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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 December														
Total (All Sectors)			Electric Power Sector						Commercial		Industrial		Residential	
Fuel	Facility Type	December 2017	December 2016	Percentage Change	Electric Utilities		Independent Power Producers		December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
					December 2017	December 2016	December 2017	December 2016						
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	106,578	118,747	-10.2%	76,945	87,293	28,912	30,661	36	42	685	750	0	0
Petroleum Liquids	Utility Scale Facilities	1,805	1,166	54.8%	911	811	832	307	NM	8	47	40	0	0
Petroleum Coke	Utility Scale Facilities	708	869	-18.6%	556	667	100	124	1	1	51	78	0	0
Natural Gas	Utility Scale Facilities	106,144	96,364	10.1%	50,102	46,333	47,404	41,755	626	598	8,013	7,678	0	0
Other Gas	Utility Scale Facilities	1,127	1,037	8.7%	25	22	343	296	0	0	759	720	0	0
Nuclear	Utility Scale Facilities	73,700	71,662	2.8%	38,871	37,268	34,828	34,394	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	22,507	22,528	-0.1%	20,836	20,799	1,534	1,591	0	0	119	117	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	32,881	32,583	0.9%	4,155	4,565	25,852	25,262	258	261	2,616	2,495	0	0
... Wind	Utility Scale Facilities	22,776	23,146	-1.6%	3,389	3,894	19,368	19,228	12	14	NM	9	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	3,059	2,424	26.2%	251	139	2,776	2,250	29	33	NM	1	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,859	3,615	6.7%	313	309	1,022	924	6	6	2,517	2,375	0	0
... Other Biomass	Utility Scale Facilities	1,795	1,944	-7.7%	125	127	1,370	1,502	210	208	89	108	0	0
... Geothermal	Utility Scale Facilities	1,393	1,454	-4.2%	77	95	1,316	1,359	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-656	-753	-12.9%	-557	-657	-99	-96	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,145	1,139	0.5%	43	36	586	613	92	85	423	405	0	0
All Energy Sources	Utility Scale Facilities	345,939	345,343	0.2%	191,887	197,136	140,293	134,908	1,046	1,015	12,714	12,283	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	1,476	1,167	26.5%	0	0	0	0	485	387	155	128	837	653
Estimated Total Solar Photovoltaic	All Facilities	4,413	3,500	26.1%	245	137	2,660	2,162	514	420	NM	129	837	653
Estimated Total Solar	All Facilities	4,536	3,591	26.3%	251	139	2,776	2,250	514	420	NM	129	837	653
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	58,292	64,847	-10.1%	41,767	47,058	16,270	17,512	10	12	246	266	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	3,058	1,995	53.3%	1,642	1,410	1,346	530	22	12	47	43	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	280	336	-16.5%	231	260	35	55	0	0	14	20	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	785,101	686,396	14.4%	388,941	343,384	345,378	294,829	3,781	3,547	47,000	44,637	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,339	1,515	-11.6%	209	301	143	136	52	63	935	1,015	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	336	178	88.9%	18	9	51	33	50	26	216	110	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	68	95	-29.0%	1	1	10	10	2	2	55	83	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	106,914	98,660	8.4%	3,913	3,520	29,997	29,054	6,971	6,758	66,034	59,328	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	59,631	66,362	-10.1%	41,975	47,359	16,413	17,648	62	75	1,181	1,280	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	3,395	2,173	56.2%	1,660	1,419	1,398	563	73	37	264	154	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	348	431	-19.2%	233	261	44	65	2	2	69	103	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	892,015	785,056	13.6%	392,854	346,904	375,375	323,883	10,752	10,305	113,034	103,965	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	138,130	163,381	-15.5%	114,378	130,885	22,777	31,124	95	192	880	1,179	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	30,428	33,729	-9.8%	19,826	20,920	8,897	10,781	384	600	1,321	1,428	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,333	1,061	25.7%	W	W	W	W	W	W	W	W	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for December									
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)		
	December 2017	December 2016	Percentage Change	December 2017	December 2016	Percentage Change	December 2017	December 2016	Percentage Change
	Residential	121,775	121,281	0.4%	15,226	14,830	2.7%	12.50	12.23
Commercial	108,720	110,172	-1.3%	11,222	11,206	0.1%	10.32	10.17	1.5%
Industrial	76,724	78,616	-2.4%	5,084	5,242	-3.0%	6.63	6.67	-0.6%
Transportation	663	653	1.5%	62	62	-0.3%	9.32	9.49	-1.8%
All Sectors	307,882	310,722	-0.9%	31,594	31,339	0.8%	10.26	10.09	1.7%

NM = Not meaningful due to large relative standard error.

W = Withheld to avoid disclosure of individual company data.

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

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

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

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

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

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

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

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

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

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

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

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date 2017 and 2016

Net Generation and Consumption of Fuels for January through December														
Fuel	Facility Type	Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
		December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	1,207,901	1,239,149	-2.5%	895,095	922,399	304,398	307,263	335	383	8,074	9,103	0	0
Petroleum Liquids	Utility Scale Facilities	12,583	13,008	-3.3%	8,805	9,069	3,235	3,360	106	77	437	503	0	0
Petroleum Coke	Utility Scale Facilities	8,508	11,197	-24.0%	6,711	8,881	1,013	1,401	8	6	776	909	0	0
Natural Gas	Utility Scale Facilities	1,272,864	1,378,307	-7.7%	617,725	654,780	558,439	624,600	7,512	7,730	89,188	91,197	0	0
Other Gas	Utility Scale Facilities	14,159	12,807	10.6%	164	154	4,013	3,758	0	0	9,982	8,895	0	0
Nuclear	Utility Scale Facilities	804,950	805,694	-0.1%	424,485	424,400	380,465	381,294	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	300,045	267,812	12.0%	276,804	247,787	21,585	18,539	243	217	1,413	1,269	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	387,245	341,633	13.4%	46,131	42,661	308,703	267,056	3,219	3,226	29,192	28,690	0	0
... Wind	Utility Scale Facilities	254,254	226,993	12.0%	36,842	35,070	217,198	191,720	144	131	71	71	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	52,958	36,054	46.9%	3,512	1,995	48,814	33,502	578	529	54	27	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	43,284	40,947	5.7%	3,327	3,038	11,779	10,382	70	69	28,108	27,458	0	0
... Other Biomass	Utility Scale Facilities	20,773	21,813	-4.8%	1,411	1,478	15,975	16,706	2,427	2,496	960	1,134	0	0
... Geothermal	Utility Scale Facilities	15,976	15,826	0.9%	1,039	1,080	14,937	14,746	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-6,495	-6,696	-2.9%	-5,448	-5,629	-1,047	-1,057	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	13,045	13,754	-5.2%	473	421	6,509	6,941	1,095	1,068	4,968	5,324	0	0
All Energy Sources	Utility Scale Facilities	4,014,804	4,076,675	-1.5%	2,270,945	2,304,923	1,587,313	1,613,156	12,518	12,706	144,028	145,890	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	24,139	18,812	28.3%	0	0	0	0	7,700	6,158	2,518	2,060	13,922	10,595
Estimated Total Solar Photovoltaic	All Facilities	73,828	51,483	43.4%	3,491	1,920	45,566	30,194	8,277	6,687	2,572	2,087	13,922	10,595
Estimated Total Solar	All Facilities	77,097	54,866	40.5%	3,512	1,995	48,814	33,502	8,277	6,687	2,572	2,087	13,922	10,595
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	663,479	677,371	-2.1%	485,100	496,192	175,500	178,047	96	111	2,783	3,021	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	21,935	22,405	-2.1%	15,722	16,137	5,553	5,624	193	108	467	536	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,349	4,253	-21.3%	2,731	3,427	415	591	3	2	200	233	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,440,777	10,170,110	-7.2%	4,752,790	5,018,894	4,118,433	4,571,375	44,765	46,304	524,788	533,537	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	15,302	16,586	-7.7%	2,800	2,979	1,350	1,336	511	572	10,641	11,700	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,964	2,277	-13.7%	72	68	238	245	289	245	1,365	1,719	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	917	1,099	-16.5%	11	6	115	113	15	9	776	971	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,156,214	1,151,866	0.4%	42,382	38,096	336,461	356,905	75,988	80,943	701,383	675,922	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	678,780	693,958	-2.2%	487,900	499,172	176,849	179,383	607	683	13,424	14,720	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	23,899	24,682	-3.2%	15,794	16,205	5,791	5,869	482	352	1,831	2,255	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	4,266	5,352	-20.3%	2,742	3,433	530	705	17	10	976	1,204	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	10,596,991	11,321,975	-6.4%	4,795,172	5,056,990	4,454,894	4,928,280	120,753	127,246	1,226,171	1,209,458	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through December									
Sector	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	Percentage Change
Residential	1,378,819	1,411,058	-2.3%	177,860	177,077	0.4%	12.90	12.55	2.8%
Commercial	1,349,208	1,367,191	-1.3%	144,108	142,643	1.0%	10.68	10.43	2.4%
Industrial	946,443	976,715	-3.1%	65,394	66,068	-1.0%	6.91	6.76	2.2%
Transportation	7,524	7,497	0.4%	727	722	0.8%	9.67	9.63	0.4%
All Sectors	3,681,995	3,762,462	-2.1%	388,089	386,509	0.4%	10.54	10.27	2.6%

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, 2017 and 2016

Total (All Sectors)											
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)		
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
Coal (1000 tons)	51,155	57,362	38.91	39.64	266	303	634,118	650,770	39.75	40.64	
Petroleum Liquids (1000 barrels)	1,693	1,323	84.69	64.72	148	193	15,619	16,807	71.15	56.89	
Petroleum Coke (1000 tons)	287	355	60.99	57.94	5	10	3,309	4,166	W	46.30	
Natural Gas (1000 Mcf)	677,158	705,358	3.75	4.10	491	772	8,050,520	10,271,180	3.51	2.97	

Electric Utilities											
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)		
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
Coal (1000 tons)	37,270	40,423	40.29	41.17	181	199	464,163	476,207	40.91	42.01	
Petroleum Liquids (1000 barrels)	1,002	925	78.22	64.43	97	119	11,319	11,985	70.00	56.02	
Petroleum Coke (1000 tons)	287	284	60.99	56.17	5	7	3,224	3,538	60.31	42.85	
Natural Gas (1000 Mcf)	315,406	336,401	3.90	4.30	257	419	3,861,856	4,907,538	3.77	3.26	

Independent Power Producers											
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)		
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
Coal (1000 tons)	13,136	16,171	34.33	35.08	66	80	161,228	164,648	35.67	35.69	
Petroleum Liquids (1000 barrels)	648	370	95.71	W	41	61	4,003	4,410	74.53	58.56	
Petroleum Coke (1000 tons)	0	55	--	W	0	2	0	492	--	68.88	
Natural Gas (1000 Mcf)	302,115	303,233	3.69	3.95	189	299	3,542,886	4,634,518	3.18	2.63	

Commercial Sector											
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)		
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
Coal (1000 tons)	4	9	W	W	1	1	24	57	W	W	
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--	
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--	
Natural Gas (1000 Mcf)	711	549	W	W	3	3	7,593	7,766	W	W	

Industrial Sector											
Fuel	Receipts		Cost		Number of Plants		Receipts		Cost		
	(Physical Units)		(Dollars / Physical Unit)				(Physical Units)		(Dollars / Physical Unit)		
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
Coal (1000 tons)	744	759	W	W	18	23	8,703	9,859	W	W	
Petroleum Liquids (1000 barrels)	42	28	69.14	W	10	13	297	412	69.57	64.79	
Petroleum Coke (1000 tons)	0	16	--	W	0	1	85	135	W	W	
Natural Gas (1000 Mcf)	58,925	65,176	W	W	42	51	638,186	721,358	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, 2017 and 2016

Total (All Sectors)												
Fuel	Receipts						Cost					
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)			
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
Coal	972,098	1,095,100	2.05	2.08	266	303	12,142,749	12,516,272	2.08	2.11		
Petroleum Liquids	10,277	7,939	13.95	10.78	148	193	94,007	101,810	11.82	9.39		
Petroleum Coke	8,088	9,945	2.17	2.07	5	10	92,837	116,942	W	1.65		
Natural Gas	699,688	729,545	3.63	3.96	491	772	8,320,427	10,619,105	3.39	2.87		
Fossil Fuels	1,690,151	1,842,529	2.75	2.82	657	968	20,650,020	23,354,130	W	2.47		

Electric Utilities												
Fuel	Receipts						Cost					
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)			
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
Coal	711,634	781,447	2.11	2.13	181	199	8,952,220	9,256,878	2.12	2.16		
Petroleum Liquids	6,108	5,565	12.84	10.71	97	119	68,548	73,294	11.56	9.16		
Petroleum Coke	8,088	8,017	2.17	1.99	5	7	90,481	99,706	2.15	1.52		
Natural Gas	325,771	348,255	3.77	4.15	257	419	3,990,184	5,075,337	3.65	3.15		
Fossil Fuels	1,051,602	1,143,285	2.69	2.78	369	543	13,101,432	14,505,214	2.63	2.54		

Independent Power Producers												
Fuel	Receipts						Cost					
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)			
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
Coal	244,777	297,372	1.84	1.91	66	80	3,006,924	3,047,358	1.91	1.93		
Petroleum Liquids	3,906	2,202	15.88	W	41	61	23,608	25,975	12.64	9.93		
Petroleum Coke	0	1,501	--	W	0	2	0	13,573	--	2.50		
Natural Gas	312,295	313,521	3.57	3.83	189	299	3,663,287	4,791,729	3.07	2.54		
Fossil Fuels	560,978	614,596	2.82	W	241	368	6,693,819	7,878,635	2.52	W		

Commercial Sector												
Fuel	Receipts						Cost					
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)			
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
Coal	89	214	W	W	1	1	548	1,288	W	W		
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--		
Petroleum Coke	0	0	--	--	0	0	0	0	--	--		
Natural Gas	734	568	W	W	3	3	7,841	8,005	W	W		
Fossil Fuels	823	781	W	W	3	3	8,389	9,293	W	W		

Industrial Sector												
Fuel	Receipts						Cost					
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)			
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
Coal	15,598	16,067	W	W	18	23	183,058	210,749	W	W		
Petroleum Liquids	263	172	11.14	W	10	13	1,850	2,541	11.18	10.51		
Petroleum Coke	0	427	--	W	0	1	2,356	3,664	W	W		
Natural Gas	60,888	67,201	W	W	42	51	659,116	744,034	W	W		
Fossil Fuels	76,749	83,867	W	W	44	54	846,380	960,387	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.A. Net Generation from Renewable Sources: Total (All Sectors), 2007-December 2017
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities										Small Scale Generation	Generation From Utility and Small Scale Facilities	
	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals													
2007	34,450	16	596	39,014	6,158	8,304	2,063	14,637	247,510	352,747	NA	NA	NA
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932	NA	NA	NA
2009	73,886	157	735	36,050	7,924	8,058	2,481	15,009	273,445	417,724	NA	NA	NA
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376	NA	NA	NA
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336	NA	NA	NA
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573	NA	NA	NA
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073	NA	NA	NA
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
2016	226,993	32,670	3,384	40,947	11,218	7,265	3,331	15,826	267,812	609,445	18,812	51,483	54,866
2017	254,254	49,688	3,269	43,284	10,876	6,964	2,933	15,976	300,045	687,289	24,139	73,828	77,097
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	1,788	288	3,457	914	643	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	18,466	1,400	86	3,600	915	603	277	1,332	25,615	52,294	980	2,380	2,465
February	20,138	2,000	241	3,406	886	537	285	1,243	24,139	52,877	1,145	3,145	3,396
March	21,939	2,360	257	3,403	949	579	281	1,315	27,393	58,474	1,525	3,885	4,143
April	20,799	2,606	273	2,987	932	593	287	1,209	25,878	55,544	1,703	4,309	4,583
May	18,848	3,037	388	3,187	980	649	280	1,342	25,486	54,197	1,879	4,916	5,304
June	16,303	3,062	412	3,414	934	614	247	1,251	23,237	49,473	1,928	4,990	5,401
July	17,618	3,473	471	3,658	943	635	262	1,311	21,455	49,828	2,000	5,474	5,945
August	13,589	3,602	368	3,722	942	634	285	1,324	19,570	44,035	1,942	5,543	5,911
Sept	16,404	3,272	363	3,407	895	589	272	1,327	16,368	42,897	1,735	5,007	5,370
October	20,335	2,942	249	3,176	839	589	265	1,353	17,339	47,088	1,552	4,495	4,743
November	19,406	2,583	184	3,391	993	602	296	1,364	18,808	47,627	1,257	3,840	4,024
December	23,146	2,333	91	3,615	1,011	640	293	1,454	22,528	55,111	1,167	3,500	3,591
Year 2017													
January	20,749	2,062	90	3,589	972	619	272	1,399	27,853	57,605	1,244	3,306	3,396
February	22,228	2,361	138	3,405	866	529	252	1,241	24,542	55,559	1,383	3,744	3,880
March	26,133	4,136	297	3,662	927	558	275	1,380	30,221	67,588	1,987	6,123	6,419
April	25,753	4,464	310	3,373	881	546	244	1,357	29,320	66,248	2,211	6,674	6,985
May	22,642	5,364	402	3,438	907	604	232	1,295	32,177	67,061	2,440	7,805	8,207
June	19,711	5,788	465	3,625	883	589	224	1,265	30,424	62,972	2,503	8,290	8,755
July	15,765	5,193	311	3,922	916	604	240	1,368	25,745	54,064	2,578	7,771	8,083
August	13,089	5,060	341	3,880	925	617	233	1,357	21,241	46,743	2,501	7,562	7,903
Sept	17,268	4,818	349	3,404	878	558	214	1,325	18,965	47,779	2,240	7,059	7,408
October	24,821	4,516	314	3,569	885	559	248	1,261	17,211	53,385	2,002	6,518	6,832
November	23,320	2,989	131	3,580	904	572	245	1,334	19,840	52,896	1,574	4,563	4,694
December	22,776	2,937	123	3,859	932	608	255	1,393	22,507	55,388	1,476	4,413	4,536
Year to Date													
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
2016	226,993	32,670	3,384	40,947	11,218	7,265	3,331	15,826	267,812	609,445	18,812	51,483	54,866
2017	254,254	49,688	3,269	43,284	10,876	6,964	2,933	15,976	300,045	687,289	24,139	73,828	77,097
Rolling 12 Months Ending in December													
2016	226,993	32,670	3,384	40,947	11,218	7,265	3,331	15,826	267,812	609,445	18,812	51,483	54,866
2017	254,254	49,688	3,269	43,284	10,876	6,964	2,933	15,976	300,045	687,289	24,139	73,828	77,097

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, 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 2016 and prior years are final. Values for 2017 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 small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2007-December 2017
(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													
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	482,162	3,154	381,952	23,451	847	84,528	-1,145	6,414	1,498,962	
2009	419,031	6,306	4,288	491,839	2,962	381,570	24,308	863	100,937	-1,259	6,146	1,437,061	
2010	448,709	5,117	3,497	508,774	2,915	382,126	22,351	1,105	119,851	-1,035	6,346	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	551,758	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	17,896	22,962	202,858	-897	6,638	1,603,971	
2016	307,263	3,360	1,401	624,600	3,758	381,294	18,539	33,502	233,553	-1,057	6,941	1,613,156	
2017	304,398	3,235	1,013	558,439	4,013	380,465	21,585	48,814	259,889	-1,047	6,509	1,587,313	
Year 2015													
January	36,595	701	128	46,877	368	34,893	1,491	1,066	16,096	-92	560	138,685	
February	38,196	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	-75	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	28,612	379	42	48,969	341	34,551	1,884	1,363	19,168	-82	589	135,816	
February	22,057	416	99	42,840	295	31,357	1,991	2,065	20,345	-66	540	121,939	
March	14,363	210	138	45,900	355	31,704	2,100	2,420	22,164	-93	549	119,810	
April	17,877	188	97	44,832	311	28,696	1,993	2,662	20,487	-84	554	117,612	
May	18,842	233	124	49,574	303	30,046	1,847	3,188	19,608	-64	610	124,310	
June	28,585	214	131	59,185	335	30,175	1,410	3,229	17,117	-88	595	140,888	
July	34,564	291	136	70,645	324	32,430	1,306	3,690	18,856	-106	610	162,745	
August	34,607	309	140	73,317	319	33,599	1,217	3,701	15,341	-115	617	163,051	
Sept	30,124	258	113	58,805	323	31,529	996	3,294	17,145	-89	567	143,155	
October	25,524	232	141	47,044	228	30,717	1,080	2,965	20,549	-90	549	128,939	
November	21,446	325	116	41,736	330	32,097	1,122	2,576	19,760	-85	560	119,981	
December	30,661	307	124	41,755	296	34,384	1,591	2,250	23,013	-96	613	134,908	
Year 2017													
January	28,593	264	116	38,893	337	34,695	2,008	1,961	21,600	-90	580	128,978	
February	21,279	203	92	34,219	317	29,650	1,741	2,297	22,205	-90	513	112,426	
March	22,607	155	92	40,738	355	30,400	2,059	4,101	25,836	-66	517	126,794	
April	21,810	179	95	36,522	281	26,526	2,103	4,418	25,402	-71	506	117,771	
May	23,035	229	41	40,987	340	29,585	2,243	5,330	22,880	-73	544	125,140	
June	25,605	246	100	51,504	331	31,988	1,972	5,792	20,276	-93	549	138,270	
July	30,301	227	47	65,181	356	33,440	1,867	5,077	17,361	-114	571	154,316	
August	28,374	232	113	62,813	366	33,717	1,852	4,982	15,031	-107	580	147,754	
Sept	25,775	243	97	52,413	332	32,602	1,402	4,784	18,304	-84	598	136,355	
October	22,715	203	84	47,683	306	30,957	1,346	4,451	24,554	-75	518	132,743	
November	25,391	222	35	40,082	348	32,077	1,657	2,845	23,363	-84	537	126,473	
December	28,912	832	100	47,404	343	34,828	1,534	2,776	23,076	-99	586	140,293	
Year to Date													
2015	342,608	6,240	1,601	619,839	3,517	380,498	17,896	22,962	202,858	-897	6,638	1,603,971	
2016	307,263	3,360	1,401	624,600	3,758	381,294	18,539	33,502	233,553	-1,057	6,941	1,613,156	
2017	304,398	3,235	1,013	558,439	4,013	380,465	21,585	48,814	259,889	-1,047	6,509	1,587,313	
Rolling 12 Months Ending in December													
2016	307,263	3,360	1,401	624,600	3,758	381,294	18,539	33,502	233,553	-1,057	6,941	1,613,156	
2017	304,398	3,235	1,013	558,439	4,013	380,465	21,585	48,814	259,889	-1,047	6,509	1,587,313	

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 2016 and prior years are final. Values for 2017 are preliminary. See Technical Notes for a discussion of the impact of 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-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, 2007-December 2017
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities										Total Generation at Utility Scale Facilities	Small Scale Generation			Net Generation From Utility and Small Scale Facilities		
	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage		Other	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar		
Annual Totals																	
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	8,552	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	163	8	7,471	0	0	35	416	2,803	0	1,170	12,595	5,889	6,106	6,106		
2016	383	77	6	7,730	0	0	217	529	2,697	0	1,068	12,706	6,158	6,687	6,687		
2017	335	106	8	7,512	0	0	243	578	2,642	0	1,095	12,518	7,700	8,277	8,277		
Year 2015																	
January	56	22	1	564	0	0	3	20	225	0	88	981	327	347	347		
February	59	22	1	499	0	0	3	23	198	0	77	932	396	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	843	0	0	3	32	234	0	95	1,046	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	8	1	605	0	0	21	26	230	0	89	1,022	346	373	373		
February	45	8	1	570	0	0	18	39	210	0	75	967	398	437	437		
March	46	3	1	579	0	0	22	44	225	0	90	1,011	520	564	564		
April	24	6	0	551	0	0	15	46	221	0	97	961	566	612	612		
May	20	6	0	607	0	0	12	48	230	0	96	1,019	616	663	663		
June	23	5	0	692	0	0	13	53	220	0	83	1,089	623	676	676		
July	24	8	1	831	0	0	15	55	234	0	96	1,263	640	696	696		
August	26	7	0	859	0	0	19	58	234	0	95	1,298	620	677	677		
Sept	29	4	0	700	0	0	23	48	223	0	87	1,114	556	605	605		
October	27	5	0	617	0	0	21	42	218	0	90	1,021	493	536	536		
November	35	8	0	521	0	0	17	36	224	0	85	927	393	428	428		
December	42	8	1	598	0	0	21	33	228	0	85	1,015	387	420	420		
Year 2017																	
January	41	14	1	648	0	0	23	22	224	0	85	1,057	414	436	436		
February	32	8	1	565	0	0	NM	26	203	0	78	934	454	480	480		
March	32	10	1	638	0	0	NM	48	224	0	87	1,066	830	879	879		
April	19	6	0	532	0	0	NM	50	214	0	87	934	700	750	750		
May	19	7	0	583	0	0	NM	65	233	0	101	1,036	774	838	838		
June	23	6	0	645	0	0	NM	71	215	0	90	1,075	781	852	852		
July	29	8	0	703	0	0	NM	63	226	0	100	1,150	818	881	881		
August	27	9	1	699	0	0	NM	60	225	0	101	1,137	796	858	858		
Sept	27	8	1	651	0	0	14	58	208	0	90	1,058	713	772	772		
October	24	7	1	627	0	0	NM	53	219	0	95	1,039	633	686	686		
November	27	8	1	595	0	0	NM	31	221	0	88	986	501	532	532		
December	36	NM	1	626	0	0	NM	29	229	0	92	1,046	485	514	514		
Year to Date																	
2015	509	163	8	7,471	0	0	35	416	2,803	0	1,170	12,595	5,889	6,106	6,106		
2016	383	77	6	7,730	0	0	217	529	2,697	0	1,068	12,706	6,158	6,687	6,687		
2017	335	106	8	7,512	0	0	243	578	2,642	0	1,095	12,518	7,700	8,277	8,277		
Rolling 12 Months Ending in December																	
2016	383	77	6	7,730	0	0	217	529	2,697	0	1,068	12,706	6,158	6,687	6,687		
2017	335	NM	8	7,512	0	0	NM	578	2,642	0	1,095	12,518	7,700	8,277	8,277		

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 2016 and prior years are final. Values for 2017 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 component rounding. Nil-Not meaningful due to large standard error. Will-Withheld to avoid disclosure of individual company data.

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

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

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Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-86IM, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2007-December 2017
(Thousand Megawatthours)

Period	Generation at Utility Scale Facilities											Small Scale Generation			Net Generation From Utility and Small Scale Facilities		
	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 Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar		
Annual Totals																	
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	1,955	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	8,894	0	1,282	16	28,659	0	4,978	144,063	1,139	1,156	1,156		
2015	10,896	563	990	88,353	9,401	0	1,410	21	28,614	0	5,462	145,712	1,451	1,472	1,472		
2016	9,103	503	909	91,197	8,895	0	1,269	27	28,663	0	5,324	145,890	2,060	2,087	2,087		
2017	8,074	437	776	89,188	9,982	0	1,413	54	29,138	0	4,968	144,028	2,518	2,572	2,572		
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	462	11,476	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	7,428	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	878	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	793	45	91	7,653	851	0	130	1	2,492	0	442	12,497	113	115	115		
February	750	45	76	7,133	753	0	115	2	2,317	0	396	11,597	124	126	126		
March	781	39	63	7,462	837	0	142	2	2,381	0	409	12,117	171	173	173		
April	670	37	50	7,067	815	0	128	2	2,192	0	424	11,386	186	189	189		
May	740	51	87	7,341	740	0	119	3	2,350	0	456	11,886	206	208	208		
June	814	44	81	7,661	692	0	99	3	2,391	0	463	12,248	206	209	209		
July	873	48	79	8,165	731	0	104	3	2,501	0	486	12,989	214	217	217		
August	847	37	81	8,291	732	0	92	3	2,499	0	503	13,075	209	212	212		
Sept	762	41	60	7,708	674	0	65	2	2,312	0	489	12,111	190	192	192		
October	693	41	75	7,527	679	0	88	2	2,312	0	433	11,851	174	176	176		
November	630	37	87	7,514	662	0	69	2	2,433	0	418	11,852	139	140	140		
December	750	40	78	7,678	720	0	117	1	2,493	0	405	12,283	128	129	129		
Year 2017																	
January	757	41	57	7,885	769	0	123	NM	2,467	0	383	12,484	133	NM	NM		
February	662	35	55	6,962	855	0	112	NM	2,342	0	367	11,361	147	NM	NM		
March	669	35	79	7,372	885	0	127	NM	2,446	0	413	12,030	209	NM	NM		
April	593	34	48	7,171	867	0	124	NM	2,353	0	413	11,596	227	NM	NM		
May	637	35	76	7,252	835	0	135	4	2,315	0	400	11,689	252	256	256		
June	706	35	75	7,489	867	0	124	8	2,404	0	419	12,127	254	262	262		
July	699	34	87	7,977	884	0	121	7	2,600	0	490	12,897	264	272	272		
August	700	34	72	7,834	951	0	109	7	2,593	0	489	12,590	258	265	265		
Sept	652	32	66	8,993	737	0	98	6	2,287	0	390	11,301	235	241	241		
October	680	37	45	7,087	698	0	102	6	2,346	0	372	11,373	214	220	220		
November	634	38	74	7,362	834	0	120	4	2,373	0	408	11,846	170	174	174		
December	685	47	51	8,013	759	0	119	NM	2,613	0	423	12,714	155	NM	NM		
Year to Date																	
2015	10,896	563	990	88,353	9,401	0	1,410	21	28,614	0	5,462	145,712	1,451	1,472	1,472		
2016	9,103	503	909	91,197	8,895	0	1,269	27	28,663	0	5,324	145,890	2,060	2,087	2,087		
2017	8,074	437	776	89,188	9,982	0	1,413	54	29,138	0	4,968	144,028	2,518	2,572	2,572		
Rolling 12 Months Ending in December																	
2016	9,103	503	909	91,197	8,895	0	1,269	27	28,663	0	5,324	145,890	2,060	2,087	2,087		
2017	8,074	437	776	89,188	9,982	0	1,413	NM	29,138	0	4,968	144,028	2,518	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 2016 and prior years are final. Values for 2017 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. Nil=Not meaningful due to large standard error. 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 small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

**Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-December 2017
(Thousand Megawatthours)**

Period	Small Scale Generation	
	Estimated Small Scale Solar Photovoltaic Generation	
Annual Totals		
2014		4,947
2015		6,999
2016		10,595
2017		13,922
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		520
February		622
March		835
April		951
May		1,058
June		1,099
July		1,146
August		1,113
Sept		989
October		884
November		726
December		653
Year 2017		
January		697
February		783
March		1,147
April		1,284
May		1,415
June		1,468
July		1,495
August		1,446
Sept		1,292
October		1,156
November		903
December		837
Year to Date		
2015		6,999
2016		10,595
2017		13,922
Rolling 12 Months Ending in December		
2016		10,595
2017		13,922

See Glossary for definitions. Values for 2016 and prior years are final. Values for 2017 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 small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, 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, December 2017 and 2016 (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		Commercial Sector		Industrial Sector			
		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities			
		December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016		
New England	9,165	8,900	3.0%	292	321	8,513	8,247	107	103	253	228
Connecticut	3,364	3,201	5.1%	6	8	3,282	3,119	32	32	45	41
Maine	1,036	905	14.5%	0	0	836	721	18	17	182	168
Massachusetts	2,637	2,475	6.6%	40	29	2,529	2,385	46	43	23	17
New Hampshire	1,584	1,715	-7.6%	169	208	1,405	1,498	7	6	2	2
Rhode Island	370	430	-13.9%	0	1	367	424	3	4	0	0
Vermont	173	175	-0.8%	78	74	95	100	0	0	0	0
Middle Atlantic	36,145	36,689	-1.4%	3,232	2,710	32,337	33,431	196	168	380	359
New Jersey	6,593	6,268	5.2%	2	7	6,471	6,157	52	48	69	55
New York	10,979	10,903	0.7%	3,225	2,695	7,577	8,028	103	105	73	75
Pennsylvania	18,574	19,499	-4.7%	5	8	18,289	19,246	41	15	239	230
East North Central	53,245	51,811	2.8%	22,706	21,170	29,420	29,662	152	146	967	834
Illinois	16,139	17,114	-5.7%	413	429	15,433	16,418	35	32	258	235
Indiana	10,015	9,622	4.1%	8,497	8,226	1,117	1,104	23	21	378	270
Michigan	9,778	8,779	11.4%	6,576	6,034	3,003	2,564	70	61	130	119
Ohio	11,078	11,063	0.1%	2,207	2,524	8,805	8,455	15	22	52	62
Wisconsin	6,235	5,233	19.2%	5,013	3,956	1,063	1,120	10	9	149	147
West North Central	30,495	30,478	0.1%	24,395	24,780	5,659	5,275	51	55	390	368
Iowa	5,111	5,492	-6.9%	3,775	3,955	1,147	1,355	20	19	169	162
Kansas	4,684	4,531	3.4%	3,152	3,355	1,525	1,173	NM	0	6	3
Minnesota	5,727	5,728	0.0%	4,441	4,434	1,113	1,131	16	20	157	144
Missouri	6,923	6,718	3.0%	6,564	6,438	343	261	12	15	4	5
Nebraska	3,239	3,341	-3.0%	2,615	2,788	584	516	1	1	39	36
North Dakota	3,849	3,621	6.3%	3,117	3,066	716	537	0	0	15	17
South Dakota	962	1,047	-8.1%	731	744	231	303	NM	0	0	0
South Atlantic	66,186	65,853	0.5%	54,422	56,225	9,936	7,907	112	99	1,714	1,621
Delaware	527	396	32.8%	2	4	416	296	NM	1	108	95
District of Columbia	6	7	-9.4%	0	0	5	5	1	2	0	0
Florida	17,482	17,857	-2.1%	15,954	16,643	1,051	733	6	7	470	475
Georgia	10,956	10,456	4.8%	9,365	9,324	1,134	710	NM	1	456	420
Maryland	3,151	2,739	15.1%	57	0	3,022	2,691	47	23	26	25
North Carolina	11,467	10,890	5.3%	10,384	9,892	883	812	17	28	183	158
South Carolina	8,011	8,094	-1.0%	7,697	7,893	142	71	0	0	172	130
Virginia	8,010	7,935	0.9%	6,070	6,673	1,692	1,004	40	38	208	221
West Virginia	6,575	7,479	-12.1%	4,894	5,796	1,591	1,586	0	0	91	97
East South Central	30,251	30,402	-0.5%	25,791	26,217	3,668	3,409	19	17	774	759
Alabama	11,716	11,829	-1.0%	8,518	8,513	2,819	2,949	0	0	379	367
Kentucky	6,043	7,214	-16.2%	5,900	7,135	89	28	0	0	55	51
Mississippi	4,919	4,336	13.4%	4,002	3,762	743	415	2	0	172	159
Tennessee	7,573	7,023	7.8%	7,371	6,808	17	17	17	17	168	182
West South Central	58,462	55,987	4.4%	18,180	19,001	33,693	30,480	50	76	6,539	6,431
Arkansas	6,072	5,170	17.4%	4,204	3,866	1,709	1,147	1	3	158	155
Louisiana	8,457	8,472	-0.2%	4,945	4,916	762	864	13	12	2,736	2,680
Oklahoma	6,189	6,396	-3.2%	2,406	3,688	3,706	2,632	0	0	76	76
Texas	37,745	35,950	5.0%	6,625	6,531	27,514	25,837	37	61	3,568	3,520
Mountain	30,056	31,541	-4.7%	23,506	25,021	6,220	6,202	47	38	283	280
Arizona	8,307	8,167	1.7%	7,519	7,413	776	747	12	7	0	0
Colorado	4,736	4,944	-4.2%	3,612	3,835	1,115	1,100	3	3	7	6
Idaho	1,327	1,101	20.5%	869	564	404	477	5	4	50	56
Montana	2,697	2,845	-5.2%	911	1,226	1,783	1,616	0	0	3	3
Nevada	2,898	2,962	-2.2%	2,032	2,094	834	838	9	9	22	21
New Mexico	2,510	3,209	-21.8%	1,719	2,438	781	761	10	10	0	0
Utah	3,357	3,628	-7.5%	3,043	3,285	244	283	8	7	62	52
Wyoming	4,224	4,684	-9.8%	3,801	4,164	285	379	0	0	139	141
Pacific Contiguous	30,590	32,244	-5.1%	18,441	20,686	10,517	9,948	254	249	1,379	1,362
California	15,070	15,470	-2.6%	6,123	6,877	7,523	7,186	243	238	1,181	1,169
Oregon	5,385	6,025	-10.6%	3,836	4,622	1,485	1,341	7	7	57	54
Washington	10,136	10,750	-5.7%	8,481	9,187	1,509	1,421	4	3	141	139
Pacific Noncontiguous	1,344	1,458	-7.8%	923	1,006	329	346	58	65	34	41
Alaska	559	630	-11.2%	499	565	21	21	31	31	8	13
Hawaii	785	828	-5.2%	424	440	308	325	27	34	26	28
U.S. Total	345,939	345,343	0.2%	191,887	197,136	140,293	134,908	1,046	1,015	12,714	12,283

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 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	101,570	107,725	-5.7%	2,387	2,482	95,098	101,348	1,263	1,282	2,822	2,612
Connecticut	34,108	36,497	-6.5%	80	74	33,141	35,511	377	409	510	502
Maine	11,192	11,514	-2.8%	0	0	8,960	9,458	215	205	2,017	1,851
Massachusetts	31,456	31,955	-1.6%	451	468	30,199	30,729	540	532	265	226
New Hampshire	17,494	19,282	-9.3%	939	1,062	16,456	18,113	70	74	30	33
Rhode Island	5,244	6,565	-20.1%	3	13	5,182	6,494	58	58	0	0
Vermont	2,077	1,911	8.7%	914	865	1,160	1,043	3	3	0	0
Middle Atlantic	402,630	427,095	-5.7%	34,741	35,325	361,072	385,130	2,272	2,127	4,546	4,513
New Jersey	74,541	77,611	-4.0%	153	151	72,969	76,129	676	642	742	689
New York	127,880	134,417	-4.9%	34,486	35,094	91,315	97,139	1,197	1,222	882	962
Pennsylvania	200,210	215,067	-6.9%	103	80	196,787	211,863	398	263	2,922	2,861
East North Central	578,990	585,059	-1.0%	246,140	246,855	319,701	326,837	1,832	1,899	11,317	9,468
Illinois	181,911	187,289	-2.9%	5,445	5,191	173,178	179,069	366	354	2,921	2,675
Indiana	100,492	101,759	-1.2%	85,255	86,423	10,171	11,873	265	280	4,802	3,183
Michigan	112,367	112,122	0.2%	80,114	78,006	30,059	31,947	816	881	1,377	1,287
Ohio	118,974	118,922	0.0%	23,714	26,624	94,339	91,357	262	227	659	715
Wisconsin	65,247	64,967	0.4%	51,613	50,612	11,954	12,590	122	157	1,557	1,608
West North Central	338,678	325,988	3.9%	276,090	272,454	57,817	48,911	614	654	4,156	3,969
Iowa	56,478	54,393	3.8%	41,669	40,080	12,582	12,136	223	232	2,004	1,944
Kansas	51,366	47,600	7.9%	34,481	34,176	16,825	13,372	NM	0	47	52
Minnesota	59,701	59,479	0.4%	46,641	47,985	11,336	9,886	184	204	1,540	1,403
Missouri	83,801	78,612	6.6%	80,168	75,449	3,412	2,916	175	199	46	47
Nebraska	35,937	36,525	-1.6%	30,476	32,548	5,077	3,610	19	19	365	347
North Dakota	40,931	37,856	8.1%	34,350	33,415	6,426	4,267	0	0	155	175
South Dakota	10,464	11,524	-9.2%	8,305	8,800	2,159	2,724	NM	0	0	0
South Atlantic	799,728	813,880	-1.7%	662,364	678,187	116,482	115,751	1,253	1,293	19,629	18,648
Delaware	7,662	8,731	-12.2%	25	80	6,158	7,356	7	7	1,472	1,289
District of Columbia	67	76	-12.6%	0	0	47	53	20	24	0	0
Florida	237,821	238,262	-0.2%	218,543	216,244	13,951	16,576	75	84	5,252	5,358
Georgia	128,979	133,380	-3.3%	108,922	115,955	14,896	12,664	7	8	5,154	4,754
Maryland	34,132	37,167	-8.2%	68	7	33,284	36,442	497	449	283	268
North Carolina	130,689	130,779	-0.1%	116,342	118,657	12,173	9,977	205	270	1,969	1,875
South Carolina	93,467	96,986	-3.6%	88,407	91,591	3,038	3,622	2	2	2,020	1,770
Virginia	93,500	92,555	1.0%	74,033	76,224	16,633	13,425	441	449	2,393	2,456
West Virginia	73,410	75,943	-3.3%	56,023	59,429	16,301	15,637	0	0	1,086	877
East South Central	349,987	364,881	-4.1%	300,031	308,701	40,899	47,070	189	187	8,868	8,923
Alabama	139,194	142,385	-2.2%	101,021	97,991	33,890	40,139	0	0	4,284	4,255
Kentucky	72,116	80,274	-10.2%	71,069	79,113	449	547	0	0	599	613
Mississippi	60,574	62,881	-3.7%	52,363	54,760	6,291	6,185	5	0	1,915	1,937
Tennessee	78,103	79,341	-1.6%	75,579	76,837	269	200	185	187	2,071	2,118
West South Central	687,867	700,416	-1.8%	222,791	241,141	390,729	380,273	838	990	73,508	78,012
Arkansas	62,109	60,445	2.8%	45,669	43,352	14,717	15,455	7	43	1,716	1,595
Louisiana	96,978	107,269	-9.6%	56,508	64,486	10,458	10,282	136	170	29,877	32,332
Oklahoma	76,545	78,655	-2.7%	38,540	45,255	37,183	32,509	0	0	823	891
Texas	452,235	454,048	-0.4%	82,075	88,048	328,371	322,028	696	777	41,093	43,195
Mountain	359,436	364,116	-1.3%	279,585	283,709	76,101	76,336	582	582	3,169	3,488
Arizona	105,833	108,763	-2.7%	90,551	89,822	15,117	18,776	165	0	0	0
Colorado	54,318	54,418	-0.2%	41,672	42,191	12,531	12,123	41	31	74	73
Idaho	15,926	15,661	1.7%	10,248	9,995	5,106	5,017	52	51	521	599
Montana	28,269	27,784	1.7%	11,224	10,811	17,013	16,943	0	0	31	30
Nevada	37,967	39,787	-4.6%	26,857	29,476	10,690	9,904	126	126	294	280
New Mexico	33,566	32,912	2.0%	24,706	25,014	8,744	7,777	115	119	1	1
Utah	36,732	38,134	-3.7%	32,013	34,206	3,793	2,766	84	90	843	1,072
Wyoming	46,826	46,657	0.4%	42,313	42,194	3,107	3,029	0	0	1,406	1,434
Pacific Contiguous	380,097	371,232	2.4%	236,291	225,200	125,238	127,274	2,958	2,859	15,610	15,792
California	206,107	196,963	4.6%	90,885	81,156	98,861	99,247	2,849	2,859	13,511	13,702
Oregon	58,516	60,182	-2.8%	44,239	45,096	13,597	14,437	74	70	606	579
Washington	115,474	114,087	1.2%	101,167	98,948	12,780	13,591	34	36	1,493	1,511
Pacific Noncontiguous	15,819	16,284	-2.9%	10,524	10,868	4,176	4,223	717	727	403	466
Alaska	5,971	6,335	-5.7%	5,277	5,649	240	252	344	322	110	111
Hawaii	9,848	9,949	-1.0%	5,247	5,218	3,935	3,971	373	405	293	355
U.S. Total	4,014,804	4,076,675	-1.5%	2,270,945	2,304,923	1,587,313	1,613,156	12,518	12,706	144,028	145,890

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 2017 are preliminary. Values for 2016 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.A. Utility Scale Facility Net Generation from Coal
by State, by Sector, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	221	565	-60.9%	109	155	110	410	0	0	NM	1
Connecticut	104	89	-17.1%	0	0	104	89	0	0	0	0
Maine	8	9	-10.6%	0	0	6	8	0	0	NM	1
Massachusetts	0	313	-100.0%	0	0	0	313	0	0	0	0
New Hampshire	109	155	-29.5%	109	155	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	5,719	5,791	-1.2%	0	0	5,688	5,739	0	0	31	52
New Jersey	129	120	7.6%	0	0	129	120	0	0	0	0
New York	115	87	32.5%	0	0	107	60	0	0	8	26
Pennsylvania	5,476	5,585	-2.0%	0	0	5,453	5,559	0	0	23	25
East North Central	24,839	26,116	-4.9%	15,084	15,425	9,545	10,487	NM	6	204	198
Illinois	5,135	5,904	-13.0%	345	343	4,630	5,406	NM	4	156	152
Indiana	7,138	7,048	1.3%	6,853	6,770	283	275	2	3	0	1
Michigan	3,063	3,463	-11.6%	3,023	3,420	36	39	0	0	NM	4
Ohio	6,070	6,758	-10.2%	1,474	1,990	4,596	4,767	0	0	NM	1
Wisconsin	3,433	2,943	16.6%	3,390	2,903	0	0	0	0	43	39
West North Central	16,631	16,968	-2.0%	16,383	16,720	0	0	10	19	238	229
Iowa	2,061	2,351	-12.3%	1,925	2,217	0	0	7	9	128	125
Kansas	1,906	2,267	-15.9%	1,906	2,267	0	0	0	0	0	0
Minnesota	2,264	2,416	-6.3%	2,202	2,357	0	0	1	62	58	58
Missouri	5,937	5,184	14.5%	5,935	5,175	0	0	2	9	0	0
Nebraska	1,859	2,120	-12.3%	1,820	2,084	0	0	0	0	39	36
North Dakota	2,379	2,407	-1.2%	2,370	2,396	0	0	0	0	NM	11
South Dakota	225	224	0.4%	225	224	0	0	0	0	0	0
South Atlantic	17,274	21,069	-18.0%	14,752	18,511	2,445	2,455	9	7	68	96
Delaware	63	10	508.5%	0	0	63	10	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,445	3,447	-29.1%	2,432	3,434	0	0	0	0	12	13
Georgia	2,500	2,923	-14.5%	2,486	2,903	0	0	0	0	NM	20
Maryland	914	1,068	-14.4%	0	0	906	1,060	0	0	7	7
North Carolina	2,876	3,109	-7.5%	2,846	3,070	9	13	7	6	14	19
South Carolina	1,459	1,879	-22.4%	1,455	1,875	0	0	0	0	3	4
Virginia	833	1,626	-48.8%	743	1,537	71	55	2	1	17	32
West Virginia	6,185	7,007	-11.7%	4,789	5,690	1,396	1,316	0	0	0	0
East South Central	10,680	12,058	-11.4%	10,431	11,763	199	230	0	0	50	65
Alabama	2,749	2,800	-1.8%	2,746	2,797	0	0	0	0	NM	3
Kentucky	4,687	6,084	-23.0%	4,687	6,084	0	0	0	0	0	0
Mississippi	303	417	-27.3%	103	186	199	230	0	0	0	0
Tennessee	2,940	2,758	6.6%	2,894	2,696	0	0	0	0	46	62
West South Central	16,321	18,939	-13.8%	8,030	9,897	8,264	9,006	0	0	27	36
Arkansas	2,585	2,897	-10.8%	2,117	2,439	463	453	0	0	5	5
Louisiana	1,051	1,317	-20.2%	682	886	369	431	0	0	0	0
Oklahoma	1,217	2,198	-44.6%	981	2,007	215	160	0	0	22	30
Texas	11,468	12,527	-8.5%	4,250	4,565	7,218	7,961	0	0	0	0
Mountain	13,807	15,951	-13.4%	12,092	14,429	1,678	1,480	0	0	38	42
Arizona	2,468	3,056	-19.3%	2,468	3,056	0	0	0	0	0	0
Colorado	2,474	2,939	-15.8%	2,472	2,938	0	0	0	0	1	1
Idaho	NM	3	NM	0	0	0	0	0	0	NM	3
Montana	1,500	1,334	12.4%	0	27	1,498	1,306	0	0	1	1
Nevada	74	73	1.1%	-4	-5	78	78	0	0	0	0
New Mexico	1,199	1,948	-38.4%	1,199	1,948	0	0	0	0	0	0
Utah	2,503	2,629	-4.8%	2,464	2,597	39	32	0	0	0	0
Wyoming	3,588	3,969	-9.6%	3,492	3,869	63	63	0	0	33	37
Pacific Contiguous	919	1,113	-17.4%	40	369	851	713	0	0	29	32
California	27	28	-3.1%	0	0	0	0	0	0	27	28
Oregon	40	369	-89.2%	40	369	0	0	0	0	0	0
Washington	852	717	18.9%	0	0	851	713	0	0	1	4
Pacific Noncontiguous	168	176	-4.5%	NM	23	132	141	11	10	0	2
Alaska	NM	50	NM	NM	23	15	17	11	10	0	0
Hawaii	116	126	-7.5%	0	0	116	124	0	0	0	2
U.S. Total	106,578	118,747	-10.2%	76,945	87,293	28,912	30,661	36	42	685	750

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	1,697	2,544	-33.3%	287	422	1,392	2,113	0	0	NM	10
Connecticut	198	177	11.4%	0	0	198	177	0	0	0	0
Maine	76	70	9.4%	0	0	58	60	0	0	NM	10
Massachusetts	1,136	1,875	-39.4%	0	0	1,136	1,875	0	0	0	0
New Hampshire	287	422	-31.9%	287	422	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	49,637	57,757	-14.1%	0	0	49,151	57,046	0	0	496	711
New Jersey	1,217	1,315	-7.5%	0	0	1,217	1,315	0	0	0	0
New York	770	1,770	-56.5%	0	0	562	1,437	0	0	209	333
Pennsylvania	47,650	54,672	-12.8%	0	0	47,373	54,294	0	0	277	378
East North Central	277,141	274,536	0.9%	167,889	165,111	106,949	107,209	66	82	2,237	2,136
Illinois	58,186	59,338	-1.9%	4,002	3,419	52,403	54,397	32	20	1,749	1,501
Indiana	72,487	72,533	-0.1%	69,833	69,060	2,620	3,421	34	46	0	7
Michigan	41,993	40,527	3.6%	41,503	39,988	444	445	0	15	46	78
Ohio	68,584	68,775	-0.3%	17,088	19,716	51,483	48,946	0	0	13	113
Wisconsin	35,892	33,363	7.6%	35,463	32,927	0	0	0	0	429	436
West North Central	186,067	182,383	2.0%	183,390	179,756	1	0	106	142	2,571	2,485
Iowa	25,513	25,198	1.2%	23,870	23,480	0	0	83	88	1,560	1,631
Kansas	19,400	23,096	-16.0%	19,400	23,096	0	0	0	0	0	0
Minnesota	23,333	23,206	0.5%	22,785	22,806	0	0	1	2	547	398
Missouri	67,523	60,322	11.9%	67,500	60,269	1	0	22	53	0	0
Nebraska	21,392	21,898	-2.3%	21,027	21,551	0	0	0	0	365	347
North Dakota	26,845	26,580	1.0%	26,746	26,472	0	0	0	0	99	109
South Dakota	2,062	2,083	-1.0%	2,062	2,083	0	0	0	0	0	0
South Atlantic	210,561	238,077	-11.6%	186,842	208,099	22,902	28,762	56	52	761	1,163
Delaware	359	479	-25.1%	0	0	359	479	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	37,512	39,429	-4.9%	37,265	38,522	109	733	0	0	138	175
Georgia	32,473	37,890	-14.3%	32,311	37,674	0	0	0	0	162	216
Maryland	8,504	13,826	-38.5%	0	0	8,430	13,751	0	0	74	75
North Carolina	34,458	37,436	-8.0%	34,136	37,020	108	166	45	45	169	206
South Carolina	18,152	21,003	-13.6%	18,127	20,900	0	0	0	0	25	103
Virginia	10,809	16,499	-34.5%	10,111	15,605	494	609	11	8	192	277
West Virginia	68,295	71,513	-4.5%	54,893	58,377	13,402	13,024	0	0	0	112
East South Central	121,035	137,590	-12.0%	118,077	133,748	2,231	2,895	0	0	727	947
Alabama	31,455	34,258	-8.2%	31,411	34,186	0	0	0	0	43	72
Kentucky	57,237	66,822	-14.3%	57,237	66,822	0	0	0	0	0	0
Mississippi	4,628	5,342	-13.4%	2,397	2,447	2,231	2,895	0	0	0	0
Tennessee	27,716	31,168	-11.1%	27,032	30,293	0	0	0	0	684	875
West South Central	190,598	176,203	8.2%	91,620	88,820	98,644	86,965	0	0	334	417
Arkansas	26,285	23,800	10.4%	22,743	19,154	3,497	4,596	0	0	45	50
Louisiana	12,315	12,014	2.5%	7,240	8,062	5,075	3,952	0	0	0	0
Oklahoma	17,371	19,158	-9.3%	15,332	16,903	1,750	1,888	0	0	289	367
Texas	134,627	121,231	11.0%	46,306	44,702	88,321	76,529	0	0	0	0
Mountain	161,723	161,149	0.4%	144,993	144,251	16,108	16,021	0	0	622	877
Arizona	31,396	30,403	3.3%	31,396	30,403	0	0	0	0	0	0
Colorado	29,242	29,949	-2.4%	29,233	29,920	0	21	0	0	9	8
Idaho	26	29	-10.4%	0	0	0	0	0	0	26	29
Montana	14,241	14,269	-0.2%	225	260	14,010	14,003	0	0	6	6
Nevada	1,866	2,167	-13.9%	902	1,279	964	888	0	0	0	0
New Mexico	18,414	18,365	0.3%	18,414	18,365	0	0	0	0	0	0
Utah	26,390	25,939	1.7%	25,759	25,103	413	399	0	0	217	437
Wyoming	40,148	40,027	0.3%	39,063	38,920	721	709	0	0	364	397
Pacific Contiguous	7,508	6,819	10.1%	1,728	1,898	5,463	4,569	0	0	317	352
California	291	319	-8.7%	0	0	0	0	0	0	291	319
Oregon	1,728	1,898	-9.0%	1,728	1,898	0	0	0	0	0	0
Washington	5,489	4,602	19.3%	0	0	5,463	4,569	0	0	26	33
Pacific Noncontiguous	1,934	2,092	-7.5%	268	295	1,558	1,684	108	107	0	6
Alaska	558	594	-6.0%	268	295	182	192	108	107	0	0
Hawaii	1,376	1,497	-8.1%	0	0	1,376	1,492	0	0	0	6
U.S. Total	1,207,901	1,239,149	-2.5%	895,095	922,399	304,398	307,263	335	383	8,074	9,103

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

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector		
	Generation at Utility Scale Facilities	December 2017	December 2016	Percentage Change	Electric Utilities		Independent Power Producers		December 2017	December 2016	December 2017	December 2016
					Generation at Utility Scale Facilities		Generation at Utility Scale Facilities					
					December 2017	December 2016	December 2017	December 2016				
New England	389	82	374.9%	34	6	343	70	NM	4	NM	2	
Connecticut	76	16	384.6%	1	1	72	14	NM	0	1	0	
Maine	83	5	NM	0	0	79	4	0	0	NM	1	
Massachusetts	120	54	121.7%	21	1	96	51	NM	1	0	0	
New Hampshire	76	4	NM	9	2	64	0	2	2	0	0	
Rhode Island	32	2	NM	0	1	32	0	0	1	0	0	
Vermont	3	1	407.8%	3	0	0	0	0	0	0	0	
Middle Atlantic	468	102	359.9%	139	30	321	65	NM	2	NM	4	
New Jersey	37	19	96.1%	NM	0	36	18	0	0	0	0	
New York	356	62	472.7%	139	30	211	27	NM	2	5	4	
Pennsylvania	75	21	258.8%	0	0	73	20	0	0	NM	0	
East North Central	51	57	-9.3%	31	24	16	30	NM	0	4	2	
Illinois	5	6	-26.2%	NM	1	4	5	NM	0	0	0	
Indiana	13	11	22.4%	8	9	1	0	0	0	3	2	
Michigan	13	8	67.4%	13	8	0	0	0	0	NM	0	
Ohio	19	30	-36.5%	8	5	11	24	0	0	0	0	
Wisconsin	NM	2	NM	NM	2	0	0	0	0	NM	0	
West North Central	52	60	-13.9%	50	60	NM	0	0	0	0	0	
Iowa	24	35	-32.0%	24	35	NM	0	0	0	0	0	
Kansas	7	4	61.7%	7	4	0	0	0	0	0	0	
Minnesota	NM	4	NM	NM	4	NM	0	0	0	0	0	
Missouri	12	13	-8.8%	12	13	0	0	0	0	0	0	
Nebraska	NM	-1	NM	NM	-1	0	0	0	0	0	0	
North Dakota	4	5	-29.9%	4	5	0	0	0	0	0	0	
South Dakota	NM	0	NM	NM	0	0	0	NM	0	0	0	
South Atlantic	184	118	55.8%	129	100	NM	13	3	0	11	5	
Delaware	NM	3	NM	1	0	NM	3	0	0	0	0	
District of Columbia	0	0	-100.0%	0	0	0	0	0	0	0	0	
Florida	35	41	-15.5%	33	40	NM	0	0	0	NM	2	
Georgia	19	5	315.0%	11	3	NM	1	0	0	5	1	
Maryland	14	6	141.1%	0	0	13	6	0	0	1	0	
North Carolina	33	29	16.0%	30	27	NM	1	0	0	NM	1	
South Carolina	NM	9	NM	NM	7	0	0	0	0	1	1	
Virginia	54	12	348.2%	36	9	15	3	2	0	NM	0	
West Virginia	10	13	-27.8%	10	13	0	0	0	0	0	0	
East South Central	24	16	48.6%	22	15	0	0	0	0	NM	1	
Alabama	6	4	81.7%	5	3	0	0	0	0	NM	1	
Kentucky	-1	5	-118.2%	-1	5	0	0	0	0	0	0	
Mississippi	2	2	22.7%	2	2	0	0	0	0	0	0	
Tennessee	17	6	191.9%	16	6	0	0	0	0	0	0	
West South Central	14	16	-12.2%	13	11	NM	4	0	0	0	1	
Arkansas	NM	6	NM	NM	5	0	1	0	0	0	0	
Louisiana	NM	1	NM	NM	1	0	0	0	0	0	0	
Oklahoma	2	1	187.5%	2	1	0	0	0	0	0	0	
Texas	6	8	-31.2%	4	4	NM	3	0	0	0	0	
Mountain	21	16	26.7%	20	14	1	2	0	0	0	0	
Arizona	6	3	83.3%	6	3	0	0	0	0	0	0	
Colorado	1	1	33.2%	1	1	0	0	0	0	0	0	
Idaho	0	0	NM	0	0	0	0	0	0	0	0	
Montana	1	2	-62.8%	NM	0	1	2	0	0	0	0	
Nevada	0	0	1.4%	0	0	0	0	0	0	0	0	
New Mexico	4	6	-36.5%	4	6	0	0	0	0	0	0	
Utah	3	3	1.6%	3	3	0	0	0	0	0	0	
Wyoming	6	2	284.8%	6	2	0	0	0	0	0	0	
Pacific Contiguous	5	10	-43.6%	4	4	1	4	0	0	NM	1	
California	3	5	-38.4%	3	3	0	2	0	0	NM	0	
Oregon	1	2	-49.8%	1	2	0	0	0	0	0	0	
Washington	1	3	-49.7%	NM	0	1	1	0	0	NM	1	
Pacific Noncontiguous	597	689	-13.3%	470	545	106	118	1	1	20	24	
Alaska	74	129	-42.5%	71	121	0	0	1	1	2	7	
Hawaii	523	560	-6.6%	398	425	106	118	0	0	18	16	
U.S. Total	1,805	1,166	54.8%	911	811	832	307	NM	8	47	40	

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 1.5.B. Utility Scale Facility Net Generation from Petroleum Liquids

by State, by Sector, Year-to-Date through December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	650	693	-6.2%	69	58	523	581	45	43	12	11
Connecticut	116	92	26.1%	7	6	105	81	3	3	1	2
Maine	129	110	17.0%	0	0	116	99	2	2	10	9
Massachusetts	250	422	-40.8%	29	15	197	388	23	19	1	1
New Hampshire	105	39	170.4%	25	20	66	2	14	16	0	0
Rhode Island	44	26	68.7%	3	13	39	12	3	2	0	0
Vermont	6	4	51.8%	6	4	0	0	0	0	0	0
Middle Atlantic	997	997	0.0%	288	328	652	611	NM	13	44	45
New Jersey	68	81	-16.0%	0	1	67	79	0	1	0	0
New York	655	643	1.9%	288	326	320	269	NM	11	38	38
Pennsylvania	274	273	0.4%	0	1	265	263	4	2	NM	7
East North Central	528	547	-3.3%	328	319	173	204	5	5	22	19
Illinois	49	70	-29.0%	9	9	39	59	NM	1	0	0
Indiana	126	113	11.1%	107	101	1	0	0	1	17	12
Michigan	117	120	-2.5%	112	116	0	0	3	2	2	2
Ohio	204	217	-5.7%	69	70	132	142	0	1	2	3
Wisconsin	32	27	17.6%	31	23	0	3	0	0	NM	1
West North Central	473	392	20.7%	463	382	NM	6	1	2	1	2
Iowa	254	239	6.5%	254	238	1	1	0	0	0	0
Kansas	61	28	116.9%	61	28	0	0	0	0	0	0
Minnesota	43	32	35.1%	34	24	NM	6	1	1	1	2
Missouri	66	78	-15.5%	66	78	0	0	0	0	0	0
Nebraska	8	-18	-142.2%	8	-18	0	0	0	0	0	0
North Dakota	36	30	19.9%	36	30	0	0	0	0	0	0
South Dakota	5	3	66.8%	5	3	0	0	NM	0	0	0
South Atlantic	1,680	2,134	-21.3%	1,284	1,612	293	430	32	6	70	86
Delaware	NM	63	NM	2	9	NM	54	0	0	0	0
District of Columbia	0	1	-100.0%	0	0	0	0	0	1	0	0
Florida	532	772	-31.1%	509	739	3	7	0	0	20	26
Georgia	116	114	1.4%	71	60	15	24	3	2	28	30
Maryland	114	161	-28.8%	2	-2	109	159	1	1	2	2
North Carolina	231	251	-8.2%	210	210	11	33	0	0	9	8
South Carolina	89	114	-22.2%	79	95	1	2	0	0	8	17
Virginia	440	535	-17.9%	292	382	115	147	28	2	4	5
West Virginia	120	123	-2.4%	119	118	1	5	0	0	0	0
East South Central	265	273	-3.0%	245	248	4	6	0	0	16	20
Alabama	41	46	-10.0%	25	26	4	5	0	0	12	15
Kentucky	88	88	0.2%	88	88	0	0	0	0	0	0
Mississippi	12	18	-33.1%	10	15	0	0	0	0	2	3
Tennessee	124	122	1.9%	122	119	0	0	0	0	2	2
West South Central	152	156	-2.8%	89	101	58	47	1	1	5	6
Arkansas	48	42	13.8%	23	30	24	9	0	0	2	3
Louisiana	11	14	-27.3%	11	13	0	2	0	0	0	0
Oklahoma	16	17	-6.7%	15	17	0	0	0	0	1	1
Texas	77	82	-6.3%	40	42	34	36	1	1	2	2
Mountain	214	226	-5.4%	196	193	17	22	0	0	0	11
Arizona	57	52	9.6%	57	52	0	0	0	0	0	0
Colorado	8	7	21.4%	8	7	0	0	0	0	0	0
Idaho	0	0	-7.5%	0	0	0	0	0	0	0	0
Montana	13	17	-25.0%	NM	0	13	17	0	0	0	0
Nevada	9	11	-20.4%	5	8	4	3	0	0	0	0
New Mexico	45	52	-13.6%	45	52	0	0	0	0	0	0
Utah	39	32	22.2%	37	30	1	2	0	0	0	0
Wyoming	44	56	-21.8%	43	45	0	0	0	0	0	11
Pacific Contiguous	79	119	-33.5%	47	40	15	18	1	1	16	60
California	46	92	-50.1%	35	33	3	7	0	0	8	51
Oregon	10	5	113.1%	10	5	0	0	0	0	0	0
Washington	23	22	3.2%	2	2	12	11	0	0	9	9
Pacific Noncontiguous	7,545	7,472	1.0%	5,795	5,787	1,493	1,435	7	6	250	243
Alaska	888	831	6.8%	836	780	0	0	5	3	47	48
Hawaii	6,658	6,640	0.3%	4,959	5,007	1,493	1,435	2	3	204	195
U.S. Total	12,583	13,008	-3.3%	8,805	9,069	3,235	3,360	106	77	437	503

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

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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, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
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	15	NM	0	0	0	0	0	0	NM	15
New Jersey	7	6	14.4%	0	0	0	0	0	0	7	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	9	NM	0	0	0	0	0	0	NM	9
East North Central	141	138	2.0%	72	39	59	83	0	0	10	17
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	66	48	37.2%	56	34	0	0	0	0	10	15
Ohio	59	83	-29.0%	0	0	59	83	0	0	0	1
Wisconsin	16	7	135.5%	16	5	0	0	0	0	0	2
West North Central	8	6	31.9%	0	0	0	0	1	1	7	5
Iowa	8	6	31.9%	0	0	0	0	1	1	7	5
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	116	106	8.6%	105	96	0	0	0	0	NM	10
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	105	96	9.3%	105	96	0	0	0	0	0	0
Georgia	NM	10	NM	0	0	0	0	0	0	NM	10
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	79	-100.0%	0	79	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	79	-100.0%	0	79	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	389	476	-18.3%	379	453	0	0	0	0	10	23
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	383	468	-18.1%	379	453	0	0	0	0	4	14
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	9	NM	0	0	0	0	0	0	NM	9
Mountain	41	41	-1.0%	0	0	41	41	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	41	-1.0%	0	0	41	41	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	8	-100.0%	0	0	0	0	0	0	0	8
California	0	8	-100.0%	0	0	0	0	0	0	0	8
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	708	869	-18.6%	556	667	100	124	1	1	51	78

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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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	151	155	-3.0%	0	0	0	1	0	0	151	155
New Jersey	76	65	16.2%	0	0	0	0	0	0	76	65
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	75	90	-17.0%	0	0	0	1	0	0	75	89
East North Central	1,686	2,281	-26.1%	967	1,133	568	958	0	0	151	190
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	497	-100.0%	0	497	0	0	0	0	0	0
Michigan	1,007	699	44.1%	856	553	0	3	0	0	151	143
Ohio	568	965	-41.1%	0	0	568	955	0	0	0	10
Wisconsin	111	120	-7.4%	111	83	0	0	0	0	0	37
West North Central	43	39	10.0%	0	0	0	0	8	6	34	33
Iowa	43	39	10.0%	0	0	0	0	8	6	34	33
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	1,105	2,146	-48.5%	951	2,048	0	0	0	0	154	97
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	951	2,048	-53.6%	951	2,048	0	0	0	0	0	0
Georgia	154	97	57.9%	0	0	0	0	0	0	154	97
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	427	1,130	-62.2%	427	1,130	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	427	1,130	-62.2%	427	1,130	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	4,651	4,919	-5.4%	4,366	4,569	0	0	0	0	285	350
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	4,551	4,805	-5.3%	4,366	4,569	0	0	0	0	185	235
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	101	114	-12.0%	0	0	0	0	0	0	101	114
Mountain	445	443	0.6%	0	0	445	443	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	445	443	0.6%	0	0	445	443	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	84	-100.0%	0	0	0	0	0	0	0	84
California	0	84	-100.0%	0	0	0	0	0	0	0	84
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	8,508	11,197	-24.0%	6,711	8,881	1,013	1,401	8	6	776	909

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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, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector		
	Generation at Utility Scale Facilities	December 2017	December 2016	Percentage Change	Electric Utilities		Independent Power Producers		December 2017	December 2016	December 2017	December 2016
					Generation at Utility Scale Facilities		Generation at Utility Scale Facilities					
					December 2017	December 2016	December 2017	December 2016				
New England	3,891	3,677	5.8%	NM	11	3,710	3,517	74	75	100	74	
Connecticut	1,481	1,402	5.6%	3	5	1,404	1,324	29	32	44	41	
Maine	169	126	34.3%	0	0	136	111	2	1	30	14	
Massachusetts	1,747	1,448	20.7%	NM	4	1,685	1,389	38	38	23	17	
New Hampshire	192	303	-36.5%	1	1	187	298	1	1	2	2	
Rhode Island	301	398	-24.4%	0	0	299	395	2	3	0	0	
Vermont	0	0	79.2%	0	0	0	0	0	0	0	0	
Middle Atlantic	11,477	12,540	-8.5%	940	788	10,261	11,506	95	90	182	156	
New Jersey	3,083	2,910	5.9%	NM	18	3,017	2,857	18	12	35	23	
New York	3,773	4,139	-8.9%	927	769	2,750	3,282	61	67	36	21	
Pennsylvania	4,621	5,490	-15.8%	0	1	4,494	5,367	16	10	111	112	
East North Central	9,953	7,772	28.1%	4,351	3,231	5,202	4,248	114	114	286	179	
Illinois	1,080	1,051	2.7%	NM	78	928	899	29	27	61	47	
Indiana	1,999	1,728	15.7%	1,565	1,390	291	275	16	15	127	48	
Michigan	2,570	1,908	34.7%	756	570	1,711	1,263	51	43	52	31	
Ohio	2,968	2,247	32.1%	696	507	2,244	1,703	13	21	16	17	
Wisconsin	1,335	837	59.5%	1,274	687	28	108	4	7	30	36	
West North Central	1,719	1,159	48.3%	1,473	903	169	192	21	16	55	48	
Iowa	436	131	232.6%	396	99	0	0	8	5	32	28	
Kansas	176	118	49.1%	171	115	0	0	0	0	6	3	
Minnesota	649	385	68.4%	542	309	86	55	8	9	13	12	
Missouri	277	445	-37.7%	185	301	NM	137	5	2	4	5	
Nebraska	35	17	105.2%	35	17	0	0	0	0	0	0	
North Dakota	94	32	190.4%	93	32	0	0	0	0	1	1	
South Dakota	51	30	69.2%	51	30	0	0	0	0	0	0	
South Atlantic	25,996	22,283	16.7%	21,070	19,486	4,482	2,423	51	27	393	348	
Delaware	420	346	21.5%	0	3	338	273	0	0	82	70	
District of Columbia	1	2	-61.7%	0	0	0	0	1	2	0	0	
Florida	11,294	10,775	4.8%	10,515	10,300	651	352	2	2	127	121	
Georgia	4,632	3,831	20.9%	3,635	3,266	947	527	0	0	49	37	
Maryland	664	77	762.7%	56	0	555	49	45	21	8	7	
North Carolina	3,677	3,112	18.1%	3,273	2,739	389	365	2	2	13	6	
South Carolina	1,205	966	24.7%	1,109	925	82	31	0	0	14	9	
Virginia	4,020	3,119	28.9%	2,458	2,247	1,503	817	2	1	58	54	
West Virginia	83	55	49.9%	24	5	NM	7	0	0	42	43	
East South Central	10,093	10,006	0.9%	6,468	6,660	3,399	3,129	18	17	209	201	
Alabama	4,115	4,482	-8.2%	1,239	1,459	2,781	2,919	0	0	96	104	
Kentucky	929	675	37.6%	818	627	87	26	0	0	23	22	
Mississippi	4,152	3,806	9.1%	3,580	3,587	529	184	2	0	42	35	
Tennessee	897	1,042	-14.0%	831	986	2	0	17	17	48	39	
West South Central	25,394	21,561	17.8%	6,017	5,642	13,642	10,272	42	67	5,692	5,579	
Arkansas	1,668	950	75.5%	405	239	1,231	679	0	2	32	30	
Louisiana	4,837	4,582	5.6%	2,270	1,971	281	364	13	12	2,274	2,235	
Oklahoma	2,545	2,291	11.1%	1,094	1,518	1,424	759	0	0	26	14	
Texas	16,344	13,738	19.0%	2,248	1,914	10,706	8,470	30	53	3,360	3,301	
Mountain	7,028	6,181	13.7%	5,591	4,717	1,251	1,308	39	28	147	129	
Arizona	2,080	1,230	69.2%	1,556	758	513	466	11	5	0	0	
Colorado	1,162	939	23.7%	1,012	764	147	174	2	0	2	1	
Idaho	262	242	8.4%	164	98	84	126	3	3	11	15	
Montana	43	30	45.4%	31	24	12	6	0	0	1	0	
Nevada	2,057	2,231	-7.8%	1,836	2,011	193	194	6	5	22	21	
New Mexico	786	789	-0.4%	484	448	292	332	10	9	0	0	
Utah	556	642	-13.3%	489	597	11	9	7	5	50	30	
Wyoming	81	78	4.0%	20	18	0	0	0	0	62	61	
Pacific Contiguous	10,324	10,916	-5.4%	3,921	4,631	5,287	5,159	172	165	943	961	
California	7,694	8,114	-5.2%	2,632	3,007	3,973	4,006	166	159	924	941	
Oregon	1,644	1,800	-8.6%	599	950	1,033	837	4	4	9	8	
Washington	985	1,002	-1.7%	691	673	281	316	3	2	11	11	
Pacific Noncontiguous	269	269	0.1%	264	263	0	0	0	0	5	6	
Alaska	269	269	0.1%	264	263	0	0	0	0	5	6	
Hawaii	0	0	--	0	0	0	0	0	0	0	0	
U.S. Total	106,144	96,364	10.1%	50,102	46,333	47,404	41,755	626	598	8,013	7,678	

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 2017 are preliminary. Values for 2016 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 1.7.B. Utility Scale Facility Net Generation from Natural Gas

by State, by Sector, Year-to-Date through December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	47,410	53,631	-11.6%	255	324	45,075	51,273	921	963	1,160	1,070
Connecticut	15,567	17,952	-13.3%	46	48	14,638	16,996	373	407	509	500
Maine	2,100	3,498	-40.0%	0	0	1,706	3,157	30	28	364	314
Massachusetts	21,341	21,144	0.9%	176	238	20,451	20,226	457	456	257	223
New Hampshire	3,580	4,744	-24.5%	32	37	3,508	4,652	10	22	30	33
Rhode Island	4,821	6,291	-23.4%	0	0	4,772	6,241	49	49	0	0
Vermont	2	2	-8.0%	1	1	0	0	1	1	0	0
Middle Atlantic	144,098	168,649	-14.6%	10,017	12,430	130,972	153,135	1,062	1,088	2,046	1,997
New Jersey	36,355	43,807	-17.0%	219	272	35,569	43,005	197	187	369	344
New York	48,295	56,793	-15.0%	9,791	12,146	37,413	43,531	726	782	365	335
Pennsylvania	59,449	68,049	-12.6%	7	12	57,991	66,599	139	119	1,312	1,319
East North Central	100,398	111,191	-9.7%	42,467	48,048	53,584	59,805	1,380	1,432	2,967	1,906
Illinois	14,071	17,485	-19.5%	1,358	1,674	11,673	14,798	327	326	713	686
Indiana	18,438	19,996	-7.8%	14,427	16,010	2,525	3,310	190	193	1,296	483
Michigan	26,287	29,295	-10.3%	8,433	10,050	16,825	18,352	549	578	481	315
Ohio	28,134	28,942	-2.8%	6,180	6,548	21,531	22,079	247	213	176	103
Wisconsin	13,467	15,473	-13.0%	12,070	13,766	1,031	1,266	66	122	300	319
West North Central	19,935	22,475	-11.3%	16,656	18,506	2,415	3,154	279	298	585	518
Iowa	3,519	2,961	18.9%	3,067	2,661	NM	0	87	87	366	213
Kansas	2,662	2,027	31.3%	2,620	1,975	0	0	0	0	42	52
Minnesota	7,139	8,928	-20.0%	5,863	7,191	1,053	1,437	97	112	126	189
Missouri	4,253	6,032	-29.5%	2,755	4,173	1,361	1,717	94	97	43	44
Nebraska	680	538	26.4%	679	536	0	0	1	1	0	1
North Dakota	936	1,071	-12.6%	928	1,051	0	0	0	0	8	20
South Dakota	746	919	-18.8%	746	919	0	0	0	0	0	0
South Atlantic	331,834	322,338	2.9%	270,228	262,912	56,458	54,914	543	502	4,604	4,010
Delaware	6,664	7,787	-14.4%	15	64	5,663	6,728	0	0	985	995
District of Columbia	20	23	-13.2%	0	0	0	0	20	23	0	0
Florida	160,594	158,495	1.3%	149,690	145,192	9,420	11,820	24	33	1,459	1,450
Georgia	53,474	52,862	1.2%	40,690	41,277	12,156	11,143	0	0	629	443
Maryland	6,729	5,423	24.1%	56	0	6,107	4,919	476	425	90	79
North Carolina	39,651	39,251	1.0%	34,593	34,070	4,911	5,064	13	12	134	105
South Carolina	16,368	16,367	0.0%	13,796	13,154	2,439	3,150	0	1	132	62
Virginia	46,736	40,905	14.3%	31,210	29,013	14,850	11,253	10	9	666	631
West Virginia	1,599	1,225	30.6%	178	142	913	838	0	0	509	245
East South Central	119,014	127,445	-6.6%	78,682	81,521	37,846	43,643	183	183	2,303	2,098
Alabama	52,254	57,804	-9.6%	17,702	16,893	33,438	39,838	0	0	1,113	1,073
Kentucky	9,391	8,228	14.1%	8,708	7,452	432	523	0	0	251	253
Mississippi	46,994	50,095	-6.2%	42,592	46,400	3,962	3,280	5	0	436	415
Tennessee	10,375	11,319	-8.3%	9,680	10,777	14	2	179	183	503	356
West South Central	310,505	347,156	-10.6%	88,634	108,005	157,853	171,057	748	899	63,289	67,194
Arkansas	17,588	18,171	-3.2%	6,290	7,181	11,006	10,672	0	39	292	279
Louisiana	57,884	66,479	-12.9%	29,482	34,690	4,070	5,145	136	170	24,196	26,475
Oklahoma	31,630	36,529	-13.4%	18,941	24,414	12,437	11,945	0	0	252	169
Texas	203,403	225,976	-10.0%	33,921	41,720	130,341	143,294	612	691	38,529	40,271
Mountain	88,029	99,018	-11.1%	67,060	72,922	18,982	24,205	431	438	1,556	1,453
Arizona	29,550	34,183	-13.6%	19,223	19,266	10,185	14,776	143	141	0	0
Colorado	12,650	12,679	-0.2%	10,698	10,732	1,930	1,926	3	2	20	20
Idaho	2,842	3,321	-14.4%	1,588	1,762	1,092	1,380	40	40	121	140
Montana	472	476	-0.9%	358	378	110	94	0	0	4	4
Nevada	26,647	28,922	-7.9%	24,140	26,369	2,156	2,209	60	65	291	278
New Mexico	9,175	9,958	-7.9%	5,752	6,199	3,311	3,641	111	116	1	1
Utah	5,902	8,691	-32.1%	5,143	8,031	198	179	74	74	488	408
Wyoming	790	788	0.3%	158	185	1	1	0	0	631	602
Pacific Contiguous	109,100	123,363	-11.6%	41,249	47,135	55,254	63,414	1,962	1,924	10,636	10,889
California	87,906	97,074	-9.4%	30,095	32,955	45,446	51,521	1,903	1,866	10,463	10,731
Oregon	12,116	15,307	-20.8%	5,005	7,587	6,993	7,612	42	38	77	69
Washington	9,077	10,982	-17.3%	6,149	6,593	2,814	4,280	17	20	96	89
Pacific Noncontiguous	2,541	3,040	-16.4%	2,476	2,977	0	0	2	1	62	63
Alaska	2,541	3,040	-16.4%	2,476	2,977	0	0	2	1	62	63
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,272,864	1,378,307	-7.7%	617,725	654,780	558,439	624,600	7,512	7,730	89,188	91,197

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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, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
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	60	58	3.7%	0	0	0	0	0	0	60	58
New Jersey	19	19	0.3%	0	0	0	0	0	0	19	19
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	40	38	5.5%	0	0	0	0	0	0	40	38
East North Central	447	392	14.1%	25	22	184	145	0	0	238	225
Illinois	14	14	-3.2%	0	0	0	0	0	0	14	14
Indiana	216	198	9.2%	NM	0	0	0	0	0	215	197
Michigan	164	137	20.4%	24	21	140	115	0	0	0	0
Ohio	53	43	22.2%	0	0	44	30	0	0	9	13
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	5	-21.9%	0	0	0	0	0	0	4	5
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	4	5	-21.9%	0	0	0	0	0	0	4	5
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	28	26	7.6%	0	0	0	0	0	0	28	26
Delaware	25	24	4.8%	0	0	0	0	0	0	25	24
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	16.5%	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	3	2	37.4%	0	0	0	0	0	0	3	2
East South Central	0	4	-94.5%	0	0	0	0	0	0	0	4
Alabama	0	2	-99.7%	0	0	0	0	0	0	0	2
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	2	-87.4%	0	0	0	0	0	0	0	2
West South Central	392	366	7.0%	0	0	125	112	0	0	267	255
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	175	167	4.6%	0	0	0	0	0	0	175	167
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	217	199	8.9%	0	0	125	112	0	0	92	87
Mountain	39	45	-11.6%	0	0	0	1	0	0	39	43
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	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	2	6	-67.7%	0	0	0	0	0	0	2	6
Wyoming	38	37	0.2%	0	0	0	37	0	0	38	37
Pacific Contiguous	151	138	10.1%	0	0	34	37	0	0	118	100
California	118	100	17.4%	0	0	0	0	0	0	118	100
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	34	37	-9.6%	0	0	34	37	0	0	0	0
Pacific Noncontiguous	5	4	35.2%	0	0	0	0	0	0	5	4
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	5	4	35.2%	0	0	0	0	0	0	5	4
U.S. Total	1,127	1,037	8.7%	25	22	343	296	0	0	759	720

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

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 1.8.B. Utility Scale Facility Net Generation from Other Gases

by State, by Sector, Year-to-Date through December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	818	695	17.8%	0	0	0	1	0	0	818	694
New Jersey	219	207	5.9%	0	0	0	0	0	0	219	207
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	599	488	22.8%	0	0	0	1	0	0	599	487
East North Central	5,808	4,812	20.7%	164	154	2,182	2,028	0	0	3,463	2,630
Illinois	180	204	-11.8%	0	0	0	6	0	0	180	198
Indiana	3,135	2,272	37.9%	16	9	0	0	0	0	3,119	2,263
Michigan	1,652	1,615	2.3%	149	145	1,504	1,470	0	0	0	0
Ohio	841	721	16.7%	0	0	678	553	0	0	163	168
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	42	40	4.9%	0	0	0	0	0	0	42	40
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	42	40	4.9%	0	0	0	0	0	0	42	40
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	511	307	66.4%	0	0	0	0	0	0	511	307
Delaware	471	277	69.9%	0	0	0	0	0	0	471	277
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5	5	4.0%	0	0	0	0	0	0	5	5
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	34	25	39.9%	0	0	0	0	0	0	34	25
East South Central	23	39	-42.3%	0	0	0	0	0	0	23	39
Alabama	11	24	-53.8%	0	0	0	0	0	0	11	24
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	12	15	-24.3%	0	0	0	0	0	0	12	15
West South Central	4,735	4,613	2.6%	0	0	1,462	1,318	0	0	3,273	3,295
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	2,165	2,099	3.1%	0	0	0	0	0	0	2,165	2,099
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,570	2,514	2.2%	0	0	1,462	1,318	0	0	1,108	1,196
Mountain	395	422	-6.3%	0	0	14	9	0	0	381	412
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	14	9	60.0%	0	0	14	9	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	16	54	-69.7%	0	0	0	0	0	0	16	54
Wyoming	365	358	1.9%	0	0	0	0	0	0	365	358
Pacific Contiguous	1,775	1,828	-2.9%	0	0	356	402	0	0	1,419	1,427
California	1,419	1,427	-0.6%	0	0	0	0	0	0	1,419	1,427
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	356	402	-11.4%	0	0	356	402	0	0	0	0
Pacific Noncontiguous	52	51	2.0%	0	0	0	0	0	0	52	51
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	52	51	2.0%	0	0	0	0	0	0	52	51
U.S. Total	14,159	12,807	10.6%	164	154	4,013	3,758	0	0	9,982	8,895

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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, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	2,994	2,859	4.8%	0	0	2,994	2,859	0	0	0	0
Connecticut	1,558	1,554	0.3%	0	0	1,558	1,554	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	506	375	34.9%	0	0	506	375	0	0	0	0
New Hampshire	930	930	0.0%	0	0	930	930	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	14,410	13,993	3.0%	0	0	14,410	13,993	0	0	0	0
New Jersey	3,131	3,018	3.7%	0	0	3,131	3,018	0	0	0	0
New York	3,660	3,554	3.0%	0	0	3,660	3,554	0	0	0	0
Pennsylvania	7,619	7,420	2.7%	0	0	7,619	7,420	0	0	0	0
East North Central	14,282	13,648	4.6%	2,445	1,661	11,837	11,987	0	0	0	0
Illinois	8,700	8,860	-1.8%	0	0	8,700	8,860	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	3,056	2,267	34.8%	2,445	1,661	611	606	0	0	0	0
Ohio	1,625	1,624	0.1%	0	0	1,625	1,624	0	0	0	0
Wisconsin	901	897	0.5%	0	0	901	897	0	0	0	0
West North Central	3,608	4,214	-14.4%	3,155	3,755	453	459	0	0	0	0
Iowa	453	459	-1.3%	0	0	453	459	0	0	0	0
Kansas	912	913	-0.1%	912	913	0	0	0	0	0	0
Minnesota	1,313	1,317	-0.4%	1,313	1,317	0	0	0	0	0	0
Missouri	329	924	-64.4%	329	924	0	0	0	0	0	0
Nebraska	602	601	0.0%	602	601	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	18,793	18,761	0.2%	17,450	17,466	1,344	1,295	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	2,755	2,747	0.3%	2,755	2,747	0	0	0	0	0	0
Georgia	3,095	3,079	0.5%	3,095	3,079	0	0	0	0	0	0
Maryland	1,344	1,295	3.7%	0	0	1,344	1,295	0	0	0	0
North Carolina	3,887	3,881	0.1%	3,887	3,881	0	0	0	0	0	0
South Carolina	5,027	5,023	0.1%	5,027	5,023	0	0	0	0	0	0
Virginia	2,686	2,736	-1.8%	2,686	2,736	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	7,289	6,403	13.8%	7,289	6,403	0	0	0	0	0	0
Alabama	3,860	3,805	1.4%	3,860	3,805	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	316	-14	NM	316	-14	0	0	0	0	0	0
Tennessee	3,112	2,612	19.2%	3,112	2,612	0	0	0	0	0	0
West South Central	6,790	6,455	5.2%	3,000	2,653	3,790	3,802	0	0	0	0
Arkansas	1,387	1,050	32.2%	1,387	1,050	0	0	0	0	0	0
Louisiana	1,613	1,604	0.6%	1,613	1,604	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,790	3,802	-0.3%	0	0	3,790	3,802	0	0	0	0
Mountain	2,984	2,983	0.0%	2,984	2,983	0	0	0	0	0	0
Arizona	2,984	2,983	0.0%	2,984	2,983	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	2,548	2,346	8.6%	2,548	2,346	0	0	0	0	0	0
California	1,681	1,693	-0.7%	1,681	1,693	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	867	653	32.9%	867	653	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	73,700	71,662	2.8%	38,871	37,268	34,828	34,394	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 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	31,537	32,751	-3.7%	0	0	31,537	32,751	0	0	0	0
Connecticut	16,500	16,575	-0.5%	0	0	16,500	16,575	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	5,047	5,414	-6.8%	0	0	5,047	5,414	0	0	0	0
New Hampshire	9,991	10,761	-7.2%	0	0	9,991	10,761	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	159,400	154,380	3.3%	0	0	159,400	154,380	0	0	0	0
New Jersey	34,033	29,885	13.9%	0	0	34,033	29,885	0	0	0	0
New York	42,167	41,571	1.4%	0	0	42,167	41,571	0	0	0	0
Pennsylvania	83,200	82,924	0.3%	0	0	83,200	82,924	0	0	0	0
East North Central	156,909	157,128	-0.1%	26,284	24,507	130,625	132,621	0	0	0	0
Illinois	97,191	98,607	-1.4%	0	0	97,191	98,607	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	32,381	31,552	2.6%	26,284	24,507	6,097	7,045	0	0	0	0
Ohio	17,688	16,817	5.2%	0	0	17,688	16,817	0	0	0	0
Wisconsin	9,649	10,151	-4.9%	0	0	9,649	10,151	0	0	0	0
West North Central	44,983	45,590	-1.3%	39,769	40,888	5,214	4,703	0	0	0	0
Iowa	5,214	4,703	10.9%	0	0	5,214	4,703	0	0	0	0
Kansas	10,648	8,246	29.1%	10,648	8,246	0	0	0	0	0	0
Minnesota	13,904	13,861	0.3%	13,904	13,861	0	0	0	0	0	0
Missouri	8,304	9,430	-11.9%	8,304	9,430	0	0	0	0	0	0
Nebraska	6,913	9,351	-26.1%	6,913	9,351	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	205,235	206,905	-0.8%	190,128	192,145	15,107	14,760	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	29,146	29,320	-0.6%	29,146	29,320	0	0	0	0	0	0
Georgia	33,709	34,481	-2.2%	33,709	34,481	0	0	0	0	0	0
Maryland	15,107	14,760	2.3%	0	0	15,107	14,760	0	0	0	0
North Carolina	42,374	42,786	-1.0%	42,374	42,786	0	0	0	0	0	0
South Carolina	54,345	55,826	-2.7%	54,345	55,826	0	0	0	0	0	0
Virginia	30,554	29,732	2.8%	30,554	29,732	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	81,834	75,377	8.6%	81,834	75,377	0	0	0	0	0	0
Alabama	42,652	39,902	6.9%	42,652	39,902	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	7,365	5,897	24.9%	7,365	5,897	0	0	0	0	0	0
Tennessee	31,818	29,578	7.6%	31,818	29,578	0	0	0	0	0	0
West South Central	66,682	72,652	-8.2%	28,101	30,573	38,581	42,079	0	0	0	0
Arkansas	12,691	13,421	-5.4%	12,691	13,421	0	0	0	0	0	0
Louisiana	15,410	17,152	-10.2%	15,410	17,152	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	38,581	42,079	-8.3%	0	0	38,581	42,079	0	0	0	0
Mountain	32,340	32,377	-0.1%	32,340	32,377	0	0	0	0	0	0
Arizona	32,340	32,377	-0.1%	32,340	32,377	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	26,029	28,533	-8.8%	26,029	28,533	0	0	0	0	0	0
California	17,901	18,908	-5.3%	17,901	18,908	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	8,128	9,626	-15.6%	8,128	9,626	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	804,950	805,694	-0.1%	424,485	424,400	380,465	381,294	0	0	0	0

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

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	543	550	-1.3%	69	78	443	444	0	0	31	27
Connecticut	17	20	-16.1%	1	1	15	18	0	0	0	0
Maine	274	228	20.2%	0	0	243	201	0	0	30	27
Massachusetts	62	82	-24.5%	11	16	50	65	0	0	0	0
New Hampshire	96	117	-18.5%	25	25	71	93	0	0	0	0
Rhode Island	0	0	14.9%	0	0	0	0	0	0	0	0
Vermont	95	103	-7.8%	32	36	63	67	0	0	0	0
Middle Atlantic	2,723	2,532	7.6%	2,193	1,950	523	576	0	0	6	5
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	2,525	2,279	10.8%	2,189	1,943	329	330	0	0	6	5
Pennsylvania	197	252	-21.9%	4	7	193	245	0	0	0	0
East North Central	473	403	17.1%	413	351	42	37	0	0	18	15
Illinois	10	10	-2.4%	4	4	6	6	0	0	0	0
Indiana	39	30	30.5%	39	30	0	0	0	0	0	0
Michigan	135	117	15.8%	124	107	NM	8	0	0	NM	2
Ohio	45	39	16.4%	29	25	16	14	0	0	0	0
Wisconsin	243	208	17.1%	217	186	NM	9	0	0	15	13
West North Central	934	813	14.8%	897	776	22	24	0	0	14	13
Iowa	81	65	24.0%	80	65	0	1	0	0	0	0
Kansas	3	2	25.4%	0	0	3	2	0	0	0	0
Minnesota	109	122	-10.8%	76	87	NM	22	0	0	14	13
Missouri	101	37	171.8%	101	37	0	0	0	0	0	0
Nebraska	135	61	122.0%	135	61	0	0	0	0	0	0
North Dakota	162	147	10.1%	162	147	0	0	0	0	0	0
South Dakota	343	379	-9.4%	343	379	0	0	0	0	0	0
South Atlantic	1,066	843	25.4%	896	602	113	187	1	1	47	53
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	15	10	50.0%	15	10	0	0	0	0	0	0
Georgia	210	201	4.4%	208	200	NM	0	0	0	1	1
Maryland	71	138	-48.8%	0	0	71	138	0	0	0	0
North Carolina	332	160	107.5%	328	158	NM	2	1	1	NM	0
South Carolina	174	84	106.6%	170	82	NM	2	0	0	0	0
Virginia	109	69	56.8%	104	65	5	3	0	0	0	0
West Virginia	146	180	-18.9%	71	87	29	41	0	0	45	52
East South Central	1,611	1,326	21.5%	1,610	1,325	NM	1	0	0	0	0
Alabama	666	448	48.7%	666	448	0	0	0	0	0	0
Kentucky	379	327	15.8%	378	326	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	567	551	2.8%	567	551	0	0	0	0	0	0
West South Central	726	268	171.1%	612	202	113	65	NM	0	0	0
Arkansas	293	135	116.6%	289	134	NM	2	0	0	0	0
Louisiana	106	63	68.3%	0	0	106	63	0	0	0	0
Oklahoma	221	41	445.6%	221	41	0	0	0	0	0	0
Texas	105	29	265.1%	102	28	3	1	NM	0	0	0
Mountain	2,647	2,585	2.4%	2,539	2,522	107	62	0	1	0	0
Arizona	489	595	-17.8%	489	595	0	0	0	0	0	0
Colorado	149	144	3.2%	129	128	NM	15	0	1	0	0
Idaho	773	492	57.1%	704	465	69	27	0	0	0	0
Montana	869	1,165	-25.4%	857	1,148	NM	16	0	0	0	0
Nevada	200	85	134.7%	195	83	NM	2	0	0	0	0
New Mexico	NM	12	NM	NM	12	0	0	0	0	0	0
Utah	65	63	3.8%	64	62	2	1	0	0	0	0
Wyoming	82	30	178.6%	82	29	0	0	0	0	0	0
Pacific Contiguous	11,643	13,029	-10.6%	11,474	12,840	169	188	0	1	0	0
California	1,857	2,296	-19.1%	1,753	2,177	104	118	0	1	0	0
Oregon	3,167	3,253	-2.7%	3,143	3,228	24	25	0	0	0	0
Washington	6,619	7,479	-11.5%	6,578	7,434	41	45	0	0	0	0
Pacific Noncontiguous	152	179	-15.2%	131	153	2	5	NM	17	NM	4
Alaska	145	168	-13.7%	130	151	0	0	NM	17	0	0
Hawaii	7	11	-38.2%	1	2	2	5	0	0	NM	4
U.S. Total	22,507	22,528	-0.1%	20,836	20,799	1,534	1,591	NM	21	119	117

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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 1.10.B. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power

by State, by Sector, Year-to-Date through December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	Electric Utilities		Independent Power Producers		December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
				Generation at Utility Scale Facilities	December 2017 YTD	December 2016 YTD	Generation at Utility Scale Facilities				
New England	6,915	6,161	12.2%	917	806	5,616	5,029	4	3	379	323
Connecticut	260	224	15.9%	23	17	236	207	0	0	0	0
Maine	3,329	3,000	11.0%	0	0	2,957	2,678	0	0	373	322
Massachusetts	825	713	15.9%	171	141	645	567	4	3	6	1
New Hampshire	1,288	1,145	12.4%	304	275	984	871	0	0	0	0
Rhode Island	2	2	11.5%	0	0	2	2	0	0	0	0
Vermont	1,211	1,078	12.4%	419	373	791	704	0	0	0	0
Middle Atlantic	31,816	29,272	8.7%	24,918	23,161	6,820	6,050	6	4	71	57
New Jersey	26	9	173.4%	0	0	26	9	0	0	0	0
New York	29,065	26,888	8.1%	24,823	23,094	4,165	3,733	6	4	71	57
Pennsylvania	2,724	2,375	14.7%	95	67	2,629	2,307	0	0	0	0
East North Central	5,608	5,419	3.5%	4,890	4,727	517	489	2	1	199	201
Illinois	129	133	-2.6%	42	51	86	80	2	1	0	0
Indiana	468	426	9.8%	468	426	0	0	0	0	0	0
Michigan	1,612	1,564	3.1%	1,474	1,433	110	106	0	0	28	26
Ohio	553	500	10.6%	355	320	198	180	0	0	0	0
Wisconsin	2,845	2,795	1.8%	2,551	2,497	123	123	0	0	170	176
West North Central	11,726	10,998	6.6%	11,304	10,613	260	255	0	0	162	130
Iowa	915	917	-0.2%	908	909	7	8	0	0	0	0
Kansas	29	31	-4.3%	0	0	29	31	0	0	0	0
Minnesota	1,257	1,209	4.0%	871	861	223	217	0	0	162	130
Missouri	1,400	1,268	10.3%	1,400	1,268	0	0	0	0	0	0
Nebraska	1,594	856	86.1%	1,594	856	0	0	0	0	0	0
North Dakota	2,036	1,912	6.5%	2,036	1,912	0	0	0	0	0	0
South Dakota	4,495	4,806	-6.5%	4,495	4,806	0	0	0	0	0	0
South Atlantic	16,105	14,692	9.6%	12,994	12,239	2,534	1,918	12	16	565	520
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	195	175	11.9%	195	175	0	0	0	0	0	0
Georgia	3,140	3,373	-6.9%	3,118	3,350	7	7	0	0	14	16
Maryland	1,963	1,392	41.0%	0	0	1,963	1,392	0	0	0	0
North Carolina	4,716	4,417	6.8%	4,652	4,359	46	44	10	14	NM	0
South Carolina	2,704	2,226	21.5%	2,652	2,172	51	52	1	2	0	0
Virginia	1,617	1,471	9.9%	1,543	1,391	74	72	0	0	0	9
West Virginia	1,769	1,638	8.0%	834	792	392	351	0	0	543	496
East South Central	21,281	17,237	23.5%	21,270	17,227	11	10	0	0	0	0
Alabama	9,202	6,985	31.7%	9,202	6,985	0	0	0	0	0	0
Kentucky	4,465	3,478	28.4%	4,454	3,468	11	10	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	7,614	6,774	12.4%	7,614	6,774	0	0	0	0	0	0
West South Central	9,629	8,588	12.1%	8,306	7,409	1,316	1,179	NM	0	0	0
Arkansas	3,951	3,570	10.7%	3,899	3,526	52	44	0	0	0	0
Louisiana	1,231	1,103	11.6%	0	0	1,231	1,103	0	0	0	0
Oklahoma	2,861	2,573	11.2%	2,861	2,573	0	0	0	0	0	0
Texas	1,586	1,342	18.2%	1,546	1,310	33	32	NM	0	0	0
Mountain	32,958	31,856	3.5%	31,605	30,627	1,338	1,217	14	12	0	0
Arizona	6,972	7,168	-2.7%	6,972	7,168	0	0	0	0	0	0
Colorado	2,018	1,903	6.1%	1,747	1,688	258	203	14	12	0	0
Idaho	9,509	9,033	5.3%	8,648	8,221	861	812	0	0	0	0
Montana	10,561	10,083	4.7%	10,414	9,941	147	142	0	0	0	0
Nevada	1,793	1,789	0.2%	1,739	1,748	54	41	0	0	0	0
New Mexico	250	148	68.7%	250	148	0	0	0	0	0	0
Utah	819	760	7.8%	807	749	11	10	0	0	0	0
Wyoming	1,036	973	6.4%	1,028	964	8	10	0	0	0	0
Pacific Contiguous	162,160	141,837	14.3%	158,994	139,471	3,154	2,354	13	12	0	0
California	42,693	28,942	47.5%	40,297	27,303	2,384	1,627	13	12	0	0
Oregon	36,643	34,549	6.1%	36,352	34,273	291	277	0	0	0	0
Washington	82,825	78,346	5.7%	82,345	77,895	479	450	0	0	0	0
Pacific Noncontiguous	1,847	1,750	5.6%	1,604	1,508	19	36	186	168	38	38
Alaska	1,781	1,659	7.3%	1,594	1,491	0	0	186	168	0	0
Hawaii	67	91	-26.4%	10	17	19	36	0	0	38	38
U.S. Total	300,045	267,812	12.0%	276,804	247,787	21,585	18,539	243	217	1,413	1,269

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 2017 are preliminary. Values for 2016 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.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	1,011	1,047	-3.4%	73	70	817	848	16	16	105	113
Connecticut	77	74	4.8%	0	0	77	73	0	0	0	0
Maine	467	501	-6.8%	0	0	355	380	8	8	104	113
Massachusetts	178	170	4.9%	NM	7	168	159	4	4	0	0
New Hampshire	176	202	-12.8%	24	25	149	174	4	3	0	0
Rhode Island	37	29	25.8%	0	0	36	28	0	1	0	0
Vermont	76	71	6.1%	43	38	32	33	0	0	0	0
Middle Atlantic	1,157	1,552	-25.4%	NM	4	1,018	1,437	58	46	75	65
New Jersey	146	135	8.4%	NM	4	119	108	22	23	NM	0
New York	499	751	-33.5%	0	0	460	713	21	19	18	19
Pennsylvania	512	667	-23.2%	0	0	439	616	15	5	57	46
East North Central	3,027	3,281	-7.7%	332	476	2,525	2,636	20	15	151	154
Illinois	1,170	1,247	-6.2%	3	4	1,167	1,243	NM	1	0	0
Indiana	582	589	-1.1%	31	27	542	554	2	2	7	6
Michigan	735	868	-15.3%	183	272	482	522	10	9	61	65
Ohio	238	242	-1.6%	NM	2	211	210	1	1	25	29
Wisconsin	301	335	-10.2%	114	172	124	107	6	3	58	54
West North Central	7,503	7,227	3.8%	2,421	2,564	5,000	4,586	16	15	66	63
Iowa	2,049	2,445	-16.2%	1,349	1,540	694	895	4	4	2	5
Kansas	1,680	1,227	36.9%	157	56	1,522	1,171	NM	0	0	0
Minnesota	1,353	1,448	-6.5%	293	345	993	1,040	NM	6	62	57
Missouri	268	132	103.8%	4	3	259	124	5	4	0	0
Nebraska	608	543	12.0%	23	26	584	516	1	1	0	0
North Dakota	1,202	1,019	18.0%	485	482	716	537	0	0	NM	0
South Dakota	343	414	-17.2%	112	111	231	303	0	0	0	0
South Atlantic	2,665	2,524	5.6%	326	239	1,332	1,319	33	47	974	919
Delaware	9	13	-31.1%	NM	1	7	10	NM	1	NM	2
District of Columbia	5	5	8.4%	0	0	5	5	0	0	0	0
Florida	569	457	24.4%	99	16	277	236	5	5	188	200
Georgia	563	542	3.8%	13	16	184	182	NM	1	365	344
Maryland	113	130	-12.9%	NM	0	101	117	2	2	9	11
North Carolina	607	564	7.6%	20	17	455	412	7	20	125	116
South Carolina	245	192	27.7%	38	43	56	37	0	0	152	112
Virginia	404	398	1.5%	155	146	98	99	18	19	133	134
West Virginia	150	222	-32.6%	0	0	150	222	0	0	0	0
East South Central	594	546	8.9%	12	9	69	49	NM	0	513	487
Alabama	319	288	10.8%	NM	0	38	30	0	0	278	258
Kentucky	42	39	6.0%	10	9	0	1	0	0	31	29
Mississippi	145	125	16.2%	0	0	15	1	0	0	130	124
Tennessee	89	94	-5.1%	0	0	15	16	NM	0	73	77
West South Central	8,345	7,813	6.8%	136	149	7,740	7,208	8	9	461	448
Arkansas	133	131	1.8%	NM	0	11	12	1	0	121	118
Louisiana	239	221	8.3%	0	0	7	6	0	0	232	215
Oklahoma	2,205	1,872	17.8%	115	130	2,062	1,710	0	0	29	33
Texas	5,768	5,590	3.2%	21	19	5,660	5,480	7	9	79	82
Mountain	3,476	3,706	-6.2%	321	382	3,115	3,279	7	9	32	36
Arizona	298	310	-3.9%	33	28	263	280	NM	1	0	0
Colorado	973	941	3.4%	25	29	947	910	NM	2	0	0
Idaho	283	359	-21.3%	NM	1	250	324	1	1	30	33
Montana	217	245	-11.4%	23	27	192	216	0	0	2	2
Nevada	564	571	-1.2%	2	3	559	564	NM	4	0	0
New Mexico	502	454	10.6%	13	25	489	429	NM	0	0	0
Utah	217	264	-18.0%	23	23	193	240	1	1	0	0
Wyoming	422	563	-24.9%	201	247	221	316	0	0	0	0
Pacific Contiguous	4,978	4,773	4.3%	509	659	4,149	3,821	81	83	239	209
California	3,677	3,319	10.8%	110	158	3,427	3,042	77	79	62	40
Oregon	530	598	-11.5%	54	74	424	475	3	3	49	46
Washington	772	855	-9.8%	345	427	297	304	NM	1	128	122
Pacific Noncontiguous	125	114	9.5%	18	11	89	80	18	20	NM	2
Alaska	19	14	39.7%	NM	7	NM	4	4	3	NM	0
Hawaii	105	100	5.3%	8	4	83	76	14	17	0	2
U.S. Total	32,881	32,583	0.9%	4,155	4,565	25,852	25,262	258	261	2,616	2,495

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 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	Electric Utilities		Independent Power Producers		December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
				December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD				
New England	11,978	10,574	13.3%	858	872	9,795	8,437	205	187	1,119	1,077
Connecticut	920	893	3.0%	3	3	916	891	0	0	0	0
Maine	5,163	4,455	15.9%	0	0	3,951	3,290	94	90	1,118	1,075
Massachusetts	2,466	2,030	21.5%	76	74	2,332	1,901	56	53	2	1
New Hampshire	2,195	2,122	3.4%	291	308	1,859	1,778	45	36	0	0
Rhode Island	376	246	53.0%	0	0	369	239	7	7	0	0
Vermont	858	828	3.7%	488	487	368	338	2	2	0	0
Middle Atlantic	14,548	14,104	3.1%	95	82	12,857	12,602	734	633	863	787
New Jersey	2,127	1,838	15.7%	95	82	1,687	1,439	335	312	10	6
New York	6,440	6,323	1.8%	0	0	6,003	5,903	238	220	199	200
Pennsylvania	5,981	5,942	0.6%	0	0	5,167	5,260	161	101	654	581
East North Central	30,709	28,958	6.0%	3,812	3,634	25,016	23,413	232	220	1,649	1,691
Illinois	11,847	11,179	6.0%	35	37	11,808	11,138	NM	5	0	0
Indiana	5,533	5,558	-0.5%	405	319	5,024	5,143	21	21	83	75
Michigan	7,732	7,200	7.4%	1,979	1,956	4,965	4,395	135	146	653	703
Ohio	2,401	2,033	18.1%	24	23	2,067	1,691	15	13	296	306
Wisconsin	3,195	2,988	7.0%	1,370	1,298	1,151	1,047	57	35	618	606
West North Central	74,859	63,417	18.0%	24,195	21,897	49,773	40,652	186	173	705	695
Iowa	21,018	20,324	3.4%	13,571	12,793	7,361	7,424	45	51	41	55
Kansas	18,561	14,172	31.0%	1,753	830	16,796	13,342	NM	0	0	0
Minnesota	13,628	11,836	15.1%	3,017	3,063	9,904	8,086	52	56	655	631
Missouri	2,152	1,293	66.4%	41	42	2,050	1,199	58	49	3	3
Nebraska	5,351	3,900	37.2%	256	272	5,077	3,610	17	18	0	0
North Dakota	10,993	8,178	34.4%	4,561	3,905	6,426	4,267	0	0	6	6
South Dakota	3,156	3,715	-15.0%	997	991	2,159	2,724	0	0	0	0
South Atlantic	31,923	25,689	24.3%	3,487	2,266	17,098	12,559	424	512	10,913	10,353
Delaware	129	124	4.0%	8	7	99	94	7	7	15	16
District of Columbia	47	53	-10.6%	0	0	47	53	0	0	0	0
Florida	5,811	4,867	19.4%	786	247	2,958	2,544	51	51	2,016	2,025
Georgia	7,054	5,454	29.3%	272	107	2,718	1,489	NM	6	4,060	3,852
Maryland	1,389	1,281	8.4%	10	9	1,243	1,137	20	23	116	112
North Carolina	8,682	5,983	45.1%	378	211	6,813	4,307	137	199	1,355	1,265
South Carolina	2,793	2,381	17.3%	432	420	540	414	0	0	1,820	1,547
Virginia	4,410	4,113	7.2%	1,602	1,264	1,072	1,088	206	226	1,531	1,535
West Virginia	1,607	1,432	12.2%	0	0	1,607	1,432	0	0	0	0
East South Central	6,727	6,417	4.8%	137	103	807	517	6	3	5,777	5,794
Alabama	3,580	3,367	6.3%	28	0	448	296	0	0	3,104	3,071
Kentucky	463	477	-2.8%	109	103	7	14	0	0	347	360
Mississippi	1,573	1,524	3.2%	0	0	98	10	0	0	1,475	1,514
Tennessee	1,111	1,050	5.9%	0	0	255	198	6	3	850	849
West South Central	99,811	84,653	17.9%	1,772	1,712	92,691	77,507	83	90	5,265	5,345
Arkansas	1,519	1,396	8.8%	NM	2	139	133	6	5	1,372	1,257
Louisiana	2,796	2,876	-2.8%	0	0	81	80	0	0	2,715	2,796
Oklahoma	24,737	20,437	21.0%	1,509	1,436	22,948	18,653	0	0	280	348
Texas	70,759	59,944	18.0%	261	274	69,522	58,641	77	85	899	944
Mountain	43,050	38,116	12.9%	3,733	3,517	38,849	34,077	136	132	332	391
Arizona	5,564	4,522	23.0%	609	497	4,933	4,000	22	24	0	0
Colorado	10,668	10,122	5.4%	313	139	10,329	9,962	24	17	3	3
Idaho	3,480	3,212	8.4%	11	11	3,152	2,825	12	11	305	365
Montana	2,192	2,160	1.4%	227	231	1,943	1,909	0	0	21	20
Nevada	7,621	6,877	10.8%	40	51	7,512	6,762	66	61	3	3
New Mexico	5,683	4,389	29.5%	246	250	5,434	4,136	NM	3	0	0
Utah	3,444	2,445	40.9%	266	257	3,168	2,172	10	16	0	0
Wyoming	4,398	4,389	0.2%	2,020	2,080	2,377	2,309	0	0	0	0
Pacific Contiguous	72,103	68,145	5.8%	7,838	8,389	60,713	56,234	983	1,029	2,569	2,493
California	54,606	49,712	9.8%	2,155	2,221	50,839	45,909	933	981	678	602
Oregon	7,980	8,382	-4.8%	1,144	1,334	6,274	6,507	32	32	529	510
Washington	9,517	10,050	-5.3%	4,539	4,835	3,600	3,819	17	16	1,362	1,381
Pacific Noncontiguous	1,538	1,560	-1.4%	203	190	1,104	1,056	231	247	NM	66
Alaska	206	212	-3.0%	105	109	58	60	42	43	NM	1
Hawaii	1,332	1,347	-1.1%	98	81	1,045	995	189	205	0	66
U.S. Total	387,245	341,633	13.4%	46,131	42,661	308,703	267,056	3,219	3,226	29,192	28,690

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	-43	-42	1.7%	0	0	-43	-42	0	0	0	0
Connecticut	4	2	58.6%	0	0	4	2	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-47	-45	4.8%	0	0	-47	-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	-101	-116	-13.0%	-45	-63	-56	-53	0	0	0	0
New Jersey	-16	-15	3.3%	-16	-15	0	0	0	0	0	0
New York	-29	-47	-37.9%	-29	-47	0	0	0	0	0	0
Pennsylvania	-56	-53	4.6%	0	0	-56	-53	0	0	0	0
East North Central	-49	-58	-15.2%	-49	-58	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	-49	-58	-15.2%	-49	-58	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	-1	-16	-93.1%	-1	-16	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	-1	-16	-93.1%	-1	-16	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	-306	-274	11.6%	-306	-274	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	-84	-142	-40.4%	-84	-142	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	-110	-63	74.2%	-110	-63	0	0	0	0	0	0
Virginia	-111	-69	61.2%	-111	-69	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-49	-42	16.2%	-49	-42	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	-49	-42	16.2%	-49	-42	0	0	0	0	0	0
West South Central	-7	-8	-12.5%	-7	-8	0	0	0	0	0	0
Arkansas	0	0	37.1%	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-7	-8	-11.5%	-7	-8	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-45	-34	31.5%	-45	-34	0	0	0	0	0	0
Arizona	-17	-10	76.9%	-17	-10	0	0	0	0	0	0
Colorado	-28	-24	13.7%	-28	-24	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	-56	-163	-65.9%	-56	-163	0	0	0	0	0	0
California	-55	-162	-65.8%	-55	-162	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	-1	-80.2%	0	-1	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	-666	-753	-12.9%	-557	-657	-99	-96	0	0	0	0

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 1.12.B. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power

by State, by Sector, Year-to-Date through December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	-441	-495	-10.8%	0	0	-441	-495	0	0	0	0
Connecticut	2	6	-67.8%	0	0	2	6	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-443	-500	-11.5%	0	0	-443	-500	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	-1,183	-1,237	-4.4%	-577	-675	-605	-562	0	0	0	0
New Jersey	-162	-204	-20.7%	-162	-204	0	0	0	0	0	0
New York	-416	-471	-11.7%	-416	-471	0	0	0	0	0	0
Pennsylvania	-605	-562	7.7%	0	0	-605	-562	0	0	0	0
East North Central	-675	-752	-10.2%	-675	-752	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	-675	-752	-10.2%	-675	-752	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	100	179	-44.4%	100	179	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	100	179	-44.4%	100	179	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	-3,550	-3,132	13.3%	-3,550	-3,132	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	-1,248	-993	25.6%	-1,248	-993	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	-1,025	-977	4.9%	-1,025	-977	0	0	0	0	0	0
Virginia	-1,278	-1,163	9.9%	-1,278	-1,163	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-686	-704	-2.5%	-686	-704	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	-686	-704	-2.5%	-686	-704	0	0	0	0	0	0
West South Central	-97	-49	99.8%	-97	-49	0	0	0	0	0	0
Arkansas	20	39	-47.2%	20	39	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-118	-87	34.5%	-118	-87	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-372	-236	58.1%	-372	-236	0	0	0	0	0	0
Arizona	-46	59	-178.2%	-46	59	0	0	0	0	0	0
Colorado	-327	-294	11.0%	-327	-294	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	410	-262	-256.9%	410	-262	0	0	0	0	0	0
California	407	-259	-257.1%	407	-259	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	3	-2	-229.2%	3	-2	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	-6,495	-6,686	-2.9%	-5,448	-5,629	-1,047	-1,057	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 2017 are preliminary. Values for 2016 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, December 2017 and 2016 (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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	159	162	-1.9%	0	0	138	142	8	8	13	12
Connecticut	48	45	7.3%	0	0	48	45	0	0	0	0
Maine	36	36	-0.3%	0	0	16	16	8	8	13	12
Massachusetts	71	77	-8.1%	0	0	71	77	0	0	0	0
New Hampshire	4	4	1.5%	0	0	4	4	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	219	205	6.9%	0	0	172	168	41	30	6	6
New Jersey	55	55	1.2%	0	0	37	36	12	13	6	6
New York	80	78	2.1%	0	0	60	61	20	17	0	0
Pennsylvania	83	71	16.6%	0	0	74	71	9	0	0	0
East North Central	81	60	34.1%	1	-3	11	9	11	10	57	44
Illinois	25	21	21.8%	0	0	-2	-1	0	0	27	22
Indiana	27	18	49.9%	0	0	0	0	2	1	25	17
Michigan	24	21	12.1%	0	0	13	11	9	9	1	1
Ohio	1	-4	-114.2%	0	-4	0	-1	0	0	1	1
Wisconsin	4	4	1.2%	1	1	0	0	0	0	NM	3
West North Central	38	40	-3.7%	17	19	13	13	3	3	6	5
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	NM	0	0	0	0	0	0	0	0
Minnesota	34	35	-4.4%	13	15	13	13	3	3	5	5
Missouri	0	0	-100.0%	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	-2.5%	4	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	380	396	-4.2%	0	0	181	215	16	17	183	165
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	265	283	-6.5%	0	0	124	144	0	0	141	138
Georgia	11	7	64.8%	0	0	0	0	0	0	11	7
Maryland	31	25	26.1%	0	0	31	25	0	0	0	0
North Carolina	55	35	57.1%	0	0	26	19	0	0	29	16
South Carolina	3	4	-36.5%	0	0	0	0	0	0	2	4
Virginia	17	44	-62.1%	0	0	0	27	16	17	0	0
West Virginia	-1	-1	35.9%	0	0	-1	-1	0	0	0	0
East South Central	8	6	34.9%	7	4	0	0	0	0	NM	2
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	7	4	82.8%	7	4	0	0	0	0	0	0
Mississippi	0	0	-100.0%	0	0	0	0	0	0	0	0
Tennessee	NM	2	NM	0	0	0	0	0	0	NM	2
West South Central	98	100	-2.1%	0	0	17	10	0	0	82	90
Arkansas	NM	1	NM	0	0	0	0	0	0	NM	1
Louisiana	51	49	3.3%	0	0	0	0	0	0	51	49
Oklahoma	6	2	281.5%	0	0	6	3	0	0	0	-1
Texas	41	49	-15.3%	0	0	11	7	0	0	31	41
Mountain	57	66	-13.7%	3	7	28	29	0	0	27	30
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	5	5	7.7%	0	0	1	1	0	0	4	4
Idaho	7	6	16.7%	0	0	0	0	0	0	7	6
Montana	26	28	-4.6%	0	0	26	28	0	0	0	0
Nevada	3	2	59.8%	3	2	0	0	0	0	0	0
New Mexico	0	0	-263.8%	0	0	0	0	0	0	0	0
Utah	10	21	-52.9%	0	5	0	0	0	0	10	16
Wyoming	6	5	23.7%	0	0	0	0	0	0	6	5
Pacific Contiguous	76	76	0.4%	0	0	27	25	0	0	49	51
California	67	68	-1.2%	0	0	18	18	0	0	49	51
Oregon	4	4	-0.3%	0	0	4	4	0	0	0	0
Washington	5	4	26.3%	0	0	5	4	0	0	0	0
Pacific Noncontiguous	29	28	3.4%	16	10	0	2	13	17	0	0
Alaska	0	0	-15.5%	0	0	0	0	0	0	0	0
Hawaii	29	28	3.3%	16	10	0	2	13	17	0	0
U.S. Total	1,145	1,139	0.5%	43	36	586	613	92	85	423	405

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

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	1,824	1,866	-2.3%	0	0	1,601	1,658	89	86	135	122
Connecticut	547	577	-5.3%	0	0	547	577	0	0	0	0
Maine	396	381	3.8%	0	0	173	174	89	86	135	122
Massachusetts	832	858	-3.0%	0	0	832	858	0	0	0	0
New Hampshire	49	49	-0.6%	0	0	49	49	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	2,349	2,322	1.2%	0	0	1,825	1,866	457	388	67	68
New Jersey	582	607	-4.1%	0	0	372	397	144	143	67	68
New York	903	899	0.5%	0	0	685	694	219	205	0	0
Pennsylvania	863	816	5.8%	0	0	769	775	95	41	0	0
East North Central	877	940	-6.6%	13	-25	87	109	149	159	630	696
Illinois	256	274	-6.4%	0	0	-22	-16	0	0	278	290
Indiana	306	363	-15.7%	0	0	0	0	19	287	287	344
Michigan	260	302	-13.8%	0	11	115	131	129	140	16	19
Ohio	0	-48	-100.4%	-3	-54	-6	-6	0	0	9	12
Wisconsin	55	50	10.6%	16	18	0	0	0	0	39	32
West North Central	450	474	-5.1%	212	234	148	141	34	33	56	65
Iowa	2	12	-80.3%	0	0	0	0	0	0	2	12
Kansas	5	0	NM	0	0	0	0	0	0	5	0
Minnesota	396	407	-2.7%	166	180	148	141	34	33	48	53
Missouri	4	9	-59.3%	4	9	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	43	45	-5.7%	43	45	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,326	4,724	-8.4%	0	0	2,090	2,408	186	205	2,051	2,111
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	3,076	3,151	-2.4%	0	0	1,461	1,473	0	0	1,615	1,678
Georgia	108	101	6.7%	0	0	0	0	0	0	108	101
Maryland	324	323	0.4%	0	0	324	323	0	0	0	0
North Carolina	577	655	-11.8%	0	0	284	363	0	0	294	292
South Carolina	41	45	-9.3%	0	0	6	5	0	0	35	41
Virginia	213	462	-53.8%	0	0	28	257	186	205	0	0
West Virginia	-14	-12	11.9%	0	0	-14	-12	0	0	0	0
East South Central	67	75	-10.0%	45	50	0	0	0	0	23	25
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	45	50	-10.5%	45	50	0	0	0	0	0	0
Mississippi	2	5	-64.8%	0	0	0	0	0	0	2	5
Tennessee	21	20	6.2%	0	0	0	0	0	0	21	20
West South Central	1,201	1,524	-21.2%	0	0	124	119	0	0	1,077	1,405
Arkansas	5	6	-13.5%	0	0	0	0	0	0	5	6
Louisiana	616	727	-15.2%	0	0	0	0	0	0	616	727
Oklahoma	48	28	74.9%	0	0	47	22	0	0	1	5
Texas	532	764	-30.5%	0	0	77	97	0	0	454	667
Mountain	656	744	-11.9%	31	57	347	343	0	0	278	344
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	57	53	6.6%	0	0	15	11	0	0	42	42
Idaho	68	65	5.1%	0	0	0	0	0	0	68	65
Montana	332	327	1.5%	0	0	332	327	0	0	0	0
Nevada	32	21	50.1%	32	21	0	0	0	0	0	0
New Mexico	-1	0	-310.4%	-1	0	0	0	0	0	0	0
Utah	122	213	-42.7%	0	36	0	5	0	0	122	172
Wyoming	46	65	-29.4%	0	0	0	0	0	0	46	65
Pacific Contiguous	934	766	21.9%	-4	-5	285	284	0	0	653	487
California	838	666	25.9%	-4	-4	189	183	0	0	653	487
Oregon	39	41	-3.4%	-1	0	40	41	0	0	0	0
Washington	57	60	-5.1%	0	0	57	60	0	0	0	0
Pacific Noncontiguous	361	320	13.0%	177	110	2	12	182	197	0	0
Alaska	-3	-2	13.3%	-3	-2	0	0	0	0	0	0
Hawaii	364	322	13.0%	180	113	2	12	182	197	0	0
U.S. Total	13,045	13,754	-5.2%	473	421	6,509	6,941	1,095	1,068	4,968	5,324

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

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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, December 2017 and 2016 (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		Commercial Sector		Industrial Sector			
		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities			
		December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	
New England	301	338	-10.8%	NM	19	280	315	2	3	0	0
Connecticut	NM	2	NM	0	0	NM	2	0	0	0	0
Maine	207	226	-8.6%	0	0	207	226	0	0	0	0
Massachusetts	19	24	-19.6%	NM	6	NM	15	2	2	0	0
New Hampshire	32	49	-34.3%	0	0	32	49	0	0	0	0
Rhode Island	16	11	46.6%	0	0	15	10	0	1	0	0
Vermont	27	27	-0.6%	NM	13	13	14	0	0	0	0
Middle Atlantic	577	999	-42.2%	0	0	577	999	0	0	0	0
New Jersey	NM	3	NM	0	0	NM	3	0	0	0	0
New York	286	538	-46.8%	0	0	286	538	0	0	0	0
Pennsylvania	289	458	-36.8%	0	0	289	458	0	0	0	0
East North Central	2,473	2,761	-10.4%	245	406	2,221	2,346	NM	1	NM	8
Illinois	1,125	1,205	-6.6%	NM	1	1,124	1,203	NM	1	0	0
Indiana	526	538	-2.2%	0	0	526	538	0	0	0	0
Michigan	506	641	-21.1%	179	271	327	370	0	0	0	0
Ohio	172	177	-3.2%	NM	2	166	168	0	0	NM	7
Wisconsin	144	200	-28.1%	65	132	78	67	0	0	1	1
West North Central	7,234	7,009	3.2%	2,372	2,524	4,858	4,481	NM	4	0	0
Iowa	2,029	2,422	-16.2%	1,346	1,538	683	884	0	0	0	0
Kansas	1,675	1,222	37.1%	157	56	1,517	1,166	NM	0	0	0
Minnesota	1,136	1,277	-11.0%	257	315	876	959	NM	4	0	0
Missouri	251	118	113.4%	0	0	251	118	0	0	0	0
Nebraska	599	538	11.4%	NM	23	583	515	0	0	0	0
North Dakota	1,201	1,019	17.9%	485	482	716	537	0	0	0	0
South Dakota	343	414	-17.2%	112	111	231	303	0	0	0	0
South Atlantic	244	305	-20.0%	0	0	244	304	0	1	0	0
Delaware	0	1	-45.6%	0	0	0	0	0	1	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	46	76	-39.6%	0	0	46	76	0	0	0	0
North Carolina	48	6	669.7%	0	0	48	6	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	150	222	-32.6%	0	0	150	222	0	0	0	0
East South Central	0	4	-100.0%	0	0	0	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	0	4	-100.0%	0	0	0	4	0	0	0	0
West South Central	7,665	7,211	6.3%	133	148	7,528	7,058	4	4	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	2,173	1,838	18.2%	112	129	2,060	1,709	0	0	0	0
Texas	5,493	5,373	2.2%	21	19	5,468	5,349	4	4	0	0
Mountain	2,322	2,539	-8.6%	249	303	2,073	2,235	NM	0	0	0
Arizona	35	49	-27.7%	0	0	35	49	0	0	0	0
Colorado	907	874	3.8%	25	29	882	844	0	0	0	0
Idaho	210	299	-29.8%	0	0	210	299	0	0	0	0
Montana	213	243	-12.3%	23	27	190	216	0	0	0	0
Nevada	24	35	-32.4%	0	0	24	35	0	0	0	0
New Mexico	441	376	17.1%	0	0	440	376	NM	0	0	0
Utah	69	100	-31.4%	0	0	69	100	0	0	0	0
Wyoming	422	563	-24.9%	201	247	221	316	0	0	0	0
Pacific Contiguous	1,892	1,928	-1.8%	361	486	1,530	1,441	0	0	0	0
California	909	765	18.9%	14	40	894	724	0	0	0	0
Oregon	397	490	-18.9%	48	67	349	422	0	0	0	0
Washington	586	673	-13.0%	299	378	287	295	0	0	0	0
Pacific Noncontiguous	67	52	28.8%	NM	7	57	45	0	0	0	0
Alaska	NM	11	NM	NM	7	NM	4	0	0	0	0
Hawaii	51	41	25.6%	0	0	51	41	0	0	0	0
U.S. Total	22,776	23,146	-1.6%	3,389	3,894	19,368	19,228	12	14	NM	9

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 2017 are preliminary. Values for 2016 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 1.14.B. Utility Scale Facility Net Generation from Wind

by State, by Sector, Year-to-Date through December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	3,301	2,646	24.8%	223	238	3,049	2,380	28	27	2	1
Connecticut	NM	13	NM	0	0	NM	13	0	0	0	0
Maine	2,222	1,667	33.3%	0	0	2,222	1,667	0	0	0	0
Massachusetts	221	216	2.2%	56	59	142	135	21	20	2	1
New Hampshire	414	432	-4.2%	0	0	414	432	0	0	0	0
Rhode Island	153	27	476.2%	0	0	146	20	7	7	0	0
Vermont	279	291	-4.2%	166	179	113	112	0	0	0	0
Middle Atlantic	7,343	7,437	-1.3%	0	0	7,342	7,436	0	0	1	2
New Jersey	20	21	-5.1%	0	0	20	21	0	0	0	0
New York	3,944	3,940	0.1%	0	0	3,943	3,939	0	0	1	2
Pennsylvania	3,379	3,476	-2.8%	0	0	3,379	3,476	0	0	0	0
East North Central	24,203	23,019	5.1%	2,822	2,942	21,312	20,010	9	8	60	59
Illinois	11,297	10,663	5.9%	12	13	11,281	10,646	NM	5	0	0
Indiana	4,742	4,899	-3.2%	0	0	4,741	4,899	1	1	0	0
Michigan	5,072	4,696	8.0%	1,899	1,947	3,173	2,749	0	0	0	0
Ohio	1,563	1,245	25.5%	NM	11	1,498	1,180	4	3	53	52
Wisconsin	1,529	1,515	0.9%	902	972	619	536	0	0	7	7
West North Central	71,528	60,923	17.4%	23,622	21,334	47,860	39,556	46	33	0	0
Iowa	20,816	20,072	3.7%	13,540	12,770	7,272	7,298	4	4	0	0
Kansas	18,501	14,111	31.1%	1,753	830	16,735	13,281	NM	0	0	0
Minnesota	10,885	9,933	9.6%	2,593	2,646	8,263	7,259	28	29	0	0
Missouri	1,949	1,122	73.7%	0	0	1,949	1,122	0	0	0	0
Nebraska	5,237	3,798	37.9%	178	192	5,059	3,606	0	0	0	0
North Dakota	10,987	8,172	34.4%	4,561	3,905	6,426	4,267	0	0	0	0
South Dakota	3,154	3,714	-15.1%	997	991	2,157	2,723	0	0	0	0
South Atlantic	2,593	1,971	31.6%	0	0	2,588	1,966	5	5	0	0
Delaware	5	5	-6.7%	0	0	0	0	5	5	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	511	527	-3.1%	0	0	511	527	0	0	0	0
North Carolina	471	6	NM	0	0	471	6	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	1,607	1,432	12.2%	0	0	1,607	1,432	0	0	0	0
East South Central	30	38	-21.5%	0	0	30	38	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	30	38	-21.5%	0	0	30	38	0	0	0	0
West South Central	91,496	77,600	17.9%	1,727	1,686	89,728	75,866	42	48	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	24,404	20,069	21.6%	1,470	1,430	22,934	18,639	0	0	0	0
Texas	67,092	57,531	16.6%	256	256	66,794	57,227	42	48	0	0
Mountain	24,995	23,842	4.8%	2,557	2,450	22,426	21,385	NM	4	3	3
Arizona	588	542	8.7%	0	0	588	542	0	0	0	0
Colorado	9,567	9,421	1.5%	310	139	9,249	9,278	NM	1	3	3
Idaho	2,453	2,578	-4.8%	0	0	2,453	2,578	0	0	0	0
Montana	2,150	2,140	0.5%	227	231	1,923	1,909	0	0	0	0
Nevada	361	344	5.1%	0	0	361	344	0	0	0	0
New Mexico	4,542	3,605	26.0%	0	0	4,539	3,603	NM	3	0	0
Utah	935	822	13.7%	0	0	935	822	0	0	0	0
Wyoming	4,398	4,389	0.2%	2,020	2,080	2,377	2,309	0	0	0	0
Pacific Contiguous	27,958	28,708	-2.6%	5,786	6,311	22,161	22,385	6	6	5	5
California	13,971	13,509	3.4%	713	704	13,247	12,794	6	6	5	5
Oregon	6,506	7,157	-9.1%	1,074	1,261	5,432	5,896	0	0	0	0
Washington	7,481	8,042	-7.0%	3,999	4,346	3,482	3,695	0	0	0	0
Pacific Noncontiguous	807	808	-0.2%	105	109	702	700	0	0	0	0
Alaska	164	169	-3.4%	105	109	58	60	0	0	0	0
Hawaii	643	639	0.7%	0	0	643	639	0	0	0	0
U.S. Total	254,254	226,993	12.0%	36,842	35,070	217,198	191,720	144	131	71	71

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Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector					
	December 2017	December 2016	Percentage Change	Electric Utilities		Independent Power Producers		December 2017	December 2016	December 2017	December 2016				
				Generation at Utility Scale Facilities		Generation at Utility Scale Facilities						Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
				December 2017	December 2016	December 2017	December 2016					December 2017	December 2016	December 2017	December 2016
New England	638	664	-3.9%	51	49	469	489	14	13	104	113				
Connecticut	73	70	4.0%	0	0	73	70	0	0	0	0				
Maine	260	275	-5.5%	0	0	148	154	8	8	104	113				
Massachusetts	100	107	-6.4%	0	0	98	106	2	1	0	0				
New Hampshire	144	154	-6.0%	24	25	117	125	4	3	0	0				
Rhode Island	19	18	8.6%	0	0	19	18	0	0	0	0				
Vermont	41	40	3.0%	27	24	NM	16	0	0	0	0				
Middle Atlantic	503	492	2.2%	0	0	379	390	50	38	74	64				
New Jersey	85	88	-2.5%	0	0	72	72	14	15	0	0				
New York	200	200	-0.1%	0	0	161	163	21	18	18	19				
Pennsylvania	218	205	6.5%	0	0	146	155	15	5	57	45				
East North Central	518	497	4.3%	75	66	281	271	19	14	144	145				
Illinois	42	40	5.6%	2	2	40	38	0	0	0	0				
Indiana	37	36	4.3%	24	24	4	4	2	2	7	6				
Michigan	224	226	-0.8%	0	0	154	152	10	9	61	65				
Ohio	60	60	-0.5%	0	0	39	38	1	1	19	21				
Wisconsin	155	135	14.8%	49	39	43	39	6	3	57	53				
West North Central	214	213	0.7%	48	40	88	99	12	11	66	63				
Iowa	18	23	-18.8%	NM	3	11	11	3	4	2	5				
Kansas	5	5	-3.6%	0	0	5	5	0	0	0	0				
Minnesota	170	169	0.7%	36	30	69	79	3	3	62	57				
Missouri	12	11	8.1%	3	3	4	4	5	4	0	0				
Nebraska	8	5	66.8%	7	4	0	0	1	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	1,793	1,751	2.4%	184	195	609	603	25	34	974	919				
Delaware	5	6	-12.9%	0	0	4	5	0	0	NM	2				
District of Columbia	5	5	8.4%	0	0	5	5	0	0	0	0				
Florida	454	446	1.7%	7	8	255	233	5	5	188	200				
Georgia	458	409	11.8%	0	0	92	65	0	0	365	344				
Maryland	51	44	14.3%	0	0	39	32	2	1	9	11				
North Carolina	234	260	-10.2%	0	0	108	135	NM	9	125	116				
South Carolina	224	191	16.9%	38	43	34	36	0	0	152	112				
Virginia	363	389	-6.6%	140	144	72	92	18	19	133	134				
West Virginia	0	0	--	0	0	0	0	0	0	0	0				
East South Central	552	529	4.3%	8	9	32	33	0	0	513	487				
Alabama	302	281	7.6%	0	0	24	23	0	0	278	258				
Kentucky	39	39	1.6%	8	9	0	1	0	0	31	29				
Mississippi	131	125	5.1%	0	0	NM	1	0	0	130	124				
Tennessee	80	85	-6.1%	0	0	7	8	0	0	73	77				
West South Central	529	534	-1.0%	0	0	64	82	4	4	461	448				
Arkansas	132	128	2.9%	0	0	10	10	1	0	121	118				
Louisiana	239	221	8.3%	0	0	7	6	0	0	232	215				
Oklahoma	30	34	-12.2%	0	0	NM	1	0	0	29	33				
Texas	128	151	-15.4%	0	0	45	65	3	4	79	82				
Mountain	92	98	-6.1%	NM	1	57	59	2	2	32	35				
Arizona	19	19	-1.8%	0	0	19	19	0	0	0	0				
Colorado	14	16	-10.6%	0	0	14	16	0	0	0	0				
Idaho	44	47	-6.7%	NM	1	12	12	1	1	30	33				
Montana	2	2	-0.4%	0	0	0	0	0	0	2	2				
Nevada	5	5	5.3%	0	0	5	5	0	0	0	0				
New Mexico	2	2	14.4%	0	0	2	2	0	0	0	0				
Utah	6	7	-17.0%	0	0	5	6	1	1	0	0				
Wyoming	0	0	--	0	0	0	0	0	0	0	0				
Pacific Contiguous	790	754	4.7%	66	76	414	394	74	76	237	208				
California	510	489	4.3%	14	21	366	356	69	72	60	40				
Oregon	94	83	12.8%	5	6	37	28	3	3	49	46				
Washington	186	182	2.1%	46	49	10	10	NM	1	128	122				
Pacific Noncontiguous	24	28	-14.5%	6	1	0	4	18	20	NM	2				
Alaska	4	3	36.1%	0	0	0	0	4	3	NM	0				
Hawaii	20	25	-20.7%	6	1	0	4	14	17	0	2				
U.S. Total	5,653	5,560	1.7%	438	436	2,392	2,426	217	214	2,606	2,484				

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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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	7,407	7,220	2.6%	559	613	5,561	5,377	170	155	1,118	1,075
Connecticut	850	856	-0.7%	0	0	850	856	0	0	0	0
Maine	2,930	2,788	5.1%	0	0	1,718	1,623	94	90	1,118	1,075
Massachusetts	1,193	1,204	-0.9%	0	0	1,165	1,177	29	27	0	0
New Hampshire	1,780	1,689	5.4%	291	308	1,444	1,346	45	36	0	0
Rhode Island	204	205	-0.5%	0	0	204	205	0	0	0	0
Vermont	450	477	-5.8%	268	305	180	170	2	2	0	0
Middle Atlantic	5,731	5,618	2.0%	0	0	4,336	4,367	553	480	842	771
New Jersey	938	983	-4.6%	0	0	769	815	169	167	0	0
New York	2,281	2,244	1.7%	0	0	1,852	1,828	231	217	198	199
Pennsylvania	2,511	2,391	5.0%	0	0	1,715	1,723	153	96	644	572
East North Central	5,853	5,587	4.8%	774	639	3,272	3,109	219	210	1,587	1,629
Illinois	495	467	6.0%	21	22	474	445	0	0	0	0
Indiana	435	433	0.4%	281	287	50	51	20	20	83	75
Michigan	2,578	2,495	3.3%	0	0	1,791	1,646	135	146	653	703
Ohio	710	722	-1.6%	4	4	457	459	8	8	241	252
Wisconsin	1,635	1,470	11.2%	468	327	500	508	57	35	610	599
West North Central	2,511	2,445	2.7%	557	558	1,111	1,052	138	139	705	695
Iowa	193	252	-23.2%	22	23	89	127	41	47	41	55
Kansas	57	59	-3.1%	0	0	57	59	0	0	0	0
Minnesota	2,016	1,892	6.5%	419	417	918	818	24	27	655	631
Missouri	144	139	3.9%	38	39	46	49	56	47	3	3
Nebraska	95	98	-2.7%	78	80	0	0	17	18	0	0
North Dakota	6	6	9.9%	0	0	0	0	0	0	6	6
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	19,875	18,907	5.1%	1,954	1,766	6,730	6,421	278	367	10,913	10,353
Delaware	65	68	-3.8%	0	0	50	52	0	0	15	16
District of Columbia	47	53	-10.6%	0	0	47	53	0	0	0	0
Florida	4,941	4,643	6.4%	81	88	2,797	2,482	47	48	2,016	2,025
Georgia	4,917	4,573	7.5%	0	0	857	719	0	3	4,060	3,852
Maryland	549	546	0.6%	0	0	420	417	13	16	116	112
North Carolina	2,633	2,556	3.0%	0	0	1,268	1,217	11	74	1,355	1,265
South Carolina	2,687	2,376	13.1%	432	420	434	409	0	0	1,820	1,547
Virginia	4,035	4,092	-1.4%	1,441	1,259	857	1,072	206	226	1,531	1,535
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	6,236	6,258	-0.3%	89	91	371	373	0	0	5,777	5,794
Alabama	3,377	3,335	1.2%	0	0	273	265	0	0	3,104	3,071
Kentucky	443	465	-4.7%	89	91	7	14	0	0	347	360
Mississippi	1,485	1,524	-2.6%	0	0	10	10	0	0	1,475	1,514
Tennessee	932	933	-0.2%	0	0	81	84	0	0	850	849
West South Central	6,128	6,291	-2.6%	0	19	824	888	39	40	5,285	5,345
Arkansas	1,490	1,370	8.8%	0	0	112	108	6	5	1,372	1,257
Louisiana	2,796	2,876	-2.8%	0	0	81	80	0	0	2,715	2,796
Oklahoma	294	362	-18.7%	0	0	15	15	0	0	280	348
Texas	1,548	1,683	-8.0%	0	19	616	685	33	35	899	944
Mountain	1,042	1,086	-4.0%	11	11	683	662	22	27	326	385
Arizona	238	214	11.0%	0	0	238	214	0	0	0	0
Colorado	166	162	2.3%	0	0	166	162	0	0	0	0
Idaho	466	532	-12.4%	11	11	137	145	12	11	305	365
Montana	21	20	5.1%	0	0	0	0	0	0	21	20
Nevada	60	55	8.4%	0	0	60	55	0	0	0	0
New Mexico	18	18	1.1%	0	0	18	18	0	0	0	0
Utah	73	84	-12.8%	0	0	63	68	10	16	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8,987	8,947	0.4%	739	780	4,866	4,787	847	901	2,535	2,479
California	5,911	5,939	-0.5%	139	230	4,331	4,268	797	853	644	589
Oregon	1,040	1,001	4.0%	62	63	417	396	32	32	529	510
Washington	2,035	2,008	1.4%	539	488	117	124	17	16	1,362	1,381
Pacific Noncontiguous	286	402	-29.0%	54	37	0	51	231	247	NM	66
Alaska	42	43	-1.2%	0	0	0	0	42	43	NM	1
Hawaii	243	359	-32.3%	54	37	0	51	189	205	0	66
U.S. Total	64,057	62,760	2.1%	4,738	4,516	27,754	27,087	2,497	2,565	29,067	28,592

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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, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
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	359	378	-5.1%	23	23	336	355	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	NM	7	NM	0	0	NM	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	311	323	-3.8%	0	0	311	323	0	0	0	0
New Mexico	2	1	16.4%	0	0	2	1	0	0	0	0
Utah	40	46	-13.5%	23	23	17	24	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,013	1,047	-3.3%	54	72	958	975	0	0	0	0
California	996	1,026	-2.9%	54	72	942	954	0	0	0	0
Oregon	17	22	-23.7%	0	0	17	21	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	22	29	-24.3%	0	0	22	29	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	22	29	-24.3%	0	0	22	29	0	0	0	0
U.S. Total	1,393	1,454	-4.2%	77	95	1,316	1,359	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 2017 are preliminary. Values for 2016 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 1.16.B. Utility Scale Facility Net Generation from Geothermal

by State, by Sector, Year-to-Date through December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	3,908	3,925	-0.4%	266	257	3,642	3,668	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	68	72	-6.2%	0	0	68	72	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	3,365	3,353	0.3%	0	0	3,365	3,353	0	0	0	0
New Mexico	13	14	-8.8%	0	0	13	14	0	0	0	0
Utah	463	485	-4.6%	266	257	196	228	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	11,816	11,641	1.5%	773	823	11,044	10,818	0	0	0	0
California	11,624	11,457	1.5%	771	819	10,853	10,638	0	0	0	0
Oregon	193	184	4.9%	2	4	191	180	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	252	260	-3.2%	0	0	252	260	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	252	260	-3.2%	0	0	252	260	0	0	0	0
U.S. Total	15,976	15,826	0.9%	1,039	1,080	14,937	14,746	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 2017 are preliminary. Values for 2016 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.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	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	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
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	6	3	117.6%	6	3	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	6	3	117.6%	6	3	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	27	24	14.6%	0	0	27	24	0	0	0	0
Arizona	24	22	9.3%	0	0	24	22	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	3	2	75.7%	0	0	3	2	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	90	64	39.6%	0	0	90	64	0	0	0	0
California	90	64	39.6%	0	0	90	64	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	123	91	35.3%	6	3	117	88	0	0	0	0

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 NM = Not meaningful due to large relative standard error or excessive percentage change.
 Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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 December 2017 and 2016 (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	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	22	75	-71.4%	22	75	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	22	75	-71.4%	22	75	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	884	888	-0.4%	0	0	884	888	0	0	0	0
Arizona	724	644	12.5%	0	0	724	644	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	160	244	-34.5%	0	0	160	244	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	2,364	2,421	-2.3%	0	0	2,364	2,421	0	0	0	0
California	2,364	2,421	-2.3%	0	0	2,364	2,421	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	3,269	3,384	-3.4%	22	75	3,248	3,308	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 2017 are preliminary. Values for 2016 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	677,371	496,192	178,047	111	3,021
2017	663,479	485,100	175,500	96	2,783
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	61,983	45,395	16,319	12	258
February	50,516	37,538	12,717	13	248
March	39,864	30,983	8,616	13	252
April	39,065	28,614	10,238	7	206
May	45,032	33,712	11,064	6	249
June	63,186	46,191	16,721	7	266
July	74,132	53,946	19,894	7	285
August	73,798	53,681	19,827	8	282
Sept	62,335	44,665	17,407	8	254
October	54,537	39,319	14,974	8	237
November	48,076	35,090	12,758	10	218
December	64,847	47,058	17,512	12	266
Year 2017					
January	63,394	46,763	16,354	12	265
February	47,878	35,521	12,112	10	235
March	48,700	35,717	12,738	9	235
April	44,216	31,501	12,507	5	202
May	50,843	37,410	13,209	6	219
June	58,884	43,796	14,854	7	226
July	69,775	52,038	17,494	8	234
August	65,801	49,033	16,527	8	233
Sept	54,702	39,435	15,035	8	225
October	50,129	36,279	13,610	7	233
November	50,864	35,840	14,788	7	229
December	58,292	41,767	16,270	10	246
Year to Date					
2015	739,594	539,506	195,927	163	3,999
2016	677,371	496,192	178,047	111	3,021
2017	663,479	485,100	175,500	96	2,783
Rolling 12 Months Ending in December					
2016	677,371	496,192	178,047	111	3,021
2017	663,479	485,100	175,500	96	2,783

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	16,586	2,979	1,336	572	11,700
2017	15,302	2,800	1,350	511	10,641
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	1,624	288	133	63	1,140
February	1,503	277	130	62	1,034
March	1,433	232	117	61	1,023
April	1,215	204	103	39	870
May	1,264	215	90	31	929
June	1,353	241	97	39	976
July	1,472	278	118	39	1,036
August	1,434	270	112	42	1,010
Sept	1,257	216	97	41	903
October	1,260	224	105	42	889
November	1,256	233	99	50	875
December	1,515	301	136	63	1,015
Year 2017					
January	1,510	290	140	55	1,025
February	1,228	208	124	44	852
March	1,357	225	146	49	937
April	1,216	212	103	35	866
May	1,221	206	101	34	880
June	1,208	219	82	39	868
July	1,225	264	104	45	813
August	1,247	264	110	40	832
Sept	1,155	216	94	39	805
October	1,278	225	101	36	916
November	1,320	262	102	42	913
December	1,339	209	143	52	935
Year to Date					
2015	16,632	1,032	1,980	635	12,985
2016	16,586	2,979	1,336	572	11,700
2017	15,302	2,800	1,350	511	10,641
Rolling 12 Months Ending in December					
2016	16,586	2,979	1,336	572	11,700
2017	15,302	2,800	1,350	511	10,641

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	693,958	499,172	179,383	683	14,720
2017	678,780	487,900	176,849	607	13,424
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	63,607	45,683	16,452	75	1,397
February	52,019	37,815	12,846	75	1,282
March	41,297	31,215	8,733	74	1,275
April	40,280	28,818	10,341	46	1,076
May	46,297	33,928	11,154	37	1,178
June	64,539	46,432	16,818	46	1,243
July	75,604	54,224	20,012	46	1,321
August	75,232	53,951	19,938	49	1,292
Sept	63,592	44,881	17,504	50	1,157
October	55,798	39,543	15,079	50	1,126
November	49,331	35,322	12,857	60	1,093
December	66,362	47,359	17,648	75	1,280
Year 2017					
January	64,904	47,054	16,494	66	1,290
February	49,106	35,729	12,235	54	1,087
March	50,057	35,942	12,884	58	1,172
April	45,432	31,713	12,611	40	1,068
May	52,064	37,616	13,310	40	1,098
June	60,092	44,015	14,937	46	1,094
July	71,001	52,302	17,598	53	1,047
August	67,048	49,297	16,637	49	1,065
Sept	55,857	39,651	15,129	47	1,030
October	51,406	36,504	13,711	43	1,149
November	52,184	36,102	14,890	50	1,142
December	59,631	41,975	16,413	62	1,181
Year to Date					
2015	756,226	540,538	197,906	798	16,984
2016	693,958	499,172	179,383	683	14,720
2017	678,780	487,900	176,849	607	13,424
Rolling 12 Months Ending in December					
2016	693,958	499,172	179,383	683	14,720
2017	678,780	487,900	176,849	607	13,424

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	22,405	16,137	5,624	108	536
2017	21,935	15,722	5,553	193	467
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	2,472	1,727	685	12	48
February	2,230	1,474	698	12	46
March	1,495	1,096	355	4	40
April	1,421	1,055	320	8	38
May	1,662	1,212	386	8	56
June	1,693	1,275	364	7	48
July	2,287	1,711	514	11	52
August	2,231	1,644	537	10	39
Sept	1,620	1,128	441	7	44
October	1,629	1,156	423	7	43
November	1,672	1,249	372	11	40
December	1,995	1,410	530	12	43
Year 2017					
January	1,977	1,459	453	20	45
February	1,569	1,157	362	13	38
March	1,673	1,342	278	16	37
April	1,519	1,188	285	10	36
May	1,752	1,306	394	16	37
June	1,739	1,290	397	14	38
July	1,853	1,296	505	17	35
August	1,723	1,275	392	20	37
Sept	1,723	1,253	417	15	38
October	1,730	1,331	346	14	39
November	1,617	1,184	379	15	39
December	3,058	1,642	1,346	22	47
Year to Date					
2015	28,925	18,562	9,473	249	641
2016	22,405	16,137	5,624	108	536
2017	21,935	15,722	5,553	193	467
Rolling 12 Months Ending in December					
2016	22,405	16,137	5,624	108	536
2017	21,935	15,722	5,553	193	467

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	2,277	68	245	245	1,719
2017	1,964	72	238	289	1,365
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	231	12	24	43	153
February	316	17	39	27	233
March	178	3	28	7	140
April	174	3	16	17	138
May	198	3	18	14	163
June	181	6	13	14	149
July	185	2	12	28	142
August	153	3	15	18	117
Sept	143	3	14	9	117
October	174	3	18	9	144
November	167	4	14	35	113
December	178	9	33	26	110
Year 2017					
January	207	12	39	39	117
February	136	8	19	28	81
March	138	4	10	30	94
April	137	3	11	16	107
May	157	3	14	19	120
June	148	5	15	15	113
July	125	3	14	17	90
August	138	3	12	19	103
Sept	120	4	14	15	87
October	145	4	18	17	106
November	177	4	21	23	129
December	336	18	51	50	216
Year to Date					
2015	3,142	62	1,155	282	1,643
2016	2,277	68	245	245	1,719
2017	1,964	72	238	289	1,365
Rolling 12 Months Ending in December					
2016	2,277	68	245	245	1,719
2017	1,964	72	238	289	1,365

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Barrels)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	24,682	16,205	5,869	352	2,255
2017	23,899	15,794	5,791	482	1,831
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	2,702	1,739	709	55	200
February	2,546	1,491	737	38	279
March	1,673	1,099	383	12	180
April	1,594	1,058	337	24	175
May	1,860	1,216	403	22	219
June	1,875	1,281	377	21	197
July	2,472	1,713	527	38	194
August	2,384	1,647	552	28	156
Sept	1,763	1,131	455	16	161
October	1,803	1,159	441	16	187
November	1,838	1,254	386	46	153
December	2,173	1,419	563	37	154
Year 2017					
January	2,184	1,471	492	59	162
February	1,705	1,164	381	41	119
March	1,811	1,346	288	46	132
April	1,656	1,190	296	26	143
May	1,910	1,309	408	35	157
June	1,886	1,295	412	29	151
July	1,978	1,299	519	34	125
August	1,861	1,279	404	39	140
Sept	1,843	1,257	431	30	126
October	1,875	1,335	364	31	145
November	1,795	1,188	400	38	167
December	3,395	1,660	1,398	73	264
Year to Date					
2015	32,067	18,624	10,629	531	2,283
2016	24,682	16,205	5,869	352	2,255
2017	23,899	15,794	5,791	482	1,831
Rolling 12 Months Ending in December					
2016	24,682	16,205	5,869	352	2,255
2017	23,899	15,794	5,791	482	1,831

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

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Petroleum 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	4,253	3,427	591	2	233
2017	3,349	2,731	415	3	200
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	342	302	16	0	23
February	330	271	39	0	19
March	362	283	63	0	17
April	382	325	43	0	14
May	370	296	52	0	23
June	380	308	52	0	21
July	400	324	56	0	20
August	419	337	61	0	21
Sept	376	311	49	0	16
October	250	171	61	0	18
November	307	239	46	0	21
December	336	260	55	0	20
Year 2017					
January	355	301	40	0	13
February	263	217	32	0	13
March	273	214	40	0	18
April	153	110	29	0	13
May	320	264	38	0	18
June	341	282	40	0	19
July	332	271	39	0	23
August	282	226	38	0	19
Sept	262	209	37	0	16
October	221	171	35	0	15
November	267	234	13	0	19
December	280	231	35	0	14
Year to Date					
2015	4,044	3,120	669	2	253
2016	4,253	3,427	591	2	233
2017	3,349	2,731	415	3	200
Rolling 12 Months Ending in December					
2016	4,253	3,427	591	2	233
2017	3,349	2,731	415	3	200

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

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

Values for 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	1,099	6	113	9	971
2017	917	11	115	15	776
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	86	1	11	2	73
February	95	0	10	2	83
March	85	0	11	2	72
April	73	1	7	0	66
May	96	0	7	0	89
June	100	0	9	0	91
July	101	1	9	1	91
August	101	1	10	0	91
Sept	75	1	10	0	64
October	92	1	11	0	80
November	99	0	10	0	89
December	95	1	10	2	83
Year 2017					
January	74	0	10	2	62
February	63	0	10	1	51
March	85	1	10	2	72
April	70	0	10	1	59
May	76	1	10	1	65
June	92	1	9	1	81
July	79	1	10	0	68
August	84	2	9	2	71
Sept	74	1	9	2	62
October	82	1	9	1	70
November	71	1	9	1	60
December	68	1	10	2	55
Year to Date					
2015	1,144	9	109	16	1,010
2016	1,099	6	113	9	971
2017	917	11	115	15	776
Rolling 12 Months Ending in December					
2016	1,099	6	113	9	971
2017	917	11	115	15	776

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	5,352	3,433	705	10	1,204
2017	4,266	2,742	530	17	976
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	427	302	27	3	96
February	425	272	49	2	102
March	447	283	74	2	89
April	455	326	50	0	80
May	466	296	58	0	112
June	480	308	60	0	111
July	502	325	65	1	111
August	520	337	71	0	112
Sept	451	311	59	0	80
October	342	172	72	0	99
November	406	240	56	0	110
December	431	261	65	2	103
Year 2017					
January	428	301	50	2	75
February	325	218	42	1	65
March	358	215	50	2	90
April	222	110	39	1	72
May	396	265	48	1	83
June	433	283	49	1	100
July	412	272	49	0	91
August	367	228	47	2	89
Sept	337	211	46	2	78
October	302	172	44	2	85
November	338	235	22	1	79
December	348	233	44	2	69
Year to Date					
2015	5,188	3,128	779	18	1,263
2016	5,352	3,433	705	10	1,204
2017	4,266	2,742	530	17	976
Rolling 12 Months Ending in December					
2016	5,352	3,433	705	10	1,204
2017	4,266	2,742	530	17	976

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.

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

See the Technical Notes for fuel conversion factors.

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

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

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

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	10,170,110	5,018,894	4,571,375	46,304	533,537
2017	9,440,777	4,752,790	4,118,433	44,765	524,788
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	786,040	390,246	347,970	3,499	44,325
February	702,082	352,877	304,311	3,344	41,550
March	758,344	377,953	333,147	3,493	43,751
April	734,600	362,063	327,542	3,278	41,717
May	819,345	407,178	365,297	3,620	43,251
June	985,722	497,616	439,024	4,109	44,973
July	1,157,589	569,028	535,036	5,188	48,337
August	1,168,337	564,916	549,161	5,384	48,875
Sept	932,041	451,574	431,159	4,223	45,086
October	760,610	368,087	345,831	3,675	43,017
November	679,004	333,973	298,069	2,944	44,018
December	686,396	343,384	294,829	3,547	44,637
Year 2017					
January	663,708	329,690	283,243	3,857	46,918
February	573,451	283,558	245,447	3,445	41,001
March	693,489	349,742	296,454	3,831	43,463
April	640,489	326,706	268,102	3,158	42,523
May	723,289	374,999	302,060	3,443	42,787
June	870,696	438,191	384,666	3,771	44,068
July	1,091,770	554,104	486,788	4,170	46,707
August	1,049,281	530,700	469,818	4,173	44,590
Sept	876,462	440,975	390,611	3,897	40,978
October	793,981	397,778	351,044	3,715	41,445
November	679,061	337,407	294,822	3,524	43,308
December	785,101	388,941	345,378	3,781	47,000
Year to Date					
2015	10,016,576	4,745,255	4,576,683	70,092	624,545
2016	10,170,110	5,018,894	4,571,375	46,304	533,537
2017	9,440,777	4,752,790	4,118,433	44,765	524,788
Rolling 12 Months Ending in December					
2016	10,170,110	5,018,894	4,571,375	46,304	533,537
2017	9,440,777	4,752,790	4,118,433	44,765	524,788

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	1,151,866	38,096	356,905	80,943	675,922
2017	1,156,214	42,382	336,461	75,988	701,383
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	102,014	3,434	32,304	7,160	59,117
February	92,405	3,264	29,348	6,354	53,439
March	95,161	3,002	30,664	6,298	55,197
April	88,634	2,286	27,002	6,104	53,241
May	92,471	2,888	29,069	6,096	54,418
June	96,618	3,649	30,019	6,907	56,043
July	102,867	3,805	32,099	8,142	58,821
August	105,025	3,723	33,436	8,377	59,489
Sept	95,330	2,973	29,581	6,850	55,926
October	92,360	2,740	27,138	6,125	56,357
November	90,321	2,812	27,191	5,773	54,544
December	98,660	3,520	29,054	6,758	59,328
Year 2017					
January	101,763	3,768	30,660	7,653	59,682
February	91,904	3,190	26,545	6,508	55,660
March	98,721	3,441	29,333	6,528	59,418
April	90,079	3,049	26,033	5,446	55,552
May	90,682	2,960	26,132	5,562	56,028
June	93,506	3,422	27,809	6,089	56,187
July	100,187	4,092	29,292	6,547	60,257
August	97,901	3,982	29,182	6,392	58,346
Sept	93,871	3,664	26,818	5,998	57,391
October	95,459	3,602	27,375	6,139	58,343
November	95,225	3,299	27,285	6,155	58,485
December	106,914	3,913	29,997	6,971	66,034
Year to Date					
2015	935,098	8,060	283,372	46,287	597,379
2016	1,151,866	38,096	356,905	80,943	675,922
2017	1,156,214	42,382	336,461	75,988	701,383
Rolling 12 Months Ending in December					
2016	1,151,866	38,096	356,905	80,943	675,922
2017	1,156,214	42,382	336,461	75,988	701,383

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

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Values for 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	11,321,975	5,056,990	4,928,280	127,246	1,209,459
2017	10,596,991	4,795,172	4,454,894	120,753	1,226,171
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	888,054	393,680	380,273	10,658	103,442
February	794,487	356,141	333,659	9,697	94,990
March	853,505	380,955	363,811	9,791	98,949
April	823,234	364,349	354,544	9,383	94,958
May	911,816	410,066	394,365	9,716	97,669
June	1,082,340	501,265	469,043	11,016	101,016
July	1,260,455	572,833	567,135	13,330	107,158
August	1,273,362	568,640	582,596	13,761	108,365
Sept	1,027,371	454,547	460,740	11,073	101,012
October	852,970	370,827	372,969	9,800	99,374
November	769,325	336,785	325,260	8,716	98,563
December	785,056	346,904	323,883	10,305	103,965
Year 2017					
January	765,471	333,459	313,903	11,509	106,600
February	665,355	286,748	271,992	9,953	96,662
March	792,211	353,183	325,787	10,359	102,882
April	730,568	329,755	294,135	8,603	98,075
May	813,971	377,959	328,192	9,005	98,815
June	964,202	441,612	412,475	9,860	100,255
July	1,191,957	558,196	516,079	10,718	106,964
August	1,147,182	534,682	499,000	10,564	102,936
Sept	970,332	444,639	417,429	9,895	98,369
October	889,440	401,379	378,419	9,854	99,788
November	774,286	340,707	322,107	9,680	101,792
December	892,015	392,854	375,375	10,752	113,034
Year to Date					
2015	10,951,674	4,753,315	4,860,055	116,380	1,221,924
2016	11,321,975	5,056,990	4,928,280	127,246	1,209,459
2017	10,596,991	4,795,172	4,454,894	120,753	1,226,171
Rolling 12 Months Ending in December					
2016	11,321,975	5,056,990	4,928,280	127,246	1,209,459
2017	10,596,991	4,795,172	4,454,894	120,753	1,226,171

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.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	273,557	24,280	224,993	20,445	3,839
2017	267,266	25,169	219,253	18,957	3,888
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	22,612	2,036	18,360	1,865	351
February	21,859	2,088	17,744	1,705	323
March	23,337	2,187	19,021	1,786	343
April	22,556	2,080	18,805	1,340	331
May	23,744	2,120	19,554	1,717	354
June	22,668	1,896	18,683	1,768	320
July	23,052	1,950	19,047	1,734	321
August	23,038	2,011	18,978	1,726	324
Sept	21,757	2,010	17,792	1,678	278
October	20,377	1,922	16,583	1,610	263
November	24,047	1,941	20,036	1,762	307
December	24,510	2,041	20,392	1,753	324
Year 2017					
January	23,634	2,207	19,369	1,687	371
February	21,208	2,062	17,332	1,463	351
March	23,157	2,249	18,842	1,672	394
April	21,387	2,091	17,433	1,516	348
May	21,919	2,234	17,939	1,460	286
June	21,978	1,939	18,174	1,547	318
July	22,785	1,979	18,962	1,583	261
August	22,973	2,081	18,999	1,598	296
Sept	21,810	1,990	17,980	1,560	280
October	21,579	2,019	17,839	1,410	311
November	21,839	2,108	17,726	1,671	333
December	22,997	2,209	18,658	1,791	339
Year to Date					
2015	282,530	25,257	227,381	25,250	4,642
2016	273,557	24,280	224,993	20,445	3,839
2017	267,266	25,169	219,253	18,957	3,888
Rolling 12 Months Ending in December					
2016	273,557	24,280	224,993	20,445	3,839
2017	267,266	25,169	219,253	18,957	3,888

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	4,163	3	2,339	1,034	788
2017	4,870	6	2,836	1,099	928
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	352	0	202	84	66
February	340	0	189	86	65
March	358	0	196	86	75
April	355	0	201	88	66
May	356	0	194	90	72
June	344	0	193	85	66
July	335	0	181	87	66
August	332	0	181	82	68
Sept	327	0	187	81	59
October	301	0	157	87	56
November	378	0	227	86	66
December	387	0	230	91	65
Year 2017					
January	461	0	292	94	75
February	437	0	274	92	70
March	482	1	313	92	76
April	409	0	222	107	80
May	292	0	133	85	73
June	378	1	190	89	98
July	365	1	209	85	71
August	409	1	214	98	96
Sept	360	1	179	98	82
October	396	1	249	93	54
November	428	0	278	85	65
December	452	0	282	81	89
Year to Date					
2015	1,522	2	644	515	362
2016	4,163	3	2,339	1,034	788
2017	4,870	6	2,836	1,099	928
Rolling 12 Months Ending in December					
2016	4,163	3	2,339	1,034	788
2017	4,870	6	2,836	1,099	928

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 2016 and prior years are final. Values for 2017 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.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2007-December 2017 (Million Cubic Feet)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	277,720	24,283	227,332	21,479	4,626
2017	272,136	25,175	222,089	20,056	4,816
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	22,964	2,036	18,562	1,949	417
February	22,200	2,088	17,933	1,791	388
March	23,694	2,187	19,217	1,873	417
April	22,911	2,081	19,005	1,428	397
May	24,100	2,120	19,748	1,807	425
June	23,012	1,896	18,876	1,853	386
July	23,387	1,950	19,229	1,822	386
August	23,370	2,011	19,159	1,808	392
Sept	22,084	2,010	17,978	1,759	337
October	20,678	1,922	16,740	1,697	319
November	24,425	1,941	20,263	1,848	373
December	24,897	2,042	20,622	1,845	388
Year 2017					
January	24,095	2,207	19,662	1,781	445
February	21,645	2,062	17,607	1,555	422
March	23,639	2,250	19,155	1,764	470
April	21,796	2,091	17,655	1,623	428
May	22,211	2,235	18,072	1,546	359
June	22,356	1,940	18,364	1,636	415
July	23,150	1,980	19,172	1,667	332
August	23,382	2,082	19,213	1,696	392
Sept	22,170	1,991	18,159	1,658	362
October	21,975	2,020	18,088	1,503	365
November	22,267	2,109	18,004	1,756	398
December	23,449	2,209	18,940	1,872	428
Year to Date					
2015	284,052	25,259	228,024	25,765	5,004
2016	277,720	24,283	227,332	21,479	4,626
2017	272,136	25,175	222,089	20,056	4,816
Rolling 12 Months Ending in December					
2016	277,720	24,283	227,332	21,479	4,626
2017	272,136	25,175	222,089	20,056	4,816

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 2016 and prior years are final. Values for 2017 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.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	16,994	464	13,953	2,566	11
2017	16,081	422	13,203	2,448	8
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	1,398	34	1,161	202	1
February	1,283	27	1,081	174	1
March	1,344	41	1,091	211	1
April	1,413	40	1,153	219	1
May	1,463	44	1,205	214	1
June	1,468	40	1,202	225	1
July	1,486	37	1,212	236	1
August	1,509	42	1,233	233	1
Sept	1,397	43	1,142	210	1
October	1,378	37	1,127	213	1
November	1,379	39	1,127	212	1
December	1,476	38	1,220	218	0
Year 2017					
January	1,412	35	1,179	198	0
February	1,223	19	1,020	185	0
March	1,308	36	1,075	197	0
April	1,270	35	1,033	201	0
May	1,386	36	1,130	219	1
June	1,399	38	1,160	199	1
July	1,416	41	1,156	218	1
August	1,428	47	1,166	215	1
Sept	1,299	41	1,057	200	1
October	1,296	33	1,051	210	1
November	1,289	30	1,059	200	1
December	1,356	32	1,117	206	1
Year to Date					
2015	16,631	452	13,797	2,375	8
2016	16,994	464	13,953	2,566	11
2017	16,081	422	13,203	2,448	8
Rolling 12 Months Ending in December					
2016	16,994	464	13,953	2,566	11
2017	16,081	422	13,203	2,448	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.

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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 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	2,232	0	885	1,134	213
2017	1,984	0	814	962	208
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	191	0	80	92	18
February	189	0	87	88	14
March	219	0	96	104	19
April	181	0	65	98	18
May	182	0	70	96	17
June	172	0	73	81	18
July	186	0	74	96	16
August	191	0	71	96	23
Sept	176	0	64	95	18
October	179	0	65	95	19
November	180	0	68	94	17
December	185	0	71	98	16
Year 2017					
January	191	0	72	99	20
February	160	0	64	84	12
March	176	0	75	82	19
April	161	0	69	74	18
May	171	0	69	84	18
June	172	0	68	88	16
July	173	0	72	84	17
August	183	0	77	84	22
Sept	143	0	63	63	17
October	143	0	59	66	18
November	155	0	64	76	15
December	157	0	63	77	17
Year to Date					
2015	1,986	0	655	1,127	203
2016	2,232	0	885	1,134	213
2017	1,984	0	814	962	208
Rolling 12 Months Ending in December					
2016	2,232	0	885	1,134	213
2017	1,984	0	814	962	208

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.

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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 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and

Useful Thermal Output, by Sector, 2007-December 2017 (Thousand Tons)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	19,226	464	14,838	3,700	224
2017	18,065	422	14,017	3,410	216
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	1,589	34	1,241	295	19
February	1,472	27	1,167	262	15
March	1,563	41	1,188	315	19
April	1,594	40	1,218	317	18
May	1,646	44	1,274	310	18
June	1,640	40	1,275	305	19
July	1,673	37	1,286	332	17
August	1,700	42	1,304	330	25
Sept	1,573	43	1,206	305	19
October	1,557	37	1,192	308	20
November	1,559	39	1,195	306	18
December	1,661	38	1,291	316	16
Year 2017					
January	1,604	35	1,251	298	20
February	1,383	19	1,084	269	12
March	1,483	36	1,150	279	19
April	1,431	35	1,102	276	18
May	1,556	36	1,198	303	19
June	1,570	38	1,228	287	17
July	1,589	41	1,228	302	18
August	1,612	47	1,243	299	23
Sept	1,441	41	1,120	262	18
October	1,439	33	1,110	276	19
November	1,444	30	1,123	276	15
December	1,513	32	1,180	283	18
Year to Date					
2015	18,617	452	14,452	3,502	211
2016	19,226	464	14,838	3,700	224
2017	18,065	422	14,017	3,410	216
Rolling 12 Months Ending in December					
2016	19,226	464	14,838	3,700	224
2017	18,065	422	14,017	3,410	216

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	359,983	41,036	149,516	473	168,959
2017	380,237	43,952	165,861	460	169,964
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	31,835	4,082	13,250	40	14,463
February	30,721	3,797	13,249	41	13,634
March	30,380	3,388	13,073	23	13,897
April	25,323	2,547	10,177	31	12,569
May	26,827	2,497	10,522	14	13,794
June	29,961	3,835	11,762	59	14,305
July	32,167	4,067	13,230	51	14,818
August	33,526	4,113	14,559	72	14,782
Sept	30,502	3,489	13,145	51	13,817
October	27,598	2,574	11,139	29	13,857
November	29,176	2,597	12,211	20	14,349
December	31,967	4,051	13,200	42	14,674
Year 2017					
January	31,706	3,909	13,533	56	14,208
February	29,797	3,477	12,653	50	13,617
March	32,848	4,094	14,372	26	14,356
April	29,061	3,047	12,331	34	13,650
May	30,151	3,584	12,937	43	13,587
June	31,698	3,694	13,829	38	14,138
July	34,231	3,839	15,149	41	15,202
August	34,458	3,818	15,424	41	15,175
Sept	29,493	3,091	13,170	15	13,216
October	32,025	3,893	14,392	33	13,707
November	31,331	3,512	13,877	41	13,901
December	33,438	3,995	14,193	43	15,207
Year to Date					
2015	406,650	43,919	171,387	504	190,840
2016	359,983	41,036	149,516	473	168,959
2017	380,237	43,952	165,861	460	169,964
Rolling 12 Months Ending in December					
2016	359,983	41,036	149,516	473	168,959
2017	380,237	43,952	165,861	460	169,964

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 2016 and prior years are final. Values for 2017 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, 2007-December 2017 (Billion Btus)

Period	Total (all sectors)	Electric Power Sector		Commercial Sector	Industrial Sector
		Electric Utilities	Independent Power Producers		
Annual Totals					
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
2016	969,841	10,950	22,905	4,520	931,465
2017	978,290	11,830	25,325	4,522	936,612
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	84,483	1,087	2,270	460	80,665
February	79,157	1,150	2,299	415	75,293
March	79,225	1,084	1,926	288	75,928
April	74,954	732	1,780	353	72,089
May	78,419	949	1,753	280	75,437
June	79,180	707	1,832	415	76,225
July	80,796	943	1,826	384	77,644
August	81,164	931	1,794	442	77,998
Sept	75,314	513	1,918	395	72,488
October	76,347	508	1,450	347	74,041
November	80,391	1,132	1,898	340	77,021
December	100,410	1,214	2,159	401	96,636
Year 2017					
January	85,579	1,076	2,005	525	81,973
February	79,087	985	1,792	430	75,881
March	81,473	1,068	2,428	299	77,678
April	77,440	879	2,063	295	74,203
May	78,630	887	2,209	301	75,234
June	80,934	1,051	2,297	322	77,264
July	83,942	1,105	2,079	355	80,403
August	85,888	1,140	2,000	365	82,383
Sept	77,237	979	1,998	233	74,027
October	79,472	933	2,035	402	76,102
November	81,151	782	2,106	473	77,790
December	87,457	946	2,314	524	83,673
Year to Date					
2015	943,962	9,351	19,200	3,714	911,697
2016	969,841	10,950	22,905	4,520	931,465
2017	978,290	11,830	25,325	4,522	936,612
Rolling 12 Months Ending in December					
2016	969,841	10,950	22,905	4,520	931,465
2017	978,290	11,830	25,325	4,522	936,612

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 2016 and prior years are final. Values for 2017 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,
December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	116	276	-58.0%	50	70	66	205	0	0	NM	0
Connecticut	64	55	18.0%	0	0	64	55	0	0	0	0
Maine	2	2	-19.0%	0	0	1	2	0	0	NM	0
Massachusetts	0	148	-100.0%	0	0	0	148	0	0	0	0
New Hampshire	50	70	-29.0%	50	70	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	2,604	2,842	-8.4%	0	0	2,596	2,826	0	0	8	16
New Jersey	52	51	3.3%	0	0	52	51	0	0	0	0
New York	47	35	34.0%	0	0	44	27	0	0	3	8
Pennsylvania	2,505	2,756	-9.1%	0	0	2,499	2,749	0	0	6	7
East North Central	12,976	13,407	-3.2%	8,045	7,997	4,865	5,347	2	2	64	61
Illinois	3,044	3,484	-13.0%	189	180	2,807	3,257	1	1	46	46
Indiana	3,513	3,529	-0.5%	3,370	3,393	142	135	1	1	0	0
Michigan	1,791	1,975	-9.3%	1,770	1,954	19	20	0	0	1	1
Ohio	2,539	2,802	-9.4%	643	868	1,896	1,934	0	0	NM	0
Wisconsin	2,088	1,616	29.0%	2,072	1,602	0	0	0	0	17	14
West North Central	10,376	10,547	-1.6%	10,257	10,430	0	0	3	5	116	112
Iowa	1,148	1,328	-14.0%	1,106	1,285	0	0	2	2	40	41
Kansas	1,217	1,424	-15.0%	1,217	1,424	0	0	0	0	0	0
Minnesota	1,308	1,386	-5.6%	1,276	1,356	0	0	0	1	32	29
Missouri	3,444	3,034	14.0%	3,444	3,032	0	0	1	2	0	0
Nebraska	1,189	1,306	-9.0%	1,148	1,267	0	0	0	0	41	39
North Dakota	1,930	1,930	0.0%	1,926	1,926	0	0	0	0	NM	3
South Dakota	140	139	0.6%	140	139	0	0	0	0	0	0
South Atlantic	7,403	9,074	-18.0%	6,338	7,992	1,045	1,052	2	2	17	28
Delaware	31	7	368.0%	0	0	31	7	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,076	1,513	-29.0%	1,074	1,511	0	0	0	0	2	2
Georgia	1,311	1,537	-15.0%	1,308	1,533	0	0	0	0	3	4
Maryland	398	451	-12.0%	0	0	396	450	0	0	2	2
North Carolina	1,112	1,203	-7.6%	1,104	1,192	NM	6	2	1	3	4
South Carolina	614	761	-19.0%	613	761	0	0	0	0	1	1
Virginia	401	739	-46.0%	364	701	29	23	0	0	7	15
West Virginia	2,461	2,862	-14.0%	1,875	2,296	586	567	0	0	0	0
East South Central	5,415	6,176	-12.0%	5,184	5,917	220	246	0	0	11	14
Alabama	1,435	1,469	-2.3%	1,434	1,468	0	0	0	0	1	1
Kentucky	2,207	2,880	-23.0%	2,207	2,880	0	0	0	0	0	0
Mississippi	289	359	-20.0%	69	114	220	246	0	0	0	0
Tennessee	1,484	1,469	1.0%	1,474	1,456	0	0	0	0	10	13
West South Central	10,875	12,761	-15.0%	5,125	6,423	5,736	6,319	0	0	13	18
Arkansas	1,455	1,732	-16.0%	1,204	1,480	250	251	0	0	1	1
Louisiana	659	900	-27.0%	415	609	244	291	0	0	0	0
Oklahoma	778	1,400	-44.0%	638	1,283	128	100	0	0	12	17
Texas	7,983	8,729	-8.5%	2,869	3,051	5,113	5,678	0	0	0	0
Mountain	7,813	8,959	-13.0%	6,722	7,989	1,081	960	0	0	10	10
Arizona	1,349	1,656	-19.0%	1,349	1,656	0	0	0	0	0	0
Colorado	1,417	1,651	-14.0%	1,417	1,651	0	0	0	0	0	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	952	857	11.0%	1	27	951	829	0	0	0	0
Nevada	47	49	-4.7%	0	0	47	49	0	0	0	0
New Mexico	688	1,106	-38.0%	688	1,106	0	0	0	0	0	0
Utah	1,186	1,222	-3.0%	1,149	1,187	37	35	0	0	0	0
Wyoming	2,175	2,418	-10.0%	2,119	2,362	47	47	0	0	8	8
Pacific Contiguous	614	699	-12.0%	24	219	584	473	0	0	6	7
California	5	5	-1.2%	0	0	0	0	0	0	5	5
Oregon	24	219	-89.0%	24	219	0	0	0	0	0	0
Washington	584	474	23.0%	0	0	584	473	0	0	0	1
Pacific Noncontiguous	101	106	-5.2%	NM	19	76	83	3	3	0	1
Alaska	NM	37	NM	NM	19	NM	14	3	3	0	0
Hawaii	64	70	-7.7%	0	0	64	69	0	0	0	1
U.S. Total	58,292	64,847	-10.0%	41,767	47,058	16,270	17,512	10	12	246	266

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 2017 are preliminary. Values for 2016 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 December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	846	1,246	-32.0%	134	194	709	1,048	0	0	3	3
Connecticut	137	128	7.1%	0	0	137	128	0	0	0	0
Maine	15	16	-6.5%	0	0	12	13	0	0	3	3
Massachusetts	559	907	-38.0%	0	0	559	907	0	0	0	0
New Hampshire	134	194	-31.0%	134	194	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	23,765	28,812	-18.0%	0	0	23,623	28,598	0	0	142	214
New Jersey	513	563	-8.9%	0	0	513	563	0	0	0	0
New York	311	760	-59.0%	0	0	242	654	0	0	69	106
Pennsylvania	22,940	27,489	-17.0%	0	0	22,868	27,381	0	0	72	108
East North Central	144,016	143,250	0.5%	88,515	86,747	54,766	55,796	18	24	717	684
Illinois	34,768	35,899	-3.2%	2,166	1,895	32,059	33,536	10	9	533	460
Indiana	35,496	36,014	-1.4%	34,188	34,303	1,300	1,698	8	11	0	3
Michigan	24,014	23,123	3.9%	23,781	22,871	217	221	0	4	16	27
Ohio	28,634	29,080	-1.5%	7,442	8,716	21,190	20,341	0	0	2	23
Wisconsin	21,104	19,134	10.0%	20,938	18,963	0	0	0	0	166	171
West North Central	115,940	113,565	2.1%	114,729	112,397	0	0	28	37	1,182	1,131
Iowa	14,339	14,019	2.3%	13,828	13,477	0	0	22	23	489	519
Kansas	12,542	14,587	-14.0%	12,542	14,587	0	0	0	0	0	0
Minnesota	13,564	13,446	0.9%	13,291	13,255	0	0	1	2	272	189
Missouri	39,418	35,473	11.0%	39,413	35,460	0	0	5	13	0	0
Nebraska	13,069	13,443	-2.8%	12,682	13,056	0	0	0	0	387	388
North Dakota	21,718	21,297	2.0%	21,684	21,263	0	0	0	0	35	34
South Dakota	1,289	1,299	-0.8%	1,289	1,299	0	0	0	0	0	0
South Atlantic	91,379	103,425	-12.0%	81,248	90,681	9,916	12,420	14	14	201	310
Delaware	186	227	-18.0%	0	0	186	227	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	16,874	17,700	-4.7%	16,800	17,341	48	326	0	0	26	32
Georgia	16,802	19,318	-13.0%	16,769	19,272	0	0	0	0	33	46
Maryland	3,674	5,882	-38.0%	0	0	3,656	5,864	0	0	18	19
North Carolina	13,423	14,772	-9.1%	13,339	14,645	39	76	12	12	33	40
South Carolina	7,506	8,569	-12.0%	7,502	8,545	0	0	0	0	5	24
Virginia	5,142	7,520	-32.0%	4,831	7,135	222	255	2	2	86	129
West Virginia	27,772	29,436	-5.7%	22,007	23,744	5,765	5,672	0	0	0	20
East South Central	61,866	69,467	-11.0%	59,291	66,214	2,419	3,056	0	0	156	198
Alabama	16,245	17,466	-7.0%	16,231	17,448	0	0	0	0	14	18
Kentucky	27,484	31,859	-14.0%	27,484	31,859	0	0	0	0	0	0
Mississippi	3,865	4,522	-15.0%	1,446	1,466	2,419	3,056	0	0	0	0
Tennessee	14,272	15,621	-8.6%	14,130	15,441	0	0	0	0	142	180
West South Central	128,187	121,146	5.8%	59,045	58,328	68,972	62,604	0	0	170	214
Arkansas	15,202	14,075	8.0%	13,238	11,525	1,956	2,541	0	0	8	9
Louisiana	8,397	8,566	-2.0%	5,035	5,852	3,362	2,714	0	0	0	0
Oklahoma	11,101	12,375	-10.0%	9,852	10,977	1,088	1,193	0	0	162	205
Texas	93,488	86,130	8.5%	30,921	29,975	62,567	56,155	0	0	0	0
Mountain	91,597	90,967	0.7%	80,880	80,258	10,570	10,517	0	0	147	192
Arizona	16,929	16,639	1.7%	16,929	16,639	0	0	0	0	0	0
Colorado	16,630	16,636	0.0%	16,628	16,628	0	6	0	0	2	2
Idaho	6	6	-12.0%	0	0	0	0	0	0	6	6
Montana	9,280	9,331	-0.5%	217	256	9,060	9,073	0	0	2	3
Nevada	1,097	1,192	-8.0%	535	674	562	519	0	0	0	0
New Mexico	10,494	10,547	-0.5%	10,494	10,547	0	0	0	0	0	0
Utah	12,482	12,092	3.2%	12,026	11,604	412	397	0	0	44	91
Wyoming	24,678	24,524	0.6%	24,051	23,911	535	523	0	0	92	90
Pacific Contiguous	4,720	4,271	11.0%	1,031	1,125	3,623	3,075	0	0	66	72
California	59	63	-6.5%	0	0	0	0	0	0	59	63
Oregon	1,031	1,125	-8.3%	1,031	1,125	0	0	0	0	0	0
Washington	3,630	3,083	18.0%	0	0	3,623	3,075	0	0	7	9
Pacific Noncontiguous	1,164	1,222	-4.8%	226	248	902	933	36	37	0	4
Alaska	405	443	-8.6%	226	248	143	158	36	37	0	0
Hawaii	759	779	-2.6%	0	0	759	775	0	0	0	4
U.S. Total	663,479	677,371	-2.1%	485,100	496,192	175,500	178,047	96	111	2,783	3,021

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 2017 are preliminary. Values for 2016 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,
December 2017 and December 2016 (Thousand Barrels)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	625	155	302.0%	64	16	549	134	9	4	3	1
Connecticut	116	29	300.0%	2	2	112	26	NM	0	0	0
Maine	152	13	NM	0	0	149	11	1	0	NM	1
Massachusetts	192	101	91.0%	32	4	157	96	NM	1	0	0
New Hampshire	112	8	NM	24	6	86	0	2	2	0	0
Rhode Island	NM	4	NM	0	3	NM	0	0	1	0	0
Vermont	7	1	366.0%	7	1	0	0	0	0	0	0
Middle Atlantic	772	187	313.0%	242	55	520	123	NM	4	7	5
New Jersey	50	29	75.0%	NM	1	50	28	0	0	0	0
New York	575	104	453.0%	241	54	327	44	NM	2	4	4
Pennsylvania	146	54	170.0%	0	0	143	51	1	1	NM	1
East North Central	96	109	-12.0%	60	50	32	56	NM	0	4	2
Illinois	NM	12	NM	NM	2	7	10	NM	0	0	0
Indiana	21	19	11.0%	16	17	2	0	0	0	3	2
Michigan	26	16	63.0%	25	15	0	0	1	0	NM	0
Ohio	38	59	-36.0%	15	12	22	47	0	0	0	0
Wisconsin	NM	4	NM	NM	4	0	0	0	0	NM	0
West North Central	80	80	-0.4%	72	78	NM	1	0	1	0	0
Iowa	19	20	-4.0%	19	20	NM	0	0	0	0	0
Kansas	13	9	53.0%	13	9	0	0	0	0	0	0
Minnesota	NM	11	NM	NM	9	NM	1	0	0	0	0
Missouri	24	27	-10.0%	24	27	NM	0	0	0	0	0
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	0
North Dakota	8	11	-33.0%	8	11	0	0	0	0	0	0
South Dakota	NM	2	NM	NM	2	0	0	NM	0	0	0
South Atlantic	357	215	66.0%	255	181	NM	27	9	1	10	5
Delaware	NM	5	NM	3	1	NM	4	0	0	0	0
District of Columbia	0	0	-100.0%	0	0	0	0	0	0	0	0
Florida	69	68	2.4%	66	66	NM	0	0	0	NM	2
Georgia	33	9	290.0%	24	6	NM	1	1	0	5	1
Maryland	32	15	116.0%	1	0	31	14	0	0	1	0
North Carolina	61	57	6.8%	57	54	NM	2	0	0	1	1
South Carolina	NM	16	NM	NM	14	1	0	0	0	1	2
Virginia	109	23	379.0%	72	17	29	5	8	0	NM	0
West Virginia	17	23	-27.0%	17	23	0	0	0	0	0	0
East South Central	64	36	76.0%	61	35	1	1	0	0	NM	1
Alabama	12	6	92.0%	10	5	1	1	0	0	NM	1
Kentucky	17	13	31.0%	17	13	0	0	0	0	0	0
Mississippi	5	4	22.0%	4	4	0	0	0	0	0	0
Tennessee	30	13	129.0%	29	13	0	0	0	0	0	0
West South Central	26	29	-9.6%	NM	20	NM	8	0	0	0	1
Arkansas	NM	10	NM	NM	8	0	1	0	0	0	0
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	0
Oklahoma	4	1	173.0%	4	1	0	0	0	0	0	0
Texas	10	15	-32.0%	NM	8	NM	7	0	0	0	0
Mountain	40	33	22.0%	38	28	2	4	0	0	0	0
Arizona	11	6	77.0%	11	6	0	0	0	0	0	0
Colorado	3	3	0.7%	3	3	0	0	0	0	0	0
Idaho	0	0	955.0%	0	0	0	0	0	0	0	0
Montana	NM	4	NM	NM	0	1	3	0	0	0	0
Nevada	1	1	-3.7%	0	0	1	1	0	0	0	0
New Mexico	7	11	-36.0%	7	11	0	0	0	0	0	0
Utah	5	5	1.8%	5	5	0	0	0	0	0	0
Wyoming	12	3	257.0%	12	3	0	0	0	0	0	0
Pacific Contiguous	10	19	-49.0%	7	8	2	9	0	0	1	2
California	7	12	-45.0%	5	5	1	6	0	0	NM	0
Oregon	1	3	-49.0%	1	3	0	0	0	0	0	0
Washington	2	5	-56.0%	NM	0	1	3	0	0	1	1
Pacific Noncontiguous	990	1,132	-13.0%	820	939	147	165	1	1	21	26
Alaska	136	224	-39.0%	130	212	0	0	1	1	5	11
Hawaii	854	908	-5.9%	690	726	147	165	1	0	17	16
U.S. Total	3,058	1,995	53.0%	1,642	1,410	1,346	530	22	12	47	43

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 2017 are preliminary. Values for 2016 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.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through December 2017 and December 2016 (Thousand Barrels)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	1,244	1,157	7.6%	145	125	1,045	978	45	44	9	10
Connecticut	280	209	34.0%	12	12	264	193	NM	3	1	2
Maine	266	227	17.0%	0	0	251	213	6	6	8	7
Massachusetts	449	598	-25.0%	49	30	380	549	19	19	1	1
New Hampshire	162	67	142.0%	60	49	89	3	13	15	0	0
Rhode Island	68	44	54.0%	5	23	NM	19	2	2	0	0
Vermont	17	12	50.0%	17	11	0	0	0	0	0	0
Middle Atlantic	2,003	1,888	6.1%	662	634	1,256	1,173	NM	25	60	56
New Jersey	112	130	-14.0%	1	2	110	126	0	1	0	0
New York	1,298	1,142	14.0%	661	630	586	459	NM	15	38	38
Pennsylvania	593	616	-3.8%	0	2	560	588	11	9	22	18
East North Central	1,012	1,083	-6.6%	650	654	336	407	7	6	20	17
Illinois	94	135	-30.0%	16	17	76	117	NM	1	0	0
Indiana	216	204	6.3%	198	191	2	0	0	1	16	12
Michigan	240	248	-3.5%	234	244	0	0	5	3	1	1
Ohio	396	426	-7.0%	138	136	256	286	1	1	2	3
Wisconsin	66	71	-6.4%	65	65	1	4	0	0	1	1
West North Central	605	546	11.0%	579	526	NM	15	2	2	1	3
Iowa	162	161	0.7%	160	159	2	2	0	0	0	0
Kansas	121	66	82.0%	121	66	0	0	0	0	0	0
Minnesota	87	67	30.0%	63	51	NM	13	1	2	1	1
Missouri	131	165	-21.0%	130	165	NM	0	0	0	0	0
Nebraska	17	16	7.2%	17	16	0	0	0	0	0	0
North Dakota	70	60	17.0%	70	59	0	0	0	0	0	1
South Dakota	18	11	58.0%	17	11	0	0	NM	0	0	0
South Atlantic	3,202	4,010	-20.0%	2,428	3,060	606	846	100	14	69	89
Delaware	NM	114	NM	5	17	NM	97	0	0	0	0
District of Columbia	0	5	-100.0%	0	0	0	0	0	5	0	0
Florida	965	1,428	-32.0%	933	1,387	12	16	0	0	19	25
Georgia	215	209	2.8%	155	133	31	45	4	3	24	27
Maryland	262	353	-26.0%	7	3	251	347	2	2	2	2
North Carolina	432	485	-11.0%	400	411	22	65	1	1	9	8
South Carolina	168	214	-21.0%	157	189	3	4	0	0	9	20
Virginia	875	987	-11.0%	565	713	212	283	93	4	5	7
West Virginia	208	216	-3.6%	206	207	2	9	0	0	0	0
East South Central	529	560	-5.6%	504	528	8	12	0	0	16	20
Alabama	72	79	-8.5%	51	51	8	12	0	0	13	16
Kentucky	187	211	-11.0%	187	211	0	0	0	0	0	0
Mississippi	26	34	-24.0%	24	32	0	0	0	0	2	2
Tennessee	243	237	2.9%	241	235	1	0	0	0	1	2
West South Central	282	293	-3.8%	166	193	109	91	1	2	5	7
Arkansas	84	76	12.0%	41	57	41	16	0	0	2	3
Louisiana	23	30	-24.0%	23	26	0	3	0	0	0	0
Oklahoma	29	32	-9.7%	27	31	0	0	0	0	1	1
Texas	146	155	-6.2%	75	79	68	72	1	2	2	2
Mountain	412	428	-3.9%	372	372	39	46	0	0	0	10
Arizona	106	98	8.2%	106	98	0	0	0	0	0	0
Colorado	22	21	3.5%	22	21	0	0	0	0	0	0
Idaho	0	0	-5.0%	0	0	0	0	0	0	0	0
Montana	30	38	-21.0%	NM	1	29	37	0	0	0	0
Nevada	19	22	-13.0%	12	16	7	6	0	0	0	0
New Mexico	87	101	-14.0%	87	101	0	0	0	0	0	0
Utah	66	55	21.0%	64	51	2	3	0	0	0	0
Wyoming	82	94	-13.0%	82	85	0	0	0	0	0	9
Pacific Contiguous	145	190	-24.0%	90	76	30	39	1	1	24	74
California	92	149	-38.0%	67	63	9	20	1	0	15	66
Oregon	18	8	114.0%	18	8	0	0	0	0	0	0
Washington	34	32	6.5%	5	5	21	19	0	0	9	8
Pacific Noncontiguous	12,500	12,250	2.0%	10,126	9,969	2,100	2,015	13	14	262	252
Alaska	1,597	1,454	9.8%	1,521	1,382	0	0	6	3	70	68
Hawaii	10,904	10,797	1.0%	8,605	8,587	2,100	2,015	7	10	191	184
U.S. Total	21,935	22,405	-2.1%	15,722	16,137	5,553	5,624	193	108	467	536

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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 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
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	2	NM	0	0	0	0	0	0	NM	2
New Jersey	1	1	27.0%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	2	NM	0	0	0	0	0	0	NM	2
East North Central	63	67	-6.2%	38	20	20	40	0	0	5	7
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	36	25	48.0%	32	18	0	0	0	0	5	6
Ohio	20	40	-50.0%	0	0	20	40	0	0	0	0
Wisconsin	7	3	159.0%	7	2	0	0	0	0	0	0
West North Central	1	1	24.0%	0	0	0	0	0	0	1	1
Iowa	1	1	24.0%	0	0	0	0	0	0	1	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	41	38	7.0%	39	36	0	0	0	0	NM	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	39	36	9.9%	39	36	0	0	0	0	0	0
Georgia	NM	3	NM	0	0	0	0	0	0	NM	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	0	30	-100.0%	0	30	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	30	-100.0%	0	30	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	159	180	-12.0%	154	174	0	0	0	0	5	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	155	176	-12.0%	154	174	0	0	0	0	1	2
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	4	4.6%	0	0	0	0	0	0	4	4
Mountain	14	15	-2.5%	0	0	14	15	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	14	15	-2.5%	0	0	14	15	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	1	-100.0%	0	0	0	0	0	0	0	1
California	0	1	-100.0%	0	0	0	0	0	0	0	1
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	280	336	-16.0%	231	260	35	55	0	0	14	20

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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 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, Year-to-Date through December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	18	23	-21.0%	0	0	0	0	0	0	18	23
New Jersey	7	6	17.0%	0	0	0	0	0	0	7	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	11	17	-35.0%	0	0	0	0	0	0	11	17
East North Central	829	983	-16.0%	504	478	253	431	0	0	72	73
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	159	-100.0%	0	159	0	0	0	0	0	0
Michigan	527	348	51.0%	456	283	0	1	0	0	72	65
Ohio	253	431	-41.0%	0	0	253	430	0	0	0	1
Wisconsin	48	44	8.8%	48	37	0	0	0	0	0	7
West North Central	8	7	15.0%	0	0	0	0	3	2	5	5
Iowa	8	7	15.0%	0	0	0	0	3	2	5	5
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	373	764	-51.0%	347	739	0	0	0	0	26	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	347	739	-53.0%	347	739	0	0	0	0	0	0
Georgia	26	25	3.1%	0	0	0	0	0	0	26	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	166	439	-62.0%	166	439	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	166	439	-62.0%	166	439	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	1,793	1,862	-3.7%	1,714	1,771	0	0	0	0	79	91
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,747	1,812	-3.6%	1,714	1,771	0	0	0	0	32	41
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	47	50	-5.8%	0	0	0	0	0	0	47	50
Mountain	162	160	1.0%	0	0	162	160	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	162	160	1.0%	0	0	162	160	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	16	-100.0%	0	0	0	0	0	0	0	16
California	0	16	-100.0%	0	0	0	0	0	0	0	16
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	3,349	4,253	-21.0%	2,731	3,427	415	591	3	2	200	233

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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 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector,
December 2017 and December 2016 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	29,816	26,072	14.0%	NM	116	28,846	25,181	379	404	506	371
Connecticut	10,401	9,831	5.8%	27	40	9,992	9,404	155	174	228	212
Maine	1,755	882	99.0%	0	0	1,598	813	12	5	144	64
Massachusetts	13,121	10,298	27.0%	NM	48	12,770	9,961	191	206	119	82
New Hampshire	1,449	2,219	-35.0%	17	25	1,412	2,175	5	6	15	13
Rhode Island	3,087	2,840	8.7%	0	0	3,072	2,828	15	12	0	0
Vermont	2	2	9.3%	1	2	0	0	1	0	0	0
Middle Atlantic	84,669	90,173	-6.1%	8,541	6,878	74,540	81,895	558	537	1,030	863
New Jersey	21,815	19,727	11.0%	NM	172	21,416	19,372	92	63	178	120
New York	29,724	31,903	-6.8%	8,408	6,698	20,690	24,655	383	425	243	125
Pennsylvania	33,130	38,544	-14.0%	4	8	32,434	37,868	83	50	609	618
East North Central	75,255	57,748	30.0%	34,389	25,225	37,947	30,521	598	595	2,321	1,407
Illinois	9,326	8,484	9.9%	NM	700	8,001	7,288	165	152	423	343
Indiana	15,511	13,173	18.0%	11,991	10,753	2,305	2,057	84	81	1,131	282
Michigan	19,453	14,194	37.0%	6,317	4,598	12,324	8,845	261	226	550	525
Ohio	21,291	15,647	36.0%	6,029	3,936	15,127	11,529	64	103	70	79
Wisconsin	9,672	6,250	55.0%	9,314	5,238	189	801	22	32	147	178
West North Central	15,241	9,174	66.0%	13,136	7,454	1,748	1,396	106	116	251	208
Iowa	3,415	1,074	218.0%	3,243	936	0	0	41	25	131	113
Kansas	1,614	1,170	38.0%	1,582	1,153	0	0	0	0	32	17
Minnesota	5,562	2,858	95.0%	4,636	2,290	831	436	34	78	61	55
Missouri	2,863	3,324	-14.0%	1,904	2,335	917	961	29	12	13	17
Nebraska	287	180	59.0%	284	180	0	0	2	0	0	0
North Dakota	959	316	203.0%	946	309	0	0	0	0	13	7
South Dakota	540	252	115.0%	540	252	0	0	0	0	0	0
South Atlantic	193,319	157,113	23.0%	156,519	137,124	34,057	17,828	616	328	2,127	1,832
Delaware	3,024	2,458	23.0%	0	32	2,622	2,069	0	0	401	357
District of Columbia	35	42	-17.0%	0	0	0	0	34	41	0	0
Florida	86,494	77,126	12.0%	80,247	73,797	5,576	2,699	9	12	663	619
Georgia	33,131	26,125	27.0%	25,677	22,119	7,136	3,775	0	0	318	232
Maryland	5,521	860	542.0%	642	0	4,287	567	554	260	39	33
North Carolina	26,923	21,718	24.0%	24,021	19,151	2,822	2,520	12	11	67	36
South Carolina	9,498	7,182	32.0%	8,827	6,881	585	241	0	1	85	60
Virginia	28,094	21,303	32.0%	16,851	15,089	10,850	5,882	7	4	387	328
West Virginia	600	299	101.0%	254	56	NM	74	0	0	167	168
East South Central	75,857	71,564	6.0%	50,072	49,151	24,588	21,293	94	83	1,103	1,036
Alabama	29,225	30,244	-3.4%	8,721	9,903	19,948	19,767	0	0	555	574
Kentucky	8,284	5,481	51.0%	7,280	5,129	908	262	0	0	96	90
Mississippi	31,363	27,639	13.0%	27,434	26,204	3,715	1,264	11	0	202	172
Tennessee	6,985	8,200	-15.0%	6,637	7,915	16	1	82	83	249	201
West South Central	182,261	148,717	23.0%	53,571	46,002	95,814	70,556	211	347	32,665	31,813
Arkansas	12,512	6,768	85.0%	3,720	1,998	8,638	4,596	0	24	153	150
Louisiana	34,884	31,480	11.0%	19,473	15,558	1,940	2,814	56	51	13,415	13,057
Oklahoma	19,318	16,793	15.0%	8,906	11,459	10,198	5,229	0	0	215	105
Texas	115,547	93,675	23.0%	21,472	16,987	75,038	57,916	155	271	18,881	18,501
Mountain	52,602	46,314	14.0%	41,709	35,515	9,498	9,599	204	148	1,190	1,052
Arizona	15,631	9,614	63.0%	11,875	6,157	3,708	3,434	48	23	0	0
Colorado	8,618	7,109	21.0%	7,332	5,605	1,248	1,480	9	0	30	24
Idaho	2,131	1,828	17.0%	1,191	895	876	854	15	12	49	67
Montana	452	336	35.0%	343	282	107	53	0	0	3	1
Nevada	14,642	15,778	-7.2%	13,087	14,221	1,346	1,351	24	21	185	185
New Mexico	6,253	6,246	0.1%	4,081	3,854	2,120	2,343	51	47	0	2
Utah	4,309	4,853	-11.0%	3,645	4,352	93	85	57	45	513	371
Wyoming	564	550	2.5%	154	148	0	0	0	0	409	402
Pacific Contiguous	73,180	76,974	-4.9%	28,039	33,395	38,340	36,559	1,016	989	5,784	6,031
California	53,827	57,503	-6.4%	18,934	22,157	28,223	28,458	989	957	5,681	5,930
Oregon	11,370	12,356	-8.0%	4,056	6,308	7,245	5,978	17	25	52	46
Washington	7,982	7,115	12.0%	5,049	4,930	2,872	2,123	10	8	51	55
Pacific Noncontiguous	2,902	2,547	14.0%	2,879	2,523	0	0	0	0	23	24
Alaska	2,902	2,547	14.0%	2,879	2,523	0	0	0	0	23	24
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	785,101	686,396	14.0%	388,941	343,384	345,378	294,829	3,781	3,547	47,000	44,637

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 2017 are preliminary. Values for 2016 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.B. Consumption of Natural Gas for Electricity Generation by State, by Sector, Year-to-Date through December 2017 and December 2016 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	358,639	388,458	-7.7%	3,086	3,330	345,031	374,582	4,677	5,180	5,845	5,366
Connecticut	111,115	127,130	-13.0%	758	421	105,745	121,879	1,970	2,213	2,641	2,618
Maine	20,905	23,895	-13.0%	0	0	19,029	22,281	152	130	1,724	1,483
Massachusetts	159,033	156,132	1.9%	1,915	2,419	153,555	150,150	2,270	2,504	1,293	1,059
New Hampshire	26,204	34,140	-23.0%	400	476	25,575	33,365	43	92	186	206
Rhode Island	41,365	47,144	-12.0%	0	0	41,128	46,907	237	236	0	0
Vermont	16	19	-11.0%	12	14	0	0	4	4	0	0
Middle Atlantic	1,088,030	1,269,480	-14.0%	92,103	110,702	978,162	1,141,115	6,257	6,552	11,507	11,111
New Jersey	264,851	314,705	-16.0%	2,141	2,583	259,812	309,356	986	945	1,913	1,821
New York	381,886	452,696	-16.0%	89,898	108,016	285,001	337,708	4,563	4,993	2,423	1,979
Pennsylvania	441,292	502,080	-12.0%	64	103	433,348	494,051	708	615	7,171	7,312
East North Central	763,320	852,535	-10.0%	336,669	382,447	395,285	446,919	7,374	7,522	23,992	15,647
Illinois	120,479	149,481	-19.0%	12,124	13,725	101,468	128,973	1,951	1,813	4,937	4,970
Indiana	139,249	152,405	-8.6%	108,175	123,508	19,009	24,991	988	1,016	11,077	2,890
Michigan	199,562	225,323	-11.0%	71,975	87,203	119,082	129,419	2,880	3,052	5,624	5,650
Ohio	203,797	210,518	-3.2%	54,329	55,135	147,425	153,812	1,222	1,051	821	520
Wisconsin	100,233	114,807	-13.0%	90,066	102,876	8,300	9,724	333	590	1,533	1,617
West North Central	172,688	179,323	-3.7%	148,725	151,096	19,897	23,870	1,465	1,609	2,600	2,747
Iowa	29,590	22,012	34.0%	27,639	20,699	NM	0	469	459	1,481	854
Kansas	23,483	20,680	14.0%	23,257	20,399	0	0	0	0	226	281
Minnesota	58,114	65,624	-11.0%	48,210	52,636	8,783	11,137	492	636	629	1,215
Missouri	40,058	47,411	-16.0%	28,295	34,015	11,113	12,732	490	501	159	163
Nebraska	5,544	5,813	-4.6%	5,531	5,791	0	0	13	13	0	9
North Dakota	9,432	10,373	-9.1%	9,326	10,146	0	0	0	0	106	227
South Dakota	6,467	7,410	-13.0%	6,467	7,410	0	0	0	0	0	0
South Atlantic	2,447,290	2,415,762	1.3%	1,980,907	1,947,864	435,351	440,121	6,413	5,960	24,619	21,816
Delaware	50,575	58,855	-14.0%	186	711	45,528	53,122	0	0	4,861	5,022
District of Columbia	601	601	0.1%	0	0	0	0	601	600	0	0
Florida	1,196,516	1,186,725	0.8%	1,109,620	1,081,094	79,183	97,758	131	172	7,581	7,701
Georgia	381,003	381,331	-0.1%	287,521	295,258	89,641	83,189	0	0	3,841	2,884
Maryland	55,976	53,486	4.7%	642	0	49,352	48,046	5,534	5,048	448	391
North Carolina	286,594	293,942	-2.5%	250,041	254,527	35,801	38,745	88	80	663	590
South Carolina	131,449	131,598	-0.1%	114,308	106,252	16,311	24,999	3	9	827	338
Virginia	331,288	298,102	11.0%	216,657	208,486	110,179	85,637	55	51	4,398	3,928
West Virginia	13,287	11,122	19.0%	1,932	1,536	9,356	8,625	0	0	1,999	961
East South Central	892,405	929,994	-4.0%	606,215	613,191	273,245	304,829	904	901	12,041	11,073
Alabama	377,454	403,770	-6.5%	129,726	120,458	241,430	277,130	0	0	6,298	6,182
Kentucky	85,900	67,386	27.0%	80,209	60,847	4,669	5,512	0	0	1,022	1,027
Mississippi	348,707	368,640	-5.4%	319,567	344,423	26,996	22,175	32	0	2,112	2,041
Tennessee	80,344	90,198	-11.0%	76,713	87,463	150	12	871	901	2,609	1,823
West South Central	2,227,457	2,480,580	-10.0%	741,949	886,812	1,118,797	1,204,698	3,698	4,706	363,013	384,364
Arkansas	129,236	131,629	-1.8%	51,007	54,814	76,806	74,981	0	433	1,423	1,401
Louisiana	410,938	481,008	-15.0%	237,052	280,472	29,972	44,592	596	739	143,317	155,205
Oklahoma	237,635	278,283	-15.0%	148,471	194,042	87,099	82,920	0	0	2,065	1,320
Texas	1,449,648	1,589,660	-8.8%	305,419	357,484	924,920	1,002,205	3,101	3,534	216,209	226,437
Mountain	668,640	739,943	-9.6%	513,218	550,066	140,095	175,191	2,231	2,274	13,096	12,413
Arizona	223,439	256,096	-13.0%	149,869	149,716	72,949	105,757	621	624	0	0
Colorado	95,071	93,347	1.8%	78,024	77,193	16,690	15,818	17	12	340	323
Idaho	20,938	24,098	-13.0%	11,987	13,694	8,227	9,590	172	170	553	644
Montana	5,137	5,382	-4.6%	4,127	4,499	991	864	0	0	19	19
Nevada	195,446	208,394	-6.2%	177,598	190,283	15,110	15,428	250	270	2,489	2,412
New Mexico	76,160	81,834	-6.9%	51,396	55,180	24,184	26,044	565	594	15	16
Utah	46,993	65,310	-28.0%	38,962	58,000	1,932	1,678	606	603	5,493	5,029
Wyoming	5,456	5,483	-0.5%	1,255	1,502	13	12	0	0	4,188	3,969
Pacific Contiguous	794,887	885,536	-10.0%	302,777	345,161	412,570	460,049	11,726	11,593	67,814	68,733
California	637,261	701,605	-9.2%	222,802	245,491	336,169	377,035	11,478	11,301	66,812	67,778
Oregon	85,235	106,536	-20.0%	35,028	51,498	49,544	54,339	177	209	486	490
Washington	72,391	77,394	-6.5%	44,947	48,172	26,858	28,674	70	83	515	465
Pacific Noncontiguous	27,423	28,498	-3.8%	27,141	28,224	0	0	22	7	261	267
Alaska	27,423	28,498	-3.8%	27,141	28,224	0	0	22	7	261	267
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	9,440,777	10,170,110	-7.2%	4,752,790	5,018,894	4,118,433	4,571,375	44,765	46,304	524,788	533,537

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Table 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, December 2017 and December 2016 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	954	993	-4.0%	0	0	935	975	19	18	0	0
Connecticut	NM	37	NM	0	0	NM	37	0	0	0	0
Maine	NM	65	NM	0	0	NM	65	0	0	0	0
Massachusetts	362	369	-1.8%	0	0	362	369	0	0	0	0
New Hampshire	86	137	-38.0%	0	0	67	119	19	18	0	0
Rhode Island	380	348	9.2%	0	0	380	348	0	0	0	0
Vermont	NM	37	NM	0	0	NM	37	0	0	0	0
Middle Atlantic	4,334	4,833	-10.0%	0	0	4,115	4,640	109	74	110	119
New Jersey	647	715	-9.5%	0	0	616	688	NM	27	0	0
New York	1,270	1,409	-9.9%	0	0	1,270	1,409	0	0	0	0
Pennsylvania	2,417	2,708	-11.0%	0	0	2,229	2,543	NM	47	110	119
East North Central	5,317	5,227	1.7%	635	580	4,609	4,617	46	11	27	19
Illinois	999	1,091	-8.4%	35	42	963	1,048	0	0	0	0
Indiana	710	618	15.0%	600	527	104	90	0	0	NM	1
Michigan	1,685	1,767	-4.6%	0	0	1,685	1,767	0	0	0	0
Ohio	921	866	6.4%	0	0	921	866	0	0	0	0
Wisconsin	1,002	886	13.0%	0	11	935	846	46	11	21	18
West North Central	1,002	867	16.0%	294	216	708	651	0	0	0	0
Iowa	232	238	-2.2%	0	0	232	238	0	0	0	0
Kansas	119	107	11.0%	0	0	119	107	0	0	0	0
Minnesota	329	286	15.0%	NM	65	258	220	0	0	0	0
Missouri	171	155	11.0%	NM	68	98	86	0	0	0	0
Nebraska	151	82	83.0%	151	82	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	3,956	4,593	-14.0%	390	418	3,246	3,778	119	212	202	186
Delaware	113	128	-11.0%	0	0	101	114	0	0	NM	14
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	593	708	-16.0%	134	155	459	552	0	1	0	0
Georgia	364	345	5.5%	0	0	333	323	0	0	30	22
Maryland	235	206	14.0%	0	0	164	146	71	60	0	0
North Carolina	914	1,419	-36.0%	0	0	890	1,293	NM	127	0	0
South Carolina	443	442	0.1%	250	257	NM	35	0	0	159	150
Virginia	1,295	1,344	-3.7%	6	5	1,285	1,315	NM	24	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	466	522	-13.0%	177	207	279	316	0	0	0	0
Alabama	94	104	-9.2%	0	0	94	104	0	0	0	0
Kentucky	185	235	-21.0%	177	207	8	29	0	0	0	0
Mississippi	NM	17	NM	0	0	NM	17	0	0	0	0
Tennessee	159	166	-4.4%	0	0	159	166	0	0	0	0
West South Central	1,309	1,740	-25.0%	0	0	1,257	1,675	52	65	0	0
Arkansas	135	143	-5.6%	0	0	135	143	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	32	NM	0	0	NM	32	0	0	0	0
Texas	1,142	1,565	-27.0%	0	0	1,090	1,501	52	65	0	0
Mountain	553	569	-2.8%	NM	22	493	497	42	51	0	0
Arizona	NM	75	NM	0	0	NM	75	0	0	0	0
Colorado	92	115	-20.0%	0	0	92	115	0	0	0	0
Idaho	72	87	-17.0%	NM	22	NM	50	19	16	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	133	130	2.3%	0	0	133	130	0	0	0	0
New Mexico	NM	3	NM	0	0	NM	3	0	0	0	0
Utah	178	159	12.0%	0	0	155	124	23	35	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	5,038	5,112	-1.4%	694	599	3,017	3,244	1,326	1,269	0	0
California	4,153	4,200	-1.1%	256	186	2,615	2,791	1,282	1,223	0	0
Oregon	493	539	-8.4%	124	149	325	343	NM	46	0	0
Washington	392	374	4.7%	314	264	77	110	0	0	0	0
Pacific Noncontiguous	78	53	45.0%	0	0	0	0	78	53	0	0
Alaska	78	53	45.0%	0	0	0	0	78	53	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	22,997	24,510	-6.2%	2,209	2,041	18,658	20,392	1,791	1,753	339	324

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Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector,
Year-to-Date through December 2017 and December 2016 (Million Cubic Feet)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	10,864	11,326	-4.1%	0	0	10,622	11,128	242	198	0	0
Connecticut	436	476	-8.3%	0	0	436	476	0	0	0	0
Maine	677	732	-7.5%	0	0	677	732	0	0	0	0
Massachusetts	4,265	4,133	3.2%	0	0	4,265	4,133	0	0	0	0
New Hampshire	1,031	1,433	-28.0%	0	0	789	1,235	242	198	0	0
Rhode Island	4,085	4,124	-1.0%	0	0	4,085	4,124	0	0	0	0
Vermont	370	428	-14.0%	0	0	370	428	0	0	0	0
Middle Atlantic	52,639	53,761	-2.1%	0	0	50,139	51,556	1,005	840	1,495	1,365
New Jersey	7,700	8,088	-4.8%	0	0	7,381	7,783	319	305	0	0
New York	15,731	16,102	-2.3%	0	0	15,731	16,102	0	0	0	0
Pennsylvania	29,208	29,571	-1.2%	0	0	27,026	27,671	687	535	1,495	1,365
East North Central	63,558	61,641	3.1%	7,712	6,864	55,231	54,392	370	146	244	239
Illinois	12,237	12,537	-2.4%	407	422	11,829	12,115	0	0	0	0
Indiana	8,453	7,383	14.0%	7,247	6,301	1,185	1,071	0	0	20	12
Michigan	20,718	19,931	3.9%	0	0	20,718	19,931	0	0	0	0
Ohio	10,697	10,348	3.4%	0	0	10,697	10,348	0	0	0	0
Wisconsin	11,454	11,442	0.1%	NM	141	10,802	10,927	370	146	224	227
West North Central	10,976	11,113	-1.2%	3,462	3,311	7,514	7,801	0	0	0	0
Iowa	1,916	2,627	-27.0%	0	0	1,916	2,627	0	0	0	0
Kansas	1,400	1,270	10.0%	0	0	1,400	1,270	0	0	0	0
Minnesota	3,880	3,609	7.5%	844	765	3,036	2,844	0	0	0	0
Missouri	2,047	1,903	7.6%	885	842	1,162	1,061	0	0	0	0
Nebraska	1,733	1,704	1.8%	1,733	1,704	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	45,630	47,055	-3.0%	4,650	4,530	37,589	38,239	1,242	2,051	2,148	2,235
Delaware	1,338	1,379	-3.0%	0	0	1,190	1,232	0	0	148	148
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	7,085	7,840	-9.6%	1,602	1,699	5,483	6,123	0	8	0	10
Georgia	3,953	4,696	-16.0%	0	0	3,636	4,240	0	0	317	456
Maryland	2,719	2,667	1.9%	0	0	1,936	1,887	783	780	0	0
North Carolina	10,776	11,273	-4.4%	0	0	10,555	10,268	222	1,005	0	0
South Carolina	5,054	4,769	6.0%	2,970	2,774	400	373	0	0	1,684	1,621
Virginia	14,705	14,431	1.9%	78	57	14,389	14,117	238	258	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,458	5,496	-0.7%	2,119	2,177	3,339	3,319	0	0	0	0
Alabama	1,108	1,093	1.3%	0	0	1,108	1,093	0	0	0	0
Kentucky	2,265	2,479	-8.6%	2,119	2,177	146	302	0	0	0	0
Mississippi	210	188	12.0%	0	0	210	188	0	0	0	0
Tennessee	1,875	1,737	8.0%	0	0	1,875	1,737	0	0	0	0
West South Central	15,235	15,922	-4.3%	0	0	14,709	15,353	526	569	0	0
Arkansas	1,587	1,491	6.5%	0	0	1,587	1,491	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	376	360	4.7%	0	0	376	360	0	0	0	0
Texas	13,272	14,072	-5.7%	0	0	12,746	13,503	526	569	0	0
Mountain	6,430	6,474	-0.7%	220	245	5,752	5,650	458	579	0	0
Arizona	895	854	4.8%	0	0	895	854	0	0	0	0
Colorado	1,079	1,311	-18.0%	0	0	1,079	1,311	0	0	0	0
Idaho	844	993	-15.0%	220	245	418	564	205	183	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,574	1,479	6.4%	0	0	1,574	1,479	0	0	0	0
New Mexico	NM	29	NM	0	0	NM	29	0	0	0	0
Utah	2,007	1,808	11.0%	0	0	1,754	1,413	253	395	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	55,688	60,012	-7.2%	7,004	7,153	34,358	37,554	14,326	15,305	0	0
California	45,802	50,177	-8.7%	2,164	2,813	29,780	32,565	13,858	14,799	0	0
Oregon	5,572	5,889	-5.4%	1,452	1,627	3,651	3,755	469	506	0	0
Washington	4,315	3,946	9.3%	3,389	2,712	926	1,234	0	0	0	0
Pacific Noncontiguous	788	758	4.0%	0	0	0	0	788	758	0	0
Alaska	788	758	4.0%	0	0	0	0	788	758	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	267,266	273,557	-2.3%	25,169	24,280	219,253	224,993	18,957	20,445	3,888	3,839

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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 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	299	325	-8.1%	0	0	282	306	17	18	0	0
Connecticut	106	107	-1.0%	0	0	106	107	0	0	0	0
Maine	24	28	-16.0%	0	0	7	10	17	18	0	0
Massachusetts	158	179	-12.0%	0	0	158	179	0	0	0	0
New Hampshire	10	10	0.5%	0	0	10	10	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	472	479	-1.6%	0	0	376	381	95	98	0	0
New Jersey	124	129	-3.9%	0	0	96	98	27	31	0	0
New York	174	180	-3.3%	0	0	131	132	44	48	0	0
Pennsylvania	174	170	2.0%	0	0	149	151	24	19	0	0
East North Central	18	20	-8.3%	2	3	0	0	16	17	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	1	12.0%	0	0	0	0	2	1	0	0
Michigan	14	15	-7.5%	0	0	0	0	14	15	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	2	3	-23.0%	2	3	0	0	0	0	0	0
West North Central	50	58	-13.0%	30	35	20	21	0	1	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	58	-13.0%	30	35	20	21	0	1	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	414	490	-15.0%	0	0	370	444	45	45	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	307	344	-11.0%	0	0	307	344	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	59	42	41.0%	0	0	59	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	48	104	-53.0%	0	0	4	59	45	45	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	0	--	0	0	0	0	0	0	1	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	0	--	0	0	0	0	0	0	1	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	69	66	3.7%	0	0	69	66	0	0	0	0
California	45	45	-1.0%	0	0	45	45	0	0	0	0
Oregon	10	10	-1.9%	0	0	10	10	0	0	0	0
Washington	14	11	28.0%	0	0	14	11	0	0	0	0
Pacific Noncontiguous	34	38	-11.0%	0	0	0	0	34	38	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	34	38	-11.0%	0	0	0	0	34	38	0	0
U.S. Total	1,356	1,476	-8.1%	32	38	1,117	1,220	206	218	1	0

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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 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, Year-to-Date through December 2017 and December 2016 (Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	3,617	3,752	-3.6%	0	0	3,413	3,563	205	189	0	0
Connecticut	1,246	1,328	-6.2%	0	0	1,246	1,328	0	0	0	0
Maine	315	303	4.1%	0	0	110	113	205	189	0	0
Massachusetts	1,931	2,000	-3.5%	0	0	1,931	2,000	0	0	0	0
New Hampshire	126	122	2.9%	0	0	126	122	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	5,431	5,430	0.0%	0	0	4,332	4,279	1,099	1,151	0	0
New Jersey	1,430	1,439	-0.6%	0	0	1,082	1,094	348	345	0	0
New York	2,007	2,047	-1.9%	0	0	1,511	1,483	496	564	0	0
Pennsylvania	1,993	1,944	2.5%	0	0	1,739	1,702	254	242	0	0
East North Central	235	250	-6.2%	35	38	0	0	200	212	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	18	18	1.5%	0	0	0	0	18	18	0	0
Michigan	182	194	-6.3%	0	0	0	0	182	194	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	35	38	-9.4%	35	38	0	0	0	0	0	0
West North Central	621	656	-5.4%	387	425	234	220	0	11	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	621	656	-5.4%	387	425	234	220	0	11	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	5,007	5,710	-12.0%	0	0	4,486	5,153	521	557	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	3,777	3,933	-4.0%	0	0	3,777	3,933	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	639	625	2.4%	0	0	639	624	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	591	1,152	-49.0%	0	0	70	596	521	557	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	8	11	-27.0%	0	0	0	0	0	0	8	11
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	8	11	-27.0%	0	0	0	0	0	0	8	11
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	3	-85.0%	0	0	0	3	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	3	-85.0%	0	0	0	3	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	738	734	0.5%	0	0	738	734	0	0	0	0
California	468	457	2.2%	0	0	468	457	0	0	0	0
Oregon	111	114	-3.1%	0	0	111	114	0	0	0	0
Washington	160	163	-1.9%	0	0	160	163	0	0	0	0
Pacific Noncontiguous	424	446	-5.0%	0	0	0	0	424	446	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	424	446	-5.0%	0	0	0	0	424	446	0	0
U.S. Total	16,081	16,994	-5.4%	422	464	13,203	13,953	2,448	2,566	8	11

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Table 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, December 2017 and December 2016 (Billion Btus)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	5,206	5,530	-5.9%	732	724	3,971	4,255	1	1	502	551
Connecticut	373	431	-13.0%	0	0	373	431	0	0	0	0
Maine	2,210	2,304	-4.1%	0	0	1,709	1,753	0	0	502	551
Massachusetts	NM	207	NM	0	0	NM	207	0	0	0	0
New Hampshire	1,883	2,060	-8.6%	351	389	1,532	1,670	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	560	529	5.8%	381	334	NM	194	1	1	0	0
Middle Atlantic	1,268	1,190	6.5%	0	0	658	633	0	0	610	557
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	754	734	2.8%	0	0	658	632	0	0	97	102
Pennsylvania	513	456	13.0%	0	0	0	0	0	0	513	456
East North Central	2,397	2,330	2.9%	552	513	1,147	1,109	0	0	698	708
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,464	1,440	1.6%	0	0	1,135	1,096	0	0	329	345
Ohio	98	108	-9.5%	0	0	12	13	0	0	86	95
Wisconsin	835	781	6.9%	552	513	0	0	0	0	283	288
West North Central	925	941	-1.7%	190	148	427	515	31	28	276	250
Iowa	0	0	-25.0%	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	898	920	-2.4%	190	148	427	515	5	7	276	250
Missouri	26	21	27.0%	0	0	0	0	26	21	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	11,714	10,723	9.2%	2,104	2,180	3,847	2,927	11	13	5,752	5,603
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	2,018	1,535	31.0%	0	0	1,216	704	0	0	803	831
Georgia	3,173	2,884	10.0%	0	0	991	689	0	0	2,182	2,194
Maryland	60	70	-14.0%	0	0	0	0	11	13	49	57
North Carolina	1,469	1,433	2.5%	0	0	831	839	0	0	638	594
South Carolina	1,551	1,543	0.5%	157	184	520	590	0	0	873	768
Virginia	3,442	3,258	5.6%	1,947	1,996	289	104	0	0	1,206	1,159
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,256	3,100	5.0%	0	0	217	212	0	0	3,039	2,887
Alabama	2,132	1,990	7.1%	0	0	217	212	0	0	1,914	1,777
Kentucky	149	131	14.0%	0	0	0	0	0	0	149	131
Mississippi	609	595	2.5%	0	0	0	0	0	0	609	595
Tennessee	366	384	-4.8%	0	0	0	0	0	0	366	384
West South Central	2,505	2,415	3.7%	0	0	0	0	0	0	2,505	2,415
Arkansas	608	607	0.2%	0	0	0	0	0	0	608	607
Louisiana	1,336	1,262	5.8%	0	0	0	0	0	0	1,336	1,262
Oklahoma	164	164	0.4%	0	0	0	0	0	0	164	164
Texas	398	383	3.7%	0	0	0	0	0	0	398	383
Mountain	577	634	-9.0%	0	0	422	464	0	0	155	170
Arizona	NM	317	NM	0	0	NM	317	0	0	0	0
Colorado	124	124	0.0%	0	0	124	124	0	0	0	0
Idaho	161	172	-6.6%	0	0	26	24	0	0	134	148
Montana	21	22	-3.4%	0	0	0	0	0	0	21	22
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	5,591	5,104	9.5%	417	487	3,504	3,085	0	0	1,670	1,532
California	3,664	3,297	11.0%	0	0	3,226	2,941	0	0	438	356
Oregon	655	506	30.0%	0	0	278	144	0	0	378	362
Washington	1,271	1,301	-2.3%	417	487	0	0	0	0	855	814
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	33,438	31,967	4.6%	3,995	4,051	14,193	13,200	43	42	15,207	14,674

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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 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through December 2017 and December 2016 (Billion Btus)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	61,533	59,763	3.0%	8,405	9,244	47,700	45,238	46	19	5,382	5,262
Connecticut	4,680	4,492	4.2%	0	0	4,680	4,492	0	0	0	0
Maine	25,082	23,886	5.0%	0	0	19,663	18,615	37	9	5,382	5,262
Massachusetts	2,304	2,261	1.9%	0	0	2,304	2,261	0	0	0	0
New Hampshire	23,472	22,675	3.5%	4,624	4,902	18,847	17,773	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	5,995	6,449	-7.0%	3,781	4,342	2,205	2,097	9	10	0	0
Middle Atlantic	13,778	12,849	7.2%	0	0	6,933	6,302	0	0	6,845	6,547
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	8,009	7,369	8.7%	0	0	6,931	6,286	0	0	1,077	1,083
Pennsylvania	5,769	5,479	5.3%	0	0	1	15	0	0	5,768	5,464
East North Central	26,502	24,216	9.4%	5,453	4,533	13,285	11,835	0	1	7,764	7,848
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	16,716	15,402	8.5%	0	0	13,139	11,678	0	1	3,578	3,723
Ohio	1,259	1,292	-2.6%	0	0	147	157	0	0	1,112	1,135
Wisconsin	8,527	7,522	13.0%	5,453	4,533	0	0	0	0	3,074	2,990
West North Central	11,331	9,890	15.0%	2,200	2,055	5,877	4,747	358	318	2,897	2,770
Iowa	10	6	88.0%	0	0	0	0	10	6	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	11,004	9,620	14.0%	2,200	2,055	5,877	4,747	31	48	2,897	2,770
Missouri	317	264	20.0%	0	0	0	0	317	264	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	127,713	116,539	9.6%	22,726	19,958	40,207	32,397	56	135	64,724	64,049
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	20,598	16,567	24.0%	0	0	11,658	7,675	0	0	8,940	8,892
Georgia	33,365	31,487	6.0%	0	0	9,291	7,285	0	0	24,074	24,202
Maryland	673	737	-8.7%	0	0	0	0	56	135	617	602
North Carolina	16,329	14,691	11.0%	0	0	9,342	8,191	0	0	6,987	6,500
South Carolina	18,876	18,343	2.9%	1,783	1,733	6,652	6,419	0	0	10,441	10,191
Virginia	37,872	34,714	9.1%	20,943	18,225	3,284	2,828	0	0	13,666	13,661
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	36,796	36,760	0.1%	0	0	2,454	2,466	0	0	34,342	34,294
Alabama	23,977	23,656	1.4%	0	0	2,454	2,466	0	0	21,523	21,190
Kentucky	1,650	1,645	0.3%	0	0	0	0	0	0	1,650	1,645
Mississippi	6,924	7,222	-4.1%	0	0	0	0	0	0	6,924	7,222
Tennessee	4,245	4,238	0.2%	0	0	0	0	0	0	4,245	4,238
West South Central	29,754	30,650	-2.9%	0	337	1,218	1,625	0	0	28,536	28,688
Arkansas	6,874	6,537	5.2%	0	0	0	0	0	0	6,874	6,537
Louisiana	15,579	15,978	-2.5%	0	0	0	0	0	0	15,579	15,978
Oklahoma	1,607	1,694	-5.1%	0	0	0	0	0	0	1,607	1,694
Texas	5,693	6,441	-12.0%	0	337	1,218	1,625	0	0	4,475	4,479
Mountain	6,731	6,856	-1.8%	0	0	5,127	4,996	0	0	1,604	1,860
Arizona	3,496	3,429	1.9%	0	0	3,496	3,429	0	0	0	0
Colorado	1,326	1,244	6.6%	0	0	1,326	1,244	0	0	0	0
Idaho	1,662	1,947	-15.0%	0	0	306	323	0	0	1,356	1,624
Montana	248	236	4.9%	0	0	0	0	0	0	248	236
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	66,099	62,459	5.8%	5,168	4,910	43,060	39,909	0	0	17,871	17,641
California	44,257	41,312	7.1%	0	0	39,747	36,876	0	0	4,510	4,436
Oregon	7,458	7,047	5.8%	0	0	3,313	3,033	0	0	4,145	4,015
Washington	14,385	14,100	2.0%	5,168	4,910	0	0	0	0	9,216	9,191
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	380,237	359,983	5.6%	43,952	41,036	165,861	149,516	460	473	169,964	168,959

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 2017 are preliminary. Values for 2016 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, 2007 - December 2017

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									
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	488	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
2016	162,009	31,702	845	130,885	20,920	603	31,124	10,781	241
2017	137,155	28,723	1,113	114,378	19,826	700	22,777	8,897	414
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	187,203	32,307	1,320	146,300	20,894	1,089	40,903	11,412	231
February	187,064	31,644	1,323	145,895	20,651	1,064	41,168	10,994	259
March	191,553	31,569	1,240	148,648	20,642	974	42,905	10,927	266
April	193,185	31,788	1,181	150,859	20,926	901	42,327	10,863	280
May	192,417	32,139	1,071	150,639	21,202	826	41,778	10,936	246
June	182,086	31,992	905	144,309	21,133	689	37,777	10,859	216
July	168,119	31,606	858	134,344	20,906	678	33,775	10,700	180
August	158,908	35,481	780	128,256	20,846	589	30,652	14,635	191
Sept	156,567	35,555	768	127,532	20,925	566	29,035	14,630	201
October	160,932	35,754	813	131,610	21,022	606	29,422	14,732	207
November	170,277	31,920	833	138,091	21,192	606	32,185	10,727	227
December	162,009	31,702	845	130,885	20,920	603	31,124	10,781	241
Year 2017, End of Month Stocks									
January	156,175	31,488	794	125,187	20,714	542	30,988	10,754	252
February	160,448	31,094	822	128,010	20,442	551	32,438	10,652	271
March	161,690	31,622	855	128,574	21,144	566	33,116	10,478	289
April	163,723	31,325	933	130,307	21,030	630	33,416	10,295	303
May	162,309	30,880	881	129,141	20,595	570	33,168	10,286	312
June	157,719	30,549	868	126,382	20,545	542	31,337	10,004	325
July	145,376	30,469	875	117,432	20,550	552	27,945	9,920	323
August	141,720	30,072	919	114,139	20,227	576	27,581	9,845	343
Sept	139,315	29,647	988	113,121	20,053	632	26,194	9,594	357
October	141,204	29,646	1,058	114,807	20,003	690	26,397	9,643	368
November	143,210	29,671	1,089	117,650	20,092	685	25,560	9,579	405
December	137,155	28,723	1,113	114,378	19,826	700	22,777	8,897	414

Notes: See Glossary for definitions. Values for 2016 and prior years are final. Values for 2017 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, December 2017 and 2016**

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	December 2017	December 2016	Percentage Change	December 2017	December 2016	Percentage Change	December 2017	December 2016	Percentage Change
New England	933	1,638	-43.1%	3,448	4,529	-23.9%	0	0	--
Connecticut	W	W	W	1,283	1,595	-19.5%	0	0	--
Maine	0	0	--	317	468	-32.3%	0	0	--
Massachusetts	W	W	W	1,408	1,903	-26.0%	0	0	--
New Hampshire	W	W	W	296	365	-18.7%	0	0	--
Rhode Island	W	W	W	104	150	-30.9%	0	0	--
Vermont	0	0	--	39	48	-18.5%	0	0	--
Middle Atlantic	3,726	4,526	-17.7%	4,996	5,728	-12.8%	0	0	--
New Jersey	153	783	-80.4%	620	674	-8.0%	0	0	--
New York	W	W	W	3,247	3,703	-12.3%	0	0	--
Pennsylvania	W	W	W	1,129	1,352	-16.5%	0	0	--
East North Central	28,613	35,636	-19.7%	1,108	1,158	-4.3%	W	247	W
Illinois	5,718	7,056	-19.0%	69	83	-16.8%	0	0	--
Indiana	8,415	9,703	-13.3%	106	109	-3.1%	W	W	W
Michigan	5,814	6,024	-3.5%	331	361	-8.2%	W	W	W
Ohio	5,162	8,028	-35.7%	415	380	9.2%	W	W	W
Wisconsin	3,503	4,824	-27.4%	186	224	-17.0%	W	W	W
West North Central	27,957	31,091	-10.1%	828	1,032	-19.8%	0	0	--
Iowa	6,831	8,430	-19.0%	94	164	-42.9%	0	0	--
Kansas	4,097	4,588	-10.7%	114	123	-7.8%	0	0	--
Minnesota	3,410	4,003	-14.8%	112	141	-20.8%	0	0	--
Missouri	8,507	9,547	-10.9%	338	386	-12.5%	0	0	--
Nebraska	3,214	2,985	7.7%	101	129	-22.2%	0	0	--
North Dakota	W	W	W	27	33	-17.2%	0	0	--
South Dakota	W	W	W	43	55	-21.9%	0	0	--
South Atlantic	24,106	26,769	-9.9%	11,794	12,109	-2.6%	W	W	W
Delaware	W	W	W	369	537	-31.2%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	4,239	4,427	-4.3%	5,416	4,913	10.2%	108	W	W
Georgia	5,115	4,907	4.2%	791	806	-1.9%	0	0	--
Maryland	1,512	1,535	-1.5%	669	941	-28.9%	0	0	--
North Carolina	4,121	4,986	-17.3%	1,186	1,248	-5.0%	0	0	--
South Carolina	4,023	5,080	-20.8%	688	718	-4.1%	0	0	--
Virginia	W	1,093	W	2,544	2,789	-8.8%	0	0	--
West Virginia	3,828	W	W	131	158	-16.8%	W	W	W
East South Central	12,268	15,918	-22.9%	1,905	1,988	-4.2%	W	W	W
Alabama	3,049	3,514	-13.2%	321	339	-5.3%	0	0	--
Kentucky	6,063	7,945	-23.7%	261	238	9.8%	W	W	W
Mississippi	912	1,246	-26.8%	557	570	-2.3%	0	0	--
Tennessee	2,244	3,214	-30.2%	765	840	-9.0%	0	0	--
West South Central	19,600	24,799	-21.0%	1,689	1,800	-6.1%	W	W	W
Arkansas	2,972	3,877	-23.3%	176	188	-6.4%	0	0	--
Louisiana	2,297	2,488	-7.7%	377	419	-9.9%	W	W	W
Oklahoma	4,332	4,624	-6.3%	105	110	-4.6%	0	0	--
Texas	9,998	13,811	-27.6%	1,031	1,083	-4.8%	0	0	--
Mountain	18,906	20,144	-6.1%	395	410	-3.5%	W	W	W
Arizona	3,015	3,544	-14.9%	137	147	-6.8%	0	0	--
Colorado	4,388	4,363	0.6%	138	126	10.0%	0	0	--
Idaho	0	0	--	0	0	-12.1%	0	0	--
Montana	W	W	W	19	20	-7.8%	W	W	W
Nevada	W	W	W	3	15	-80.7%	0	0	--
New Mexico	W	W	W	27	39	-31.3%	0	0	--
Utah	4,589	5,279	-13.1%	32	32	1.6%	0	0	--
Wyoming	4,431	4,177	6.1%	39	30	29.7%	0	0	--
Pacific Contiguous	W	W	W	322	358	-10.1%	0	0	--
California	0	0	--	153	177	-13.7%	0	0	--
Oregon	W	W	W	68	75	-9.7%	0	0	--
Washington	W	W	W	102	106	-4.3%	0	0	--
Pacific Noncontiguous	W	W	W	2,238	2,591	-13.6%	0	0	--
Alaska	0	W	W	83	322	-74.1%	0	0	--
Hawaii	W	W	W	2,154	2,269	-5.1%	0	0	--
U.S. Total	137,155	162,009	-15.3%	28,723	31,702	-9.4%	1,113	845	31.7%

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

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

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, December 2017 and 2016**

Census Division	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
Coal (Thousand Tons)							
New England	933	1,638	-43.1%	W	W	W	W
Middle Atlantic	3,726	4,526	-17.7%	W	0	W	4,526
East North Central	28,613	35,636	-19.7%	19,236	22,656	9,377	12,980
West North Central	27,957	31,091	-10.1%	27,957	W	0	W
South Atlantic	24,106	26,769	-9.9%	21,796	24,404	2,310	2,364
East South Central	12,268	15,918	-22.9%	12,268	15,918	0	0
West South Central	19,600	24,799	-21.0%	14,057	16,279	5,543	8,520
Mountain	18,906	20,144	-6.1%	W	W	W	W
Pacific Contiguous	W	W	W	W	W	W	W
Pacific Noncontiguous	W	W	W	0	W	W	W
U.S. Total	137,155	162,009	-15.3%	114,378	130,885	22,777	31,124
Petroleum Liquids (Thousand Barrels)							
New England	3,448	4,529	-23.9%	563	679	2,885	3,850
Middle Atlantic	4,996	5,728	-12.8%	1,927	2,276	3,069	3,452
East North Central	1,108	1,158	-4.3%	758	846	350	312
West North Central	828	1,032	-19.8%	806	1,006	22	26
South Atlantic	11,794	12,109	-2.6%	9,846	9,637	1,949	2,472
East South Central	1,905	1,988	-4.2%	1,832	1,914	73	73
West South Central	1,689	1,800	-6.1%	1,306	1,384	383	416
Mountain	395	410	-3.5%	364	376	31	34
Pacific Contiguous	322	358	-10.1%	219	249	103	109
Pacific Noncontiguous	2,238	2,591	-13.6%	2,205	2,554	32	37
U.S. Total	28,723	31,702	-9.4%	19,826	20,920	8,897	10,781
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	W	247	W	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	108	W	W	W
East South Central	W	W	W	W	W	0	0
West South Central	W	W	W	W	W	0	0
Mountain	W	W	W	0	0	W	W
Pacific Contiguous	0	0	--	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0
U.S. Total	1,113	845	31.7%	W	W	W	W

W = Withheld to avoid disclosure of individual company data.

Notes: See Glossary for definitions. Values for 2017 are preliminary. Values for 2016 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, 2007 - December 2017

Period	Electric Power Sector			Total
	Bituminous Coal	Subbituminous Coal	Lignite Coal	
End of Year Stocks				
2007	63,964	82,692	4,565	151,221
2008	65,818	91,214	4,566	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
2016	67,241	90,376	4,393	162,009
2017	55,941	77,542	3,672	137,155
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	76,919	105,641	4,643	187,203
February	76,373	106,153	4,537	187,064
March	79,664	107,076	4,813	191,553
April	81,390	106,720	5,075	193,185
May	82,185	105,068	5,164	192,417
June	78,216	98,822	5,048	182,086
July	71,287	92,104	4,727	168,119
August	67,462	87,040	4,406	158,908
Sept	65,962	86,411	4,194	156,567
October	67,250	89,666	4,016	160,932
November	70,537	95,428	4,313	170,277
December	67,241	90,376	4,393	162,009
Year 2017, End of Month Stocks				
January	65,806	86,034	4,335	156,175
February	67,754	88,270	4,424	160,448
March	67,740	89,299	4,651	161,690
April	68,129	90,588	5,005	163,723
May	68,251	88,854	5,204	162,309
June	66,475	86,543	4,701	157,719
July	60,498	80,598	4,281	145,376
August	59,134	77,615	4,972	141,720
Sept	58,380	76,990	3,945	139,315
October	59,036	78,648	3,519	141,204
November	59,342	79,787	4,081	143,210
December	55,941	77,542	3,672	137,155

Notes: See Glossary for definitions.

Values for 2016 and prior years are final. Values for 2017 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), 2007 - December 2017

Period	Coal						Petroleum Liquids					
	Receipts		Average Cost		Average Sulfur Percent by Weight	Percentage of Consumption	Receipts		Average Cost		Average Sulfur Percent by Weight	Percentage of Consumption
	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)			(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)		
Annual Totals												
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
2016	12,516,272	650,770	2.11	40.64	1.34	93.8	101,810	16,807	9.39	56.89	0.49	68.1
2017	12,142,749	634,118	2.08	39.75	1.29	93.4	94,007	15,619	11.82	71.15	0.49	65.4
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	56.68	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	1,035,315	54,397	2.12	40.35	1.32	85.5	9,096	1,519	7.96	47.76	0.48	56.2
February	981,062	50,919	2.11	40.62	1.40	97.9	8,023	1,323	7.00	42.51	0.47	52.0
March	896,983	45,720	2.17	42.66	1.46	110.7	6,912	1,140	6.92	41.99	0.45	68.2
April	807,001	41,015	2.16	42.44	1.45	101.8	8,592	1,414	8.37	50.85	0.42	88.7
May	871,890	44,729	2.16	42.13	1.44	96.6	9,231	1,536	9.82	59.07	0.45	82.6
June	1,022,903	53,300	2.10	40.25	1.35	82.6	7,612	1,262	10.41	62.76	0.50	67.3
July	1,155,747	60,545	2.11	40.30	1.28	80.1	9,030	1,466	11.83	72.83	0.51	59.3
August	1,254,473	65,150	2.11	40.61	1.32	86.6	9,118	1,492	9.46	57.81	0.51	62.6
Sept	1,156,705	60,441	2.12	40.58	1.30	95.0	8,154	1,342	9.40	57.14	0.51	76.1
October	1,141,983	59,814	2.07	39.59	1.28	107.2	8,387	1,390	10.01	60.48	0.54	77.1
November	1,097,110	57,377	2.08	39.83	1.29	116.3	9,715	1,599	10.09	61.31	0.50	87.0
December	1,095,100	57,362	2.08	39.64	1.32	86.4	7,939	1,323	10.78	64.72	0.48	60.9
Year 2017												
January	1,099,948	57,463	2.09	40.08	1.26	88.5	9,304	1,546	11.91	71.72	0.46	70.8
February	997,916	52,098	2.07	39.58	1.30	106.1	6,122	1,015	11.61	70.06	0.49	59.5
March	966,998	50,174	2.08	40.17	1.35	100.2	11,990	2,018	11.62	69.01	0.54	111.4
April	893,611	46,168	2.11	40.85	1.34	101.6	6,223	1,033	11.59	69.85	0.48	62.4
May	948,234	49,206	2.13	41.01	1.33	94.5	6,485	1,082	W	W	0.48	56.7
June	1,032,209	53,498	2.11	40.71	1.31	89.0	7,209	1,196	W	W	0.47	63.4
July	1,084,862	56,876	2.09	39.82	1.22	80.1	6,490	1,086	W	W	0.48	54.9
August	1,174,972	61,268	2.08	39.85	1.29	91.4	6,872	1,137	W	W	0.47	61.1
Sept	1,005,155	52,845	2.03	38.55	1.24	94.6	6,394	1,061	W	W	0.49	57.6
October	990,301	51,848	2.03	38.86	1.27	100.9	7,328	1,212	11.87	71.73	0.52	64.7
November	976,444	51,520	2.04	38.67	1.26	98.7	9,313	1,541	12.29	74.29	0.47	85.9
December	972,098	51,155	2.05	38.91	1.27	85.8	10,277	1,693	13.95	84.69	0.47	49.9
Year to Date												
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
2016	12,516,272	650,770	2.11	40.64	1.34	93.8	101,810	16,807	9.39	56.89	0.49	68.1
2017	12,142,749	634,118	2.08	39.75	1.29	93.4	94,007	15,619	11.82	71.15	0.49	65.4

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

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

W = Withheld to avoid disclosure of individual company data.

Notes:

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

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

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

- Values for 2016 and prior years are final. Values for 2017 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), 2007 - December 2017 (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													
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	
2016	116,942	4,166	1.65	46.30	5.40	77.9	10,619,105	10,271,180	2.87	2.97	90.7	2.47	
2017	92,837	3,309	W	W	5.56	77.6	8,320,427	8,050,520	3.39	3.51	76.0	W	
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	9,640	341	1.38	38.93	5.68	79.8	826,179	798,251	3.02	3.13	89.9	2.52	
February	11,273	408	1.30	35.80	5.53	96.1	736,278	711,506	2.70	2.79	89.6	2.36	
March	10,313	363	1.41	40.14	5.33	81.1	797,607	771,918	2.23	2.30	90.4	2.21	
April	10,308	369	1.35	37.75	5.56	81.0	773,337	748,523	2.42	2.50	90.9	2.31	
May	8,554	307	1.32	36.76	5.35	65.8	857,644	830,896	2.39	2.47	91.1	2.31	
June	6,895	240	1.41	40.48	4.67	50.1	1,020,410	988,673	2.67	2.75	91.4	2.39	
July	10,032	355	1.47	41.45	5.14	70.8	1,189,145	1,151,122	2.97	3.07	91.3	2.55	
August	11,033	398	1.75	48.48	5.42	76.5	1,205,876	1,163,920	2.95	3.06	91.4	2.52	
Sept	10,741	381	2.07	58.30	5.17	84.6	968,648	935,630	3.07	3.18	91.1	2.55	
October	8,844	317	1.98	55.43	5.69	92.5	795,915	770,111	3.13	3.23	90.3	2.51	
November	9,365	333	2.26	63.59	5.69	82.0	718,522	695,273	3.02	3.12	90.4	2.47	
December	9,945	355	2.07	57.94	5.43	82.3	729,545	705,358	3.96	4.10	89.9	2.82	
Year 2017													
January	7,058	251	2.14	60.16	5.67	58.6	605,951	585,551	4.13	4.28	76.5	2.82	
February	7,593	271	2.00	56.03	5.85	83.2	532,100	514,989	3.58	3.70	77.4	2.60	
March	8,628	309	2.06	57.51	5.29	86.5	616,876	597,207	3.36	3.47	75.4	2.62	
April	5,835	208	2.00	55.96	5.34	93.7	576,199	557,617	3.38	3.49	76.3	2.62	
May	6,776	242	2.05	57.46	5.57	61.1	646,012	625,854	3.49	3.60	76.9	W	
June	8,657	308	W	W	5.55	71.2	762,486	737,993	3.30	3.41	76.5	W	
July	8,498	302	W	W	5.50	73.3	928,993	898,085	3.22	3.33	75.4	W	
August	7,972	284	W	W	5.47	77.5	900,262	870,598	3.16	3.27	75.9	W	
Sept	7,915	284	W	W	5.43	84.2	759,416	733,714	3.20	3.31	75.6	W	
October	8,347	297	W	W	5.61	98.3	692,139	670,324	3.16	3.27	75.4	W	
November	7,469	266	W	W	5.67	78.7	600,304	581,428	3.36	3.47	75.1	W	
December	8,088	287	2.17	60.99	5.74	82.6	699,688	677,158	3.63	3.75	75.9	2.75	
Year to Date													
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	
2016	116,942	4,166	1.65	46.30	5.40	77.9	10,619,105	10,271,180	2.87	2.97	90.7	2.47	
2017	92,837	3,309	W	W	5.56	77.6	8,320,427	8,050,520	3.39	3.51	76.0	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 2016 and prior years are final. Values for 2017 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, 2007 - December 2017

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												
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
2016	9,256,878	476,207	2.16	42.01	1.21	95.4	73,294	11,985	9.16	56.02	0.45	74.0
2017	8,952,220	464,163	2.12	40.91	1.17	95.1	68,548	11,319	11.56	70.00	0.47	71.7
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	750,914	39,064	2.17	41.71	1.18	85.5	6,190	1,022	7.88	47.74	0.44	58.8
February	722,024	37,129	2.16	41.95	1.23	98.2	5,814	955	6.92	42.16	0.41	64.1
March	685,422	34,609	2.19	43.49	1.34	110.9	5,223	851	6.69	41.07	0.40	77.5
April	612,742	30,953	2.19	43.39	1.31	107.4	6,897	1,126	8.35	51.19	0.37	106.4
May	655,166	33,408	2.17	42.60	1.25	98.5	6,742	1,114	9.12	55.16	0.40	91.7
June	775,536	39,900	2.15	41.79	1.24	85.9	5,511	908	10.51	63.80	0.44	70.9
July	849,005	43,981	2.17	41.99	1.15	81.1	7,117	1,142	11.54	71.91	0.52	66.7
August	925,332	47,610	2.17	42.19	1.19	88.3	6,737	1,090	9.15	56.57	0.51	66.2
Sept	851,137	43,822	2.18	42.34	1.18	97.6	5,514	896	9.00	55.39	0.49	79.2
October	842,651	43,693	2.12	40.99	1.16	110.5	5,205	851	9.80	59.94	0.52	73.4
November	805,502	41,615	2.13	41.25	1.20	117.8	6,780	1,106	9.80	60.07	0.46	88.2
December	781,447	40,423	2.13	41.17	1.21	85.4	5,565	925	10.71	64.43	0.44	65.2
Year 2017												
January	791,895	41,154	2.14	41.26	1.14	87.5	6,498	1,069	11.09	67.38	0.44	72.7
February	732,712	38,088	2.11	40.63	1.20	106.6	4,563	754	11.53	69.80	0.46	64.8
March	702,185	36,293	2.13	41.15	1.21	101.0	10,468	1,759	11.58	68.94	0.53	130.7
April	646,292	33,094	2.15	41.91	1.22	104.4	4,679	774	11.38	68.84	0.46	65.0
May	698,108	35,802	2.16	42.16	1.22	95.2	4,612	764	11.38	68.72	0.45	58.3
June	781,557	40,089	2.13	41.60	1.20	91.1	5,560	915	10.86	66.00	0.47	70.7
July	816,276	42,290	2.12	40.87	1.11	80.9	4,656	774	10.91	65.61	0.45	59.6
August	884,867	45,745	2.11	40.89	1.19	92.8	5,112	839	11.08	67.54	0.46	65.6
Sept	736,582	38,557	2.08	39.78	1.10	97.2	4,752	779	11.75	71.65	0.48	62.0
October	728,591	37,915	2.09	40.19	1.16	103.9	4,858	796	11.98	73.15	0.49	59.6
November	721,520	37,867	2.12	40.30	1.13	104.9	6,681	1,094	12.02	73.45	0.41	92.0
December	711,634	37,270	2.11	40.29	1.11	88.8	6,108	1,002	12.84	78.22	0.42	60.4
Year to Date												
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
2016	9,256,878	476,207	2.16	42.01	1.21	95.4	73,294	11,985	9.16	56.02	0.45	74.0
2017	8,952,220	464,163	2.12	40.91	1.17	95.1	68,548	11,319	11.56	70.00	0.47	71.7

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 2016 and prior years are final. Values for 2017 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, 2007 - December 2017 (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													
2007	84,812	2,964	1.73	49.67	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	
2016	99,706	3,538	1.52	42.85	5.38	103.1	5,075,337	4,907,538	3.15	3.26	97.0	2.54	
2017	90,481	3,224	2.15	60.31	5.55	117.6	3,990,184	3,861,856	3.65	3.77	80.5	2.63	
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	3.62	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	2.79	
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	394,925	382,074	3.27	3.38	97.1	2.57	
February	9,837	356	1.13	31.18	5.53	131.0	356,803	344,669	2.96	3.06	96.8	2.43	
March	8,402	294	1.21	34.47	5.28	103.8	383,424	371,055	2.53	2.61	97.4	2.33	
April	8,436	300	1.14	31.95	5.58	92.1	367,155	355,539	2.72	2.80	97.6	2.42	
May	7,842	281	1.22	34.16	5.35	94.9	412,465	399,342	2.68	2.77	97.4	2.40	
June	6,325	220	1.33	38.34	4.59	71.4	501,782	485,899	2.88	2.97	96.9	2.46	
July	9,587	340	1.43	40.50	5.10	104.6	571,042	552,828	3.20	3.31	96.5	2.62	
August	9,306	335	1.62	45.01	5.45	99.4	571,170	551,024	3.23	3.34	96.9	2.59	
Sept	9,059	320	2.00	56.51	5.12	102.8	457,872	442,147	3.43	3.55	97.3	2.64	
October	7,088	253	1.87	52.47	5.71	146.9	370,666	358,541	3.53	3.65	96.7	2.58	
November	7,871	279	2.22	62.85	5.74	116.3	339,777	328,019	3.36	3.48	97.4	2.54	
December	8,017	284	1.99	56.17	5.39	108.8	348,255	336,401	4.15	4.30	97.0	2.78	
Year 2017													
January	7,058	251	2.14	60.16	5.67	83.3	288,262	278,519	4.35	4.50	83.5	2.77	
February	7,593	271	2.00	56.03	5.85	124.3	250,635	242,633	3.83	3.96	84.6	2.58	
March	8,628	309	2.06	57.51	5.29	143.9	297,754	288,236	3.56	3.67	81.6	2.64	
April	5,835	208	2.00	55.96	5.34	188.7	281,420	272,348	3.52	3.63	82.6	2.60	
May	6,776	242	2.05	57.46	5.57	91.5	323,906	314,002	3.71	3.82	83.1	2.68	
June	8,386	298	2.14	60.07	5.55	105.5	368,349	356,694	3.57	3.69	80.8	2.63	
July	8,245	292	2.11	59.61	5.49	107.5	446,546	431,672	3.48	3.60	77.3	2.62	
August	7,676	273	2.11	59.17	5.45	119.8	432,247	418,089	3.46	3.57	78.2	2.58	
Sept	7,658	274	2.12	59.07	5.42	130.2	362,507	350,492	3.58	3.70	78.8	2.61	
October	7,454	265	2.37	66.84	5.58	154.2	329,450	319,249	3.59	3.70	79.5	2.60	
November	7,084	252	2.52	70.93	5.66	107.1	283,335	274,515	3.66	3.78	80.6	2.61	
December	8,088	287	2.17	60.99	5.74	123.5	325,771	315,406	3.77	3.90	80.3	2.69	
Year to Date													
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	
2016	99,706	3,538	1.52	42.85	5.38	103.1	5,075,337	4,907,538	3.15	3.26	97.0	2.54	
2017	90,481	3,224	2.15	60.31	5.55	117.6	3,990,184	3,861,856	3.65	3.77	80.5	2.63	

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 2016 and prior years are final. Values for 2017 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, 2007 - December 2017

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												
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	228,600	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
2016	3,047,358	164,648	1.93	35.69	1.73	91.8	25,975	4,410	9.93	58.56	0.48	75.1
2017	3,006,924	161,228	1.91	35.67	1.64	91.2	23,608	4,003	12.64	74.53	0.46	69.1
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	264,906	14,431	1.94	35.56	1.72	87.7	2,670	459	7.86	45.79	0.42	64.8
February	241,497	12,970	1.92	35.76	1.91	101.0	1,867	313	6.94	41.57	0.47	42.4
March	192,217	10,216	2.04	38.36	1.89	117.0	1,484	256	W	W	0.47	66.8
April	178,203	9,323	1.99	38.00	1.97	90.2	1,473	252	W	W	0.50	74.9
May	200,347	10,560	2.08	39.52	2.05	94.7	2,331	396	11.84	69.75	0.48	98.3
June	228,760	12,535	1.87	34.19	1.72	74.5	1,842	312	10.09	59.54	0.47	82.9
July	288,156	15,689	1.89	34.68	1.67	78.4	1,828	310	12.96	76.40	0.45	58.9
August	309,421	16,607	1.89	35.21	1.71	83.3	2,262	383	10.26	60.58	0.48	69.4
Sept	289,363	15,859	1.91	34.96	1.65	90.6	2,478	420	10.16	59.98	0.49	92.3
October	280,681	15,236	1.88	34.66	1.62	101.0	2,885	492	10.39	61.12	0.49	111.5
November	276,435	15,051	1.91	35.16	1.53	117.1	2,852	446	10.79	64.16	0.47	115.5
December	297,372	16,171	1.91	35.08	1.60	91.6	2,202	370	W	W	0.50	65.7
Year 2017												
January	293,070	15,606	1.93	36.35	1.59	94.6	2,679	456	13.98	82.08	0.47	92.8
February	250,099	13,304	1.90	35.74	1.60	108.7	1,438	241	W	W	0.50	63.4
March	247,658	13,058	1.93	36.69	1.75	101.4	1,344	231	12.02	69.90	0.44	80.3
April	231,929	12,350	1.97	37.09	1.66	97.9	1,383	233	W	W	0.44	78.7
May	234,471	12,642	1.99	36.90	1.67	95.0	1,718	293	W	W	0.45	71.9
June	235,473	12,689	2.00	37.14	1.68	85.0	1,507	258	W	W	0.42	62.6
July	253,594	13,865	1.97	36.04	1.55	78.8	1,739	297	W	W	0.48	57.2
August	274,367	14,784	1.94	35.96	1.64	88.9	1,649	280	W	W	0.43	69.4
Sept	254,384	13,609	1.84	34.37	1.64	90.0	1,491	258	W	W	0.42	59.9
October	246,724	13,227	1.83	34.24	1.61	96.5	2,321	393	11.66	68.89	0.50	108.0
November	240,378	12,958	1.79	33.17	1.64	87.0	2,432	415	13.07	76.69	0.56	103.6
December	244,777	13,136	1.84	34.33	1.69	80.0	3,906	648	15.88	95.71	0.43	46.4
Year to Date												
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
2016	3,047,358	164,648	1.93	35.69	1.73	91.8	25,975	4,410	9.93	58.56	0.48	75.1
2017	3,006,924	161,228	1.91	35.67	1.64	91.2	23,608	4,003	12.64	74.53	0.46	69.1

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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 2016 and prior years are final. Values for 2017 are preliminary.

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- See the Technical Notes for fuel conversion factors.

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

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

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2007 - December 2017 (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													
2007	56,590	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	
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	W	
2017	0	0	--	--	--	0.0	3,663,287	3,542,886	3.07	3.18	79.5	2.52	
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	1,305	49	W	W	5.70	182.6	366,954	353,940	2.80	2.91	93.1	W	
February	1,314	47	W	W	5.44	97.1	322,866	312,018	2.43	2.52	93.5	W	
March	1,337	48	W	W	5.37	65.3	353,542	341,974	1.89	1.95	94.0	W	
April	1,203	44	W	W	5.30	88.5	345,599	334,192	2.07	2.14	94.3	W	
May	506	18	W	W	5.28	30.6	384,972	373,040	2.04	2.11	94.6	W	
June	348	12	W	W	5.32	20.5	457,044	442,942	2.41	2.49	94.4	W	
July	223	8	W	W	5.67	12.1	552,956	535,139	2.66	2.75	94.4	W	
August	1,510	55	W	W	5.24	77.3	569,120	549,584	2.62	2.71	94.3	W	
Sept	1,483	53	W	W	5.43	90.7	448,820	433,556	2.61	2.70	94.1	W	
October	1,549	56	W	W	5.59	78.5	362,466	350,675	2.60	2.69	94.0	W	
November	1,294	47	W	W	5.43	83.4	313,867	304,227	2.59	2.67	93.5	W	
December	1,501	55	W	W	5.50	84.2	313,521	303,233	3.83	3.95	93.6	W	
Year 2017													
January	0	0	--	--	--	0.0	259,636	250,896	3.97	4.11	79.9	2.84	
February	0	0	--	--	--	0.0	227,496	220,081	3.33	3.44	80.9	W	
March	0	0	--	--	--	0.0	263,669	255,227	3.21	3.31	78.3	2.55	
April	0	0	--	--	--	0.0	241,451	233,602	3.19	3.30	79.4	W	
May	0	0	--	--	--	0.0	269,235	260,637	3.19	3.29	79.4	W	
June	0	0	--	--	--	0.0	339,166	328,064	2.92	3.02	79.5	W	
July	0	0	--	--	--	0.0	423,924	409,779	2.86	2.96	79.4	W	
August	0	0	--	--	--	0.0	412,138	398,444	2.76	2.85	79.9	W	
Sept	0	0	--	--	--	0.0	342,641	330,729	2.68	2.78	79.2	W	
October	0	0	--	--	--	0.0	310,113	300,091	2.60	2.69	79.3	2.26	
November	0	0	--	--	--	0.0	261,523	253,222	3.02	3.12	78.6	2.41	
December	0	0	--	--	--	0.0	312,295	302,115	3.57	3.69	80.5	2.82	
Year to Date													
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	
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	W	
2017	0	0	--	--	--	0.0	3,663,287	3,542,886	3.07	3.18	79.5	2.52	

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Notes:

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2007 - December 2017

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												
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
2016	1,288	57	W	W	3.03	8.3	0	0	--	--	--	0.0
2017	548	24	W	W	2.99	4.0	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	7.2	0	0	--	--	--	0.0
March	163	7	W	W	3.03	9.7	0	0	--	--	--	0.0
April	9	0	W	W	2.98	0.9	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	8.2	0	0	--	--	--	0.0
Sept	153	7	W	W	3.14	13.5	0	0	--	--	--	0.0
October	159	7	W	W	3.15	14.1	0	0	--	--	--	0.0
November	237	10	W	W	3.04	17.6	0	0	--	--	--	0.0
December	214	9	W	W	3.05	12.5	0	0	--	--	--	0.0
Year 2017												
January	111	5	W	W	2.99	7.4	0	0	--	--	--	0.0
February	91	4	W	W	2.95	7.4	0	0	--	--	--	0.0
March	104	5	W	W	3.02	7.8	0	0	--	--	--	0.0
April	1	0	W	W	2.96	0.1	0	0	--	--	--	0.0
May	11	0	W	W	3.23	1.2	0	0	--	--	--	0.0
June	17	1	W	W	3.02	1.6	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	4	0	W	W	2.77	0.3	0	0	--	--	--	0.0
Sept	72	3	W	W	2.96	6.7	0	0	--	--	--	0.0
October	35	2	W	W	2.96	3.5	0	0	--	--	--	0.0
November	13	1	W	W	3.04	1.2	0	0	--	--	--	0.0
December	89	4	W	W	3.01	6.4	0	0	--	--	--	0.0
Year to Date												
2015	2,439	109	W	W	2.55	13.6	0	0	--	--	--	0.0
2016	1,288	57	W	W	3.03	8.3	0	0	--	--	--	0.0
2017	548	24	W	W	2.99	4.0	0	0	--	--	--	0.0

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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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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2007 - December 2017 (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												
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
2016	0	0	--	--	--	0.0	8,005	7,766	W	W	6.1	W
2017	0	0	--	--	--	0.0	7,841	7,593	W	W	6.3	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	11.3	W
February	0	0	--	--	--	0.0	488	477	W	W	4.9	W
March	0	0	--	--	--	0.0	620	610	W	W	6.2	W
April	0	0	--	--	--	0.0	578	567	W	W	6.1	W
May	0	0	--	--	--	0.0	599	587	W	W	6.1	W
June	0	0	--	--	--	0.0	599	585	W	W	5.3	W
July	0	0	--	--	--	0.0	691	667	W	W	5.0	W
August	0	0	--	--	--	0.0	802	765	W	W	5.6	W
Sept	0	0	--	--	--	0.0	610	591	W	W	5.3	W
October	0	0	--	--	--	0.0	598	575	W	W	5.9	W
November	0	0	--	--	--	0.0	613	589	W	W	6.8	W
December	0	0	--	--	--	0.0	568	549	W	W	5.3	W
Year 2017												
January	0	0	--	--	--	0.0	662	639	W	W	5.6	W
February	0	0	--	--	--	0.0	646	624	W	W	6.3	W
March	0	0	--	--	--	0.0	680	662	W	W	6.4	W
April	0	0	--	--	--	0.0	502	490	W	W	5.7	W
May	0	0	--	--	--	0.0	497	483	W	W	5.4	W
June	0	0	--	--	--	0.0	615	595	W	W	6.0	W
July	0	0	--	--	--	0.0	636	613	W	W	5.7	W
August	0	0	--	--	--	0.0	809	778	W	W	7.4	W
Sept	0	0	--	--	--	0.0	707	685	W	W	6.9	W
October	0	0	--	--	--	0.0	605	588	W	W	6.0	W
November	0	0	--	--	--	0.0	749	725	W	W	7.5	W
December	0	0	--	--	--	0.0	734	711	W	W	6.6	W
Year to Date												
2015	0	0	--	--	--	0.0	6,499	6,371	W	W	5.5	W
2016	0	0	--	--	--	0.0	8,005	7,766	W	W	6.1	W
2017	0	0	--	--	--	0.0	7,841	7,593	W	W	6.3	W

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Notes:

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

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

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

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- See the Technical Notes for fuel conversion factors.

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

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

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2007 - December 2017

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												
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
2016	210,749	9,859	W	W	1.30	67.0	2,541	412	10.51	64.79	1.27	18.3
2017	183,058	8,703	W	W	1.29	64.8	1,850	297	11.18	69.57	1.42	16.2
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	19,357	897	W	W	1.36	64.2	237	38	11.34	71.47	1.49	18.7
February	17,418	814	W	W	1.42	63.5	342	55	8.70	53.76	1.16	19.8
March	19,181	888	W	W	1.29	69.7	205	33	W	W	1.18	18.5
April	16,048	739	W	W	1.43	68.7	222	36	W	W	1.36	20.8
May	16,376	761	2.67	57.42	1.39	64.6	158	26	11.79	72.81	1.49	11.7
June	18,607	865	2.66	57.25	1.25	69.6	259	42	10.38	64.15	1.45	21.3
July	18,586	875	2.64	56.18	1.23	66.2	85	14	11.10	68.65	1.14	7.1
August	19,629	929	W	W	1.16	71.9	119	19	11.84	73.14	1.11	12.4
Sept	16,052	753	W	W	1.20	65.1	162	27	11.67	71.25	1.12	16.5
October	18,491	879	W	W	1.25	78.1	297	48	10.34	63.78	1.20	25.7
November	14,936	701	W	W	1.27	64.1	283	47	10.57	63.80	1.30	30.7
December	16,067	759	W	W	1.33	59.3	172	28	W	W	1.12	18.0
Year 2017												
January	14,872	698	W	W	1.31	54.1	128	21	11.64	72.27	1.06	12.7
February	15,014	702	W	W	1.10	64.5	121	19	W	W	1.36	16.3
March	17,051	819	W	W	1.28	69.8	178	29	10.66	66.36	1.22	21.7
April	15,389	724	W	W	1.17	67.9	160	26	W	W	1.27	17.8
May	15,645	762	W	W	1.10	69.4	155	25	W	W	1.21	16.0
June	15,163	720	W	W	1.32	65.8	142	23	W	W	1.11	15.0
July	14,992	721	2.47	51.34	1.23	68.8	95	15	W	W	1.30	12.2
August	15,734	738	W	W	1.30	69.3	110	18	W	W	1.55	12.6
Sept	14,117	677	W	W	1.10	65.7	151	24	W	W	1.51	19.3
October	14,951	704	W	W	1.30	61.3	149	24	11.43	71.09	1.58	16.4
November	14,533	694	W	W	1.38	60.8	199	32	11.67	72.03	1.71	19.3
December	15,598	744	W	W	1.87	63.1	263	42	11.14	69.14	1.79	16.1
Year to Date												
2015	263,630	12,132	W	W	1.35	71.4	2,359	385	13.45	82.47	1.42	16.9
2016	210,749	9,859	W	W	1.30	67.0	2,541	412	10.51	64.79	1.27	18.3
2017	183,058	8,703	W	W	1.29	64.8	1,850	297	11.18	69.57	1.42	16.2

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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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- 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, 2007 - December 2017 (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													
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	
2016	3,664	135	W	W	5.84	11.2	744,034	721,358	W	W	59.6	W	
2017	2,356	85	W	W	5.84	8.7	659,116	638,186	W	W	52.1	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	15.3	63,059	61,034	W	W	59.0	W	
February	122	4	W	W	6.10	4.3	56,120	54,342	W	W	57.2	W	
March	574	21	W	W	5.88	23.8	60,020	58,279	W	W	58.9	W	
April	669	25	W	W	5.81	31.0	60,005	58,224	W	W	61.3	W	
May	206	8	W	W	5.64	7.0	59,608	57,927	W	W	59.3	W	
June	222	8	W	W	5.94	7.0	60,985	59,247	W	W	58.7	W	
July	222	8	W	W	5.94	7.0	64,456	62,488	W	W	58.3	W	
August	217	8	W	W	5.81	7.2	64,784	62,548	W	W	57.7	W	
Sept	200	8	W	W	5.64	9.6	61,346	59,335	W	W	58.7	W	
October	207	8	W	W	5.66	7.9	62,185	60,320	W	W	60.7	W	
November	200	8	W	W	5.47	7.0	64,265	62,438	W	W	63.4	W	
December	427	16	W	W	5.99	15.4	67,201	65,176	W	W	62.7	W	
Year 2017													
January	0	0	--	--	--	0.0	57,392	55,497	W	W	52.1	W	
February	0	0	--	--	--	0.0	53,322	51,652	W	W	53.4	W	
March	0	0	--	--	--	0.0	54,774	53,082	W	W	51.6	W	
April	0	0	--	--	--	0.0	52,826	51,178	W	W	52.2	W	
May	0	0	--	--	--	0.0	52,374	50,733	W	W	51.3	W	
June	271	9	W	W	5.75	9.5	54,356	52,640	W	W	52.5	W	
July	253	9	W	W	5.85	10.1	57,887	56,022	W	W	52.4	W	
August	296	11	W	W	5.85	12.0	55,068	53,287	W	W	51.8	W	
Sept	257	9	W	W	5.85	11.9	53,561	51,809	W	W	52.7	W	
October	893	32	W	W	5.85	38.1	51,971	50,395	W	W	50.5	W	
November	386	14	W	W	5.85	17.6	54,697	52,966	W	W	52.0	W	
December	0	0	--	--	--	0.0	60,888	58,925	W	W	52.1	W	
Year to Date													
2015	8,189	304	W	W	5.50	24.1	765,964	740,975	W	W	60.6	W	
2016	3,664	135	W	W	5.84	11.2	744,034	721,358	W	W	59.6	W	
2017	2,356	85	W	W	5.84	8.7	659,116	638,186	W	W	52.1	W	

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

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Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, December 2017 and 2016
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	7	11	-32.0%	0	0	7	9	0	0	0	2
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	7	11	-32.0%	0	0	7	9	0	0	0	2
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	1,754	2,277	-23.0%	0	0	1,735	2,240	0	0	19	37
New Jersey	70	68	2.3%	0	0	70	68	0	0	0	0
New York	21	104	-80.0%	0	0	13	87	0	0	8	16
Pennsylvania	1,664	2,105	-21.0%	0	0	1,652	2,085	0	0	11	20
East North Central	11,256	12,194	-7.7%	6,899	7,225	4,186	4,749	0	0	171	220
Illinois	3,304	3,604	-8.3%	604	571	2,528	2,845	0	0	171	188
Indiana	2,610	2,361	11.0%	2,499	2,286	111	74	0	0	0	0
Michigan	1,504	1,967	-24.0%	1,471	1,946	33	18	0	0	0	3
Ohio	2,078	2,506	-17.0%	565	695	1,513	1,811	0	0	0	0
Wisconsin	1,760	1,756	0.2%	1,760	1,726	0	0	0	0	0	29
West North Central	10,240	9,277	10.0%	9,907	9,036	0	0	4	9	329	232
Iowa	1,360	1,219	12.0%	1,177	1,050	0	0	0	0	183	168
Kansas	1,115	1,224	-8.9%	1,115	1,224	0	0	0	0	0	0
Minnesota	1,152	955	21.0%	1,085	950	0	0	0	0	67	5
Missouri	3,365	2,801	20.0%	3,361	2,792	0	0	4	9	0	0
Nebraska	1,086	1,053	3.1%	1,007	994	0	0	0	0	79	58
North Dakota	2,023	1,930	4.9%	2,023	1,930	0	0	0	0	0	0
South Dakota	139	95	45.0%	139	95	0	0	0	0	0	0
South Atlantic	6,324	8,107	-22.0%	5,394	6,717	845	1,295	0	0	85	95
Delaware	0	29	-100.0%	0	0	0	29	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	988	1,059	-6.7%	968	1,059	0	0	0	0	20	0
Georgia	1,097	1,508	-27.0%	1,090	1,495	0	0	0	0	7	13
Maryland	348	683	-49.0%	0	0	329	662	0	0	18	21
North Carolina	888	1,076	-18.0%	859	1,038	6	7	0	0	23	32
South Carolina	439	613	-28.0%	439	610	0	0	0	0	0	4
Virginia	368	600	-39.0%	271	504	80	70	0	0	17	25
West Virginia	2,197	2,538	-13.0%	1,768	2,012	429	527	0	0	0	0
East South Central	4,337	5,758	-25.0%	4,052	5,437	220	246	0	0	65	76
Alabama	1,288	1,288	0.0%	1,288	1,288	0	0	0	0	0	0
Kentucky	2,242	3,135	-28.0%	2,242	3,135	0	0	0	0	0	0
Mississippi	276	415	-34.0%	56	169	220	246	0	0	0	0
Tennessee	531	920	-42.0%	466	845	0	0	0	0	65	76
West South Central	9,727	11,355	-14.0%	4,933	5,091	4,773	6,221	0	0	21	44
Arkansas	1,419	1,271	12.0%	1,133	1,068	280	198	0	0	6	5
Louisiana	569	733	-22.0%	371	487	198	246	0	0	0	0
Oklahoma	891	1,088	-18.0%	788	943	87	106	0	0	15	39
Texas	6,848	8,263	-17.0%	2,640	2,592	4,208	5,671	0	0	0	0
Mountain	6,945	7,753	-10.0%	5,946	6,861	999	892	0	0	0	0
Arizona	1,207	1,170	3.2%	1,207	1,170	0	0	0	0	0	0
Colorado	1,143	1,298	-12.0%	1,143	1,298	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	885	792	12.0%	0	22	885	769	0	0	0	0
Nevada	30	44	-32.0%	0	0	30	44	0	0	0	0
New Mexico	735	1,108	-34.0%	735	1,108	0	0	0	0	0	0
Utah	940	1,128	-17.0%	903	1,095	37	33	0	0	0	0
Wyoming	2,005	2,214	-9.4%	1,958	2,168	47	46	0	0	0	0
Pacific Contiguous	426	553	-23.0%	121	43	250	457	0	0	54	54
California	54	54	0.3%	0	0	0	0	0	0	54	54
Oregon	121	43	185.0%	121	43	0	0	0	0	0	0
Washington	250	457	-45.0%	0	0	250	457	0	0	0	0
Pacific Noncontiguous	138	77	80.0%	17	14	121	63	0	0	0	0
Alaska	17	14	22.0%	17	14	0	0	0	0	0	0
Hawaii	121	63	93.0%	0	0	121	63	0	0	0	0
U.S. Total	51,155	57,362	-11.0%	37,270	40,423	13,136	16,171	4	9	744	759

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

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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 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, (Year-to-Date) December 2017 and 2016
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
				Electric Utilities	Independent Power Producers						
New England	198	1,173	-83.0%	45	177	153	979	0	0	0	17
Connecticut	0	85	-100.0%	0	0	0	85	0	0	0	0
Maine	66	87	-24.0%	0	0	66	70	0	0	0	17
Massachusetts	87	824	-89.0%	0	0	87	824	0	0	0	0
New Hampshire	45	177	-75.0%	45	177	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	19,613	24,329	-19.0%	119	0	19,212	23,738	0	0	282	591
New Jersey	656	649	1.1%	0	0	656	649	0	0	0	0
New York	281	637	-56.0%	0	0	109	361	0	0	172	277
Pennsylvania	18,676	23,042	-19.0%	119	0	18,446	22,728	0	0	110	314
East North Central	137,121	137,391	-0.2%	83,863	82,037	51,281	52,728	0	0	1,977	2,625
Illinois	39,892	39,036	2.2%	7,794	6,947	30,210	30,046	0	0	1,888	2,043
Indiana	28,944	28,736	0.7%	27,448	27,038	1,496	1,699	0	0	0	0
Michigan	22,756	21,809	4.3%	22,476	21,548	272	247	0	0	8	13
Ohio	25,946	28,881	-10.0%	6,643	7,993	19,303	20,736	0	0	0	152
Wisconsin	19,582	18,929	3.5%	19,502	18,511	0	0	0	0	80	418
West North Central	115,888	117,202	-1.1%	112,551	114,210	0	0	24	57	3,313	2,935
Iowa	15,347	18,041	-15.0%	13,186	15,932	0	0	0	0	2,162	2,110
Kansas	12,077	14,425	-16.0%	12,077	14,425	0	0	0	0	0	0
Minnesota	12,780	12,471	2.5%	12,403	12,404	0	0	0	0	377	67
Missouri	37,752	34,893	8.2%	37,728	34,836	0	0	24	57	0	0
Nebraska	13,088	13,652	-4.1%	12,314	12,894	0	0	0	0	774	758
North Dakota	23,465	22,366	4.8%	23,465	22,366	0	0	0	0	0	0
South Dakota	1,379	1,333	3.5%	1,379	1,333	0	0	0	0	0	0
South Atlantic	87,495	95,606	-8.5%	76,678	82,063	9,795	12,343	0	0	1,022	1,200
Delaware	200	243	-18.0%	0	0	200	243	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	15,139	15,033	0.7%	14,947	14,744	26	290	0	0	167	0
Georgia	16,943	17,397	-2.6%	16,832	17,246	0	0	0	0	111	151
Maryland	3,851	5,583	-31.0%	0	0	3,652	5,354	0	0	198	228
North Carolina	13,182	12,236	7.7%	12,832	11,802	58	74	0	0	292	359
South Carolina	6,499	7,971	-18.0%	6,473	7,883	0	0	0	0	26	88
Virginia	5,341	7,861	-32.0%	4,651	6,894	462	663	0	0	228	304
West Virginia	26,340	29,281	-10.0%	20,943	23,494	5,398	5,719	0	0	0	69
East South Central	59,231	67,605	-12.0%	55,871	63,383	2,417	3,053	0	0	943	1,170
Alabama	15,754	16,261	-3.1%	15,754	16,261	0	0	0	0	0	0
Kentucky	31,490	37,275	-16.0%	31,490	37,275	0	0	0	0	0	0
Mississippi	3,845	4,442	-13.0%	1,428	1,389	2,417	3,053	0	0	0	0
Tennessee	8,142	9,627	-15.0%	7,199	8,458	0	0	0	0	943	1,170
West South Central	120,991	110,732	9.3%	56,200	52,760	64,360	57,516	0	0	431	457
Arkansas	14,285	12,797	12.0%	12,442	10,593	1,776	2,142	0	0	67	62
Louisiana	8,029	6,912	16.0%	5,025	5,113	3,003	1,799	0	0	0	0
Oklahoma	10,586	11,073	-4.4%	9,180	9,583	1,043	1,095	0	0	364	395
Texas	88,091	79,950	10.0%	29,553	27,471	58,539	52,479	0	0	0	0
Mountain	87,866	90,812	-3.2%	77,787	80,388	9,969	10,193	0	0	111	231
Arizona	16,406	15,236	7.7%	16,406	15,236	0	0	0	0	0	0
Colorado	16,284	15,889	2.5%	16,284	15,889	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	8,675	9,032	-3.9%	215	256	8,460	8,776	0	0	0	0
Nevada	743	956	-22.0%	182	459	561	497	0	0	0	0
New Mexico	10,608	10,909	-2.8%	10,608	10,909	0	0	0	0	0	0
Utah	11,981	13,632	-12.0%	11,458	13,004	412	397	0	0	111	231
Wyoming	23,169	25,158	-7.9%	22,633	24,635	535	523	0	0	0	0
Pacific Contiguous	4,815	4,880	-1.3%	877	994	3,313	3,252	0	0	625	634
California	625	634	-1.4%	0	0	0	0	0	0	625	634
Oregon	877	994	-12.0%	877	994	0	0	0	0	0	0
Washington	3,313	3,252	1.9%	0	0	3,313	3,252	0	0	0	0
Pacific Noncontiguous	902	1,041	-13.0%	173	195	728	846	0	0	0	0
Alaska	173	195	-11.0%	173	195	0	0	0	0	0	0
Hawaii	728	846	-14.0%	0	0	728	846	0	0	0	0
U.S. Total	634,118	650,770	-2.6%	464,163	476,207	161,228	164,648	24	57	8,703	9,859

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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, December 2017 and 2016
(Thousand Barrels)**

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
				Electric Utilities	Independent Power Producers						
New England	84	92	-9.4%	3	2	81	90	0	0	0	0
Connecticut	4	2	85.0%	0	0	4	2	0	0	0	0
Maine	2	7	-77.0%	0	0	2	6	0	0	0	0
Massachusetts	9	82	-89.0%	0	0	9	82	0	0	0	0
New Hampshire	69	2	NM	3	2	66	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	376	56	574.0%	8	2	360	47	0	0	7	6
New Jersey	0	5	-96.0%	0	0	0	5	0	0	0	0
New York	332	19	NM	8	2	324	16	0	0	0	1
Pennsylvania	43	31	38.0%	0	0	37	27	0	0	7	5
East North Central	83	101	-17.0%	55	51	27	47	0	0	2	3
Illinois	7	11	-35.0%	1	1	6	10	0	0	0	0
Indiana	21	13	64.0%	18	13	2	0	0	0	0	0
Michigan	22	14	55.0%	22	13	0	0	0	0	0	1
Ohio	31	61	-49.0%	12	22	17	37	0	0	2	2
Wisconsin	3	2	20.0%	2	2	1	0	0	0	0	0
West North Central	61	69	-12.0%	61	69	0	0	0	0	0	0
Iowa	12	22	-44.0%	12	22	0	0	0	0	0	0
Kansas	15	4	319.0%	15	4	0	0	0	0	0	0
Minnesota	5	3	60.0%	5	3	0	0	0	0	0	0
Missouri	23	30	-25.0%	23	30	0	0	0	0	0	0
Nebraska	1	1	4.7%	1	1	0	0	0	0	0	0
North Dakota	5	10	-51.0%	5	10	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	146	254	-42.0%	85	220	28	15	0	0	33	18
Delaware	4	1	232.0%	0	0	4	1	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	17	80	-78.0%	13	80	0	0	0	0	5	0
Georgia	41	13	217.0%	17	10	0	0	0	0	24	3
Maryland	9	4	124.0%	0	0	9	4	0	0	0	0
North Carolina	29	56	-48.0%	27	49	0	1	0	0	2	6
South Carolina	12	23	-47.0%	10	13	0	0	0	0	2	10
Virginia	23	44	-49.0%	6	42	16	2	0	0	1	0
West Virginia	12	33	-63.0%	12	26	0	7	0	0	0	0
East South Central	41	36	14.0%	40	35	1	1	0	0	0	0
Alabama	9	6	46.0%	8	6	1	1	0	0	0	0
Kentucky	13	14	-3.7%	13	14	0	0	0	0	0	0
Mississippi	2	2	-7.5%	2	2	0	0	0	0	0	0
Tennessee	16	13	20.0%	16	13	0	0	0	0	0	0
West South Central	12	32	-62.0%	11	27	1	5	0	0	0	0
Arkansas	2	12	-86.0%	2	11	0	2	0	0	0	0
Louisiana	2	1	148.0%	2	1	0	0	0	0	0	0
Oklahoma	1	1	38.0%	1	1	0	0	0	0	0	0
Texas	7	18	-62.0%	6	14	1	4	0	0	0	0
Mountain	37	32	16.0%	36	29	1	3	0	0	0	0
Arizona	14	10	48.0%	14	10	0	0	0	0	0	0
Colorado	1	1	26.0%	1	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	2	-89.0%	0	0	0	2	0	0	0	0
Nevada	1	1	31.0%	0	0	1	1	0	0	0	0
New Mexico	6	12	-51.0%	6	12	0	0	0	0	0	0
Utah	4	2	87.0%	4	2	0	0	0	0	0	0
Wyoming	12	5	120.0%	12	5	0	0	0	0	0	0
Pacific Contiguous	1	2	-50.0%	0	0	1	2	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	2	-50.0%	0	0	1	2	0	0	0	0
Pacific Noncontiguous	852	649	31.0%	704	490	148	159	0	0	0	0
Alaska	0	1	-50.0%	0	1	0	0	0	0	0	0
Hawaii	852	648	31.0%	704	489	148	159	0	0	0	0
U.S. Total	1,693	1,323	28.0%	1,002	925	648	370	0	0	42	28

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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) December 2017 and 2016
(Thousand Barrels)**

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	Electric Utilities December 2017 YTD	Electric Utilities December 2016 YTD	Independent Power Producers December 2017 YTD	Independent Power Producers December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
	New England	462	590	-22.0%	14	76	448	509	0	0	0
Connecticut	28	37	-24.0%	0	0	28	37	0	0	0	0
Maine	178	29	504.0%	0	0	178	24	0	0	0	5
Massachusetts	176	498	-65.0%	0	66	176	432	0	0	0	0
New Hampshire	80	11	646.0%	14	11	66	0	0	0	0	0
Rhode Island	0	15	-100.0%	0	0	0	15	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,047	1,133	-7.6%	180	307	778	712	0	0	88	114
New Jersey	5	18	-75.0%	0	0	5	18	0	0	0	0
New York	650	612	6.2%	180	307	449	284	0	0	21	22
Pennsylvania	392	502	-22.0%	0	0	325	410	0	0	67	92
East North Central	817	1,050	-22.0%	482	547	311	472	0	0	24	31
Illinois	79	119	-34.0%	5	5	74	114	0	0	0	0
Indiana	202	184	9.9%	199	184	2	0	0	0	0	0
Michigan	152	180	-16.0%	142	171	0	0	0	0	9	9
Ohio	346	517	-33.0%	98	142	233	354	0	0	15	21
Wisconsin	38	51	-25.0%	37	47	1	4	0	0	0	0
West North Central	424	402	5.3%	424	398	0	4	0	0	0	0
Iowa	101	106	-4.5%	101	106	0	0	0	0	0	0
Kansas	108	41	163.0%	108	41	0	0	0	0	0	0
Minnesota	37	42	-13.0%	37	38	0	4	0	0	0	0
Missouri	102	144	-29.0%	102	144	0	0	0	0	0	0
Nebraska	2	4	-50.0%	2	4	0	0	0	0	0	0
North Dakota	69	61	13.0%	69	61	0	0	0	0	0	0
South Dakota	5	4	38.0%	5	4	0	0	0	0	0	0
South Atlantic	2,974	3,717	-20.0%	2,406	2,804	390	659	0	0	178	254
Delaware	19	79	-77.0%	0	0	19	79	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,447	916	58.0%	1,407	909	0	7	0	0	40	0
Georgia	219	264	-17.0%	143	169	3	32	0	0	73	63
Maryland	233	266	-13.0%	0	0	233	266	0	0	0	0
North Carolina	296	354	-16.0%	263	249	1	68	0	0	32	38
South Carolina	117	277	-58.0%	100	150	0	0	0	0	18	127
Virginia	461	1,323	-65.0%	312	1,104	135	193	0	0	15	27
West Virginia	182	238	-24.0%	182	223	0	14	0	0	0	0
East South Central	368	459	-20.0%	355	439	6	11	0	0	6	9
Alabama	51	67	-24.0%	44	55	6	11	0	0	0	0
Kentucky	169	188	-9.9%	169	188	0	0	0	0	0	0
Mississippi	15	26	-42.0%	15	26	0	0	0	0	0	0
Tennessee	133	178	-26.0%	126	169	0	0	0	0	6	9
West South Central	224	287	-22.0%	125	215	99	72	0	0	0	0
Arkansas	80	74	6.9%	34	57	45	18	0	0	0	0
Louisiana	6	54	-89.0%	6	52	0	2	0	0	0	0
Oklahoma	18	29	-37.0%	18	29	0	0	0	0	0	0
Texas	120	129	-6.8%	66	77	54	52	0	0	0	0
Mountain	351	355	-1.2%	322	321	29	34	0	0	0	0
Arizona	89	108	-18.0%	89	108	0	0	0	0	0	0
Colorado	5	14	-63.0%	5	14	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	19	24	-20.0%	0	0	19	24	0	0	0	0
Nevada	18	22	-18.0%	11	16	7	6	0	0	0	0
New Mexico	72	84	-15.0%	72	84	0	0	0	0	0	0
Utah	66	30	117.0%	63	26	3	4	0	0	0	0
Wyoming	82	73	13.0%	82	73	0	0	0	0	0	0
Pacific Contiguous	35	20	77.0%	18	4	17	15	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	14	3	287.0%	14	3	0	0	0	0	0	0
Washington	22	16	32.0%	4	1	17	15	0	0	0	0
Pacific Noncontiguous	8,917	8,793	1.4%	6,993	6,872	1,924	1,921	0	0	0	0
Alaska	1	9	-86.0%	1	9	0	0	0	0	0	0
Hawaii	8,916	8,784	1.5%	6,992	6,863	1,924	1,921	0	0	0	0
U.S. Total	15,619	16,807	-7.1%	11,319	11,985	4,003	4,410	0	0	297	412

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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, December 2017 and 2016
(Thousand Tons)**

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
				Electric Utilities	Independent Power Producers						
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	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
East North Central	66	74	-11.0%	66	19	0	55	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	62	17	271.0%	62	17	0	0	0	0	0	0
Ohio	0	55	-100.0%	0	0	0	55	0	0	0	0
Wisconsin	4	2	78.0%	4	2	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	38	99	-61.0%	38	83	0	0	0	0	0	16
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	38	83	-54.0%	38	83	0	0	0	0	0	0
Georgia	0	16	-100.0%	0	0	0	0	0	0	0	16
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	14	-100.0%	0	14	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	14	-100.0%	0	14	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	183	168	9.2%	183	168	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	183	168	9.2%	183	168	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	287	355	-19.0%	287	284	0	55	0	0	0	16

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 2016 are final. Values for 2017 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.

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) December 2017 and 2016
(Thousand Tons)

Census Division and State	Electric Power Sector										
	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 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	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
East North Central	559	1,014	-45.0%	559	504	0	492	0	0	0	18
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	162	-100.0%	0	162	0	0	0	0	0	0
Michigan	504	295	71.0%	504	295	0	0	0	0	0	0
Ohio	0	492	-100.0%	0	0	0	492	0	0	0	0
Wisconsin	54	66	-17.0%	54	47	0	0	0	0	0	18
West North Central	85	0	--	0	0	0	0	0	0	85	0
Iowa	85	0	--	0	0	0	0	0	0	85	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	663	1,441	-54.0%	663	1,324	0	0	0	0	0	117
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	663	1,324	-50.0%	663	1,324	0	0	0	0	0	0
Georgia	0	117	-100.0%	0	0	0	0	0	0	0	117
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	117	92	28.0%	117	92	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	117	92	28.0%	117	92	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	1,885	1,619	16.0%	1,885	1,619	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,885	1,619	16.0%	1,885	1,619	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	3,309	4,166	-21.0%	3,224	3,538	0	492	0	0	85	135

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:

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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, December 2017 and 2016
(Million Cubic Feet)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	22,850	25,355	-9.9%	17	73	22,834	25,281	0	0	0	0
Connecticut	9,952	9,332	6.6%	0	0	9,952	9,332	0	0	0	0
Maine	4	822	-100.0%	0	0	4	822	0	0	0	0
Massachusetts	10,659	10,170	4.8%	0	48	10,659	10,122	0	0	0	0
New Hampshire	1,435	2,206	-35.0%	17	25	1,419	2,181	0	0	0	0
Rhode Island	800	2,825	-72.0%	0	0	800	2,825	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	65,359	87,122	-25.0%	7,958	5,919	56,680	80,766	0	0	721	436
New Jersey	11,977	20,467	-41.0%	0	0	11,977	20,467	0	0	0	0
New York	25,341	29,468	-14.0%	7,958	5,919	16,904	23,480	0	0	480	69
Pennsylvania	28,040	37,187	-25.0%	0	0	27,799	36,819	0	0	241	368
East North Central	64,219	58,214	10.0%	26,001	24,767	36,319	31,343	561	491	1,337	1,613
Illinois	5,878	7,449	-21.0%	14	649	5,858	6,798	0	0	6	3
Indiana	13,439	12,787	5.1%	11,176	10,593	2,263	2,194	0	0	0	0
Michigan	17,278	15,065	15.0%	2,823	4,173	13,286	9,795	561	491	609	605
Ohio	20,780	16,010	30.0%	5,614	3,960	14,694	11,587	0	0	472	463
Wisconsin	6,843	6,903	-0.9%	6,374	5,392	219	969	0	0	251	542
West North Central	4,543	10,613	-57.0%	4,060	8,335	0	1,900	150	58	333	320
Iowa	2,445	2,564	-4.6%	2,116	2,255	0	0	0	0	330	309
Kansas	1,326	936	42.0%	1,326	936	0	0	0	0	0	0
Minnesota	89	3,115	-97.0%	85	2,194	0	910	1	0	3	11
Missouri	480	3,301	-85.0%	330	2,253	0	990	150	58	0	0
Nebraska	118	163	-28.0%	118	163	0	0	0	0	0	0
North Dakota	86	336	-74.0%	86	336	0	0	0	0	0	0
South Dakota	0	198	-100.0%	0	198	0	0	0	0	0	0
South Atlantic	166,369	156,789	6.1%	138,510	136,782	24,514	15,998	0	0	3,345	4,009
Delaware	1,259	2,966	-58.0%	0	0	1,259	1,941	0	0	0	1,025
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	71,928	74,701	-3.7%	71,119	73,361	631	1,340	0	0	177	0
Georgia	28,476	26,652	6.8%	22,225	22,156	5,362	3,700	0	0	889	796
Maryland	4,084	584	599.0%	0	0	3,832	379	0	0	251	205
North Carolina	25,232	21,685	16.0%	22,635	19,150	2,323	2,520	0	0	274	15
South Carolina	8,166	7,486	9.1%	7,582	6,836	399	178	0	0	185	472
Virginia	26,156	21,890	19.0%	14,612	15,237	10,674	5,863	0	0	871	790
West Virginia	1,070	825	30.0%	337	42	34	77	0	0	698	706
East South Central	67,558	74,003	-8.7%	43,643	51,147	21,884	21,505	0	0	2,031	1,351
Alabama	25,057	29,677	-16.0%	7,610	9,705	17,447	19,972	0	0	0	0
Kentucky	5,306	5,480	-3.2%	4,398	5,218	908	262	0	0	0	0
Mississippi	29,156	29,564	-1.4%	25,627	28,292	3,529	1,272	0	0	0	0
Tennessee	8,038	9,282	-13.0%	6,007	7,931	0	0	0	0	2,031	1,351
West South Central	181,054	182,965	-1.0%	34,384	44,024	98,413	84,337	0	0	48,257	54,604
Arkansas	8,366	7,064	18.0%	1	1,686	8,097	5,148	0	0	268	230
Louisiana	37,105	37,073	0.1%	16,873	15,418	2,428	3,245	0	0	17,804	18,409
Oklahoma	17,198	16,976	1.3%	6,854	11,722	10,100	5,201	0	0	243	53
Texas	118,385	121,853	-2.8%	10,655	15,198	77,787	70,743	0	0	29,942	35,912
Mountain	46,666	42,502	9.8%	39,598	34,455	6,854	7,979	0	0	213	67
Arizona	15,517	9,664	61.0%	11,810	6,234	3,707	3,430	0	0	0	0
Colorado	8,342	6,844	22.0%	7,300	5,513	1,042	1,331	0	0	0	0
Idaho	0	1,656	-100.0%	0	802	0	854	0	0	0	0
Montana	262	211	24.0%	262	211	0	0	0	0	0	0
Nevada	13,129	14,394	-8.8%	13,129	14,394	0	0	0	0	0	0
New Mexico	5,726	5,691	0.6%	3,669	3,370	2,057	2,321	0	0	0	0
Utah	3,540	4,019	-12.0%	3,279	3,907	48	44	0	0	213	67
Wyoming	149	23	552.0%	149	23	0	0	0	0	0	0
Pacific Contiguous	58,342	66,892	-13.0%	21,038	29,993	34,618	34,123	0	0	2,687	2,775
California	45,881	48,165	-4.7%	15,810	19,021	27,384	26,368	0	0	2,687	2,775
Oregon	9,109	12,407	-27.0%	1,875	6,462	7,234	5,945	0	0	0	0
Washington	3,353	6,320	-47.0%	3,353	4,510	0	1,810	0	0	0	0
Pacific Noncontiguous	198	905	-78.0%	198	905	0	0	0	0	0	0
Alaska	198	905	-78.0%	198	905	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	677,158	705,358	-4.0%	315,406	336,401	302,115	303,233	711	549	58,925	65,176

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

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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.

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) December 2017 and 2016
(Million Cubic Feet)**

Census Division and State	Electric Power Sector										
	All Sectors			Electric Power Producers				Commercial Sector		Industrial Sector	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	268,347	372,811	-28.0%	1,098	1,973	267,249	370,838	0	0	0	0
Connecticut	100,151	118,539	-16.0%	0	0	100,151	118,539	0	0	0	0
Maine	74	22,591	-100.0%	0	0	74	22,591	0	0	0	0
Massachusetts	127,903	150,999	-15.0%	698	1,497	127,205	149,502	0	0	0	0
New Hampshire	26,062	33,883	-23.0%	400	476	25,662	33,407	0	0	0	0
Rhode Island	14,158	46,798	-70.0%	0	0	14,158	46,798	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	858,702	1,212,167	-29.0%	81,725	101,020	772,267	1,108,355	0	0	4,711	2,792
New Jersey	142,126	309,871	-54.0%	0	0	142,126	309,871	0	0	0	0
New York	317,162	422,842	-25.0%	81,725	101,020	232,984	320,922	0	0	2,454	900
Pennsylvania	399,415	479,454	-17.0%	0	0	397,158	477,561	0	0	2,257	1,892
East North Central	610,865	845,653	-28.0%	233,191	373,096	358,028	454,803	5,952	6,357	13,693	11,398
Illinois	62,629	135,248	-54.0%	255	12,793	62,320	122,418	0	0	54	36
Indiana	114,235	148,401	-23.0%	94,278	121,845	19,957	26,556	0	0	0	0
Michigan	179,592	237,431	-24.0%	36,208	83,424	131,445	141,907	5,952	6,357	5,988	5,744
Ohio	186,168	209,824	-11.0%	46,088	55,369	135,249	152,722	0	0	4,831	1,733
Wisconsin	68,240	114,750	-41.0%	56,363	99,664	9,057	11,201	0	0	2,820	3,885
West North Central	48,016	179,892	-73.0%	41,771	151,235	463	25,263	1,641	1,409	4,141	1,985
Iowa	20,669	31,395	-34.0%	16,668	30,523	0	0	0	0	4,000	872
Kansas	15,894	17,007	-6.5%	15,894	17,007	0	0	0	0	0	0
Minnesota	1,151	64,230	-98.0%	541	49,834	463	13,294	7	10	140	1,092
Missouri	6,801	45,802	-85.0%	5,167	32,434	0	11,970	1,634	1,399	0	0
Nebraska	2,210	4,333	-49.0%	2,210	4,312	0	0	0	0	0	21
North Dakota	1,290	11,320	-89.0%	1,290	11,320	0	0	0	0	0	0
South Dakota	0	5,804	-100.0%	0	5,804	0	0	0	0	0	0
South Atlantic	2,125,166	2,396,562	-11.0%	1,788,260	1,942,448	302,065	413,536	0	0	34,841	40,577
Delaware	27,749	63,408	-56.0%	0	0	27,749	49,502	0	0	0	13,906
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,057,296	1,153,072	-8.3%	1,040,054	1,072,377	15,107	80,695	0	0	2,135	0
Georgia	309,642	390,148	-21.0%	239,780	297,542	60,788	82,871	0	0	9,074	9,735
Maryland	41,709	47,562	-12.0%	0	0	39,268	45,379	0	0	2,441	2,182
North Carolina	259,532	292,769	-11.0%	228,933	253,834	28,523	38,745	0	0	2,075	189
South Carolina	111,922	130,416	-14.0%	94,360	105,944	16,308	22,310	0	0	1,254	2,162
Virginia	300,209	304,679	-1.5%	183,110	211,213	107,425	85,355	0	0	9,674	8,111
West Virginia	17,107	14,508	18.0%	2,023	1,537	6,897	8,678	0	0	8,187	4,293
East South Central	772,741	939,721	-18.0%	510,796	621,230	243,834	306,493	0	0	18,110	11,998
Alabama	329,486	394,076	-16.0%	117,318	115,349	212,168	278,728	0	0	0	0
Kentucky	51,688	67,374	-23.0%	46,919	61,863	4,769	5,511	0	0	0	0
Mississippi	305,042	378,393	-19.0%	278,145	356,139	26,897	22,254	0	0	0	0
Tennessee	86,525	99,878	-13.0%	68,415	87,879	0	0	0	0	18,110	11,998
West South Central	2,121,320	2,855,252	-26.0%	472,935	863,058	1,117,712	1,369,805	0	0	530,673	622,389
Arkansas	72,778	133,676	-46.0%	50	50,915	70,626	80,503	0	0	2,101	2,258
Louisiana	430,114	536,078	-20.0%	200,585	271,761	33,569	50,056	0	0	195,961	214,261
Oklahoma	204,536	276,545	-26.0%	115,386	193,111	86,876	82,633	0	0	2,274	801
Texas	1,413,891	1,908,954	-26.0%	156,914	347,272	926,641	1,156,613	0	0	330,337	405,068
Mountain	599,314	688,171	-13.0%	487,256	532,547	110,745	154,856	0	0	1,312	768
Arizona	221,170	254,500	-13.0%	148,283	148,841	72,886	105,659	0	0	0	0
Colorado	90,045	90,645	-0.7%	76,803	76,165	13,242	14,481	0	0	0	0
Idaho	0	20,974	-100.0%	0	12,110	0	8,865	0	0	0	0
Montana	3,140	3,386	-7.3%	3,140	3,367	0	18	0	0	0	0
Nevada	177,885	191,152	-6.9%	177,885	191,152	0	0	0	0	0	0
New Mexico	68,683	73,286	-6.3%	45,461	48,589	23,222	24,697	0	0	0	0
Utah	37,307	54,033	-31.0%	34,612	52,142	1,383	1,123	0	0	1,312	768
Wyoming	1,084	194	459.0%	1,071	182	13	12	0	0	0	0
Pacific Contiguous	644,351	767,973	-16.0%	243,125	307,952	370,522	430,569	0	0	30,705	29,451
California	553,012	593,164	-6.8%	201,411	212,636	320,896	351,077	0	0	30,705	29,451
Oregon	63,235	106,814	-41.0%	13,609	52,607	49,625	54,207	0	0	0	0
Washington	28,104	67,994	-59.0%	28,104	42,708	0	25,285	0	0	0	0
Pacific Noncontiguous	1,699	12,979	-87.0%	1,699	12,979	0	0	0	0	0	0
Alaska	1,699	12,979	-87.0%	1,699	12,979	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,050,520	10,271,180	-22.0%	3,861,856	4,907,538	3,542,886	4,634,518	7,593	7,766	638,186	721,358

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Notes:

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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, December 2017 and 2016
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.11	2.03	3.9%	--	--	2.11	2.03
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	W	W	W	--	--	W	W
East North Central	1.99	2.04	-2.5%	2.08	2.15	1.84	1.87
Illinois	1.73	W	W	1.80	1.87	1.71	W
Indiana	W	W	W	2.12	2.23	W	W
Michigan	W	W	W	2.24	2.23	W	W
Ohio	W	2.00	W	1.74	1.80	W	2.07
Wisconsin	2.12	2.21	-4.1%	2.12	2.21	--	--
West North Central	1.75	1.73	1.2%	1.75	1.73	--	--
Iowa	1.62	1.56	3.8%	1.62	1.56	--	--
Kansas	1.67	1.69	-1.2%	1.67	1.69	--	--
Minnesota	2.13	2.02	5.4%	2.13	2.02	--	--
Missouri	1.87	1.90	-1.6%	1.87	1.90	--	--
Nebraska	1.39	1.36	2.2%	1.39	1.36	--	--
North Dakota	1.61	1.61	0.0%	1.61	1.61	--	--
South Dakota	2.05	2.33	-12.0%	2.05	2.33	--	--
South Atlantic	2.65	2.67	-0.7%	2.71	2.70	2.28	2.53
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	2.95	2.96	-0.3%	2.95	2.96	--	--
Georgia	2.82	2.69	4.8%	2.82	2.69	--	--
Maryland	2.53	2.93	-14.0%	--	--	2.53	2.93
North Carolina	W	W	W	2.97	3.09	W	W
South Carolina	3.39	3.24	4.6%	3.39	3.24	--	--
Virginia	W	W	W	2.58	2.68	W	W
West Virginia	W	2.14	W	2.25	2.22	W	1.82
East South Central	W	W	W	2.06	2.08	W	W
Alabama	2.11	1.87	13.0%	2.11	1.87	--	--
Kentucky	2.02	2.09	-3.3%	2.02	2.09	--	--
Mississippi	W	W	W	2.55	2.75	W	W
Tennessee	2.10	2.22	-5.4%	2.10	2.22	--	--
West South Central	1.98	1.93	2.6%	2.36	2.21	1.56	1.68
Arkansas	W	W	W	1.93	2.10	W	W
Louisiana	W	W	W	7.02	3.47	W	W
Oklahoma	W	W	W	1.84	1.95	W	W
Texas	1.72	1.80	-4.4%	2.06	2.13	1.49	1.64
Mountain	W	W	W	1.85	1.85	W	W
Arizona	2.21	2.03	8.9%	2.21	2.03	--	--
Colorado	1.66	1.61	3.1%	1.66	1.61	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.36	1.55	W	W
Nevada	W	W	W	--	--	W	W
New Mexico	1.78	2.14	-17.0%	1.78	2.14	--	--
Utah	1.90	1.94	-2.1%	1.90	1.94	--	--
Wyoming	W	W	W	1.70	1.70	W	W
Pacific Contiguous	W	W	W	2.28	2.33	W	W
California	--	--	--	--	--	--	--
Oregon	2.28	2.33	-2.1%	2.28	2.33	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.30	3.05	W	W
Alaska	3.30	3.05	8.2%	3.30	3.05	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.04	2.07	-1.4%	2.11	2.13	1.84	1.91

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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 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	W	W	W	4.34	4.07	W	W
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	--	W	W
New Hampshire	4.34	4.07	6.6%	4.34	4.07	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.99	1.96	1.5%	1.66	--	1.99	1.96
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.92	1.90	1.1%	1.66	--	1.92	1.90
East North Central	2.02	2.09	-3.3%	2.10	2.18	1.88	1.94
Illinois	W	W	W	1.85	1.97	W	W
Indiana	W	W	W	2.15	2.25	W	W
Michigan	W	W	W	2.16	2.25	W	W
Ohio	1.92	2.06	-6.8%	1.73	1.89	1.98	2.12
Wisconsin	2.22	2.21	0.5%	2.22	2.21	--	--
West North Central	1.75	1.72	1.7%	1.75	1.72	--	--
Iowa	1.66	1.59	4.4%	1.66	1.59	--	--
Kansas	1.71	1.70	0.6%	1.71	1.70	--	--
Minnesota	2.08	2.06	1.0%	2.08	2.06	--	--
Missouri	1.87	1.87	0.0%	1.87	1.87	--	--
Nebraska	1.37	1.35	1.5%	1.37	1.35	--	--
North Dakota	1.59	1.55	2.6%	1.59	1.55	--	--
South Dakota	2.19	2.25	-2.7%	2.19	2.25	--	--
South Atlantic	2.69	2.74	-1.8%	2.72	2.78	2.47	2.53
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	2.95	3.01	W	W
Georgia	2.77	2.79	-0.7%	2.77	2.79	--	--
Maryland	2.67	2.85	-6.3%	--	--	2.67	2.85
North Carolina	W	W	W	2.97	3.10	W	W
South Carolina	3.30	3.19	3.4%	3.30	3.19	--	--
Virginia	W	W	W	2.73	2.88	W	W
West Virginia	W	2.25	W	2.21	2.29	W	2.03
East South Central	W	W	W	2.09	2.19	W	W
Alabama	2.16	2.32	-6.9%	2.16	2.32	--	--
Kentucky	1.99	2.11	-5.7%	1.99	2.11	--	--
Mississippi	W	W	W	2.66	2.69	W	W
Tennessee	2.28	2.23	2.2%	2.28	2.23	--	--
West South Central	1.94	1.92	1.0%	2.10	2.15	1.78	1.68
Arkansas	W	W	W	2.03	2.17	W	W
Louisiana	W	W	W	2.95	2.92	W	W
Oklahoma	W	W	W	1.83	1.91	W	W
Texas	1.87	1.80	3.9%	2.08	2.09	1.76	1.64
Mountain	W	W	W	1.91	1.88	W	W
Arizona	2.23	2.13	4.7%	2.23	2.13	--	--
Colorado	1.77	1.85	-4.3%	1.77	1.85	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.76	1.66	W	W
Nevada	W	W	W	3.08	2.02	W	W
New Mexico	1.96	1.90	3.2%	1.96	1.90	--	--
Utah	1.96	1.94	1.0%	1.96	1.94	--	--
Wyoming	W	W	W	1.71	1.68	W	W
Pacific Contiguous	W	W	W	2.32	2.25	W	W
California	--	--	--	--	--	--	--
Oregon	2.32	2.25	3.1%	2.32	2.25	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.08	3.08	W	W
Alaska	3.08	3.08	0.0%	3.08	3.08	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.07	2.10	-1.4%	2.12	2.16	1.91	1.93

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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 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
New England	W	W	W	11.24	14.48	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	21.63	W	W
New Hampshire	W	13.93	W	11.24	13.93	W	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	18.42	12.11	52.0%	15.39	12.10	18.49	12.11
New Jersey	W	9.53	W	--	--	W	9.53
New York	18.74	11.87	58.0%	15.39	12.10	18.81	11.83
Pennsylvania	W	12.72	W	--	--	W	12.72
East North Central	15.10	12.73	19.0%	14.92	12.91	15.46	12.55
Illinois	W	12.19	W	15.13	11.89	W	12.23
Indiana	W	12.69	W	14.68	12.69	W	--
Michigan	14.66	11.07	32.0%	14.66	11.07	--	--
Ohio	15.70	13.25	18.0%	15.78	14.31	15.65	12.63
Wisconsin	W	12.08	W	14.53	12.08	W	--
West North Central	14.57	11.96	22.0%	14.57	11.96	--	--
Iowa	14.40	11.97	20.0%	14.40	11.97	--	--
Kansas	14.20	11.76	21.0%	14.20	11.76	--	--
Minnesota	15.25	12.31	24.0%	15.25	12.31	--	--
Missouri	14.69	12.28	20.0%	14.69	12.28	--	--
Nebraska	15.48	12.84	21.0%	15.48	12.84	--	--
North Dakota	14.74	10.92	35.0%	14.74	10.92	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	14.26	10.83	32.0%	14.86	10.70	12.40	12.72
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	15.57	9.37	66.0%	15.57	9.37	--	--
Georgia	14.11	W	W	14.11	11.98	--	W
Maryland	W	11.79	W	--	--	W	11.79
North Carolina	14.78	W	W	14.78	12.56	--	W
South Carolina	15.01	13.08	15.0%	15.01	13.08	--	--
Virginia	W	W	W	14.03	8.56	W	W
West Virginia	15.67	W	W	15.67	13.48	--	W
East South Central	W	W	W	14.51	12.47	W	W
Alabama	W	W	W	15.76	12.89	W	W
Kentucky	14.48	12.57	15.0%	14.48	12.57	--	--
Mississippi	13.81	11.99	15.0%	13.81	11.99	--	--
Tennessee	13.98	12.26	14.0%	13.98	12.26	--	--
West South Central	W	12.14	W	14.42	12.12	W	12.26
Arkansas	14.20	W	W	14.20	12.03	--	W
Louisiana	13.55	11.96	13.0%	13.55	11.96	--	--
Oklahoma	15.43	12.24	26.0%	15.43	12.24	--	--
Texas	W	W	W	14.69	12.19	W	W
Mountain	W	12.99	W	16.33	13.07	W	12.27
Arizona	14.93	12.65	18.0%	14.93	12.65	--	--
Colorado	16.55	12.59	31.0%	16.55	12.59	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	--	--	W	W
New Mexico	19.57	13.57	44.0%	19.57	13.57	--	--
Utah	15.74	W	W	15.74	13.34	--	W
Wyoming	16.62	12.71	31.0%	16.62	12.71	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	12.02	9.99	W	W
Alaska	18.54	15.94	16.0%	18.54	15.94	--	--
Hawaii	W	W	W	12.02	9.98	W	W
U.S. Total	14.02	W	W	12.84	10.71	15.88	W

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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 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) December 2017 and 2016
(Dollars per MMBtu)**

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	W	8.95	W	13.71	9.76	W	8.83
Connecticut	W	10.94	W	--	--	W	10.94
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	9.64	W	W
New Hampshire	W	10.52	W	13.71	10.52	W	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	15.14	10.11	50.0%	9.48	8.04	16.49	11.04
New Jersey	W	9.74	W	--	--	W	9.74
New York	16.12	9.88	63.0%	9.48	8.04	18.81	11.88
Pennsylvania	W	10.47	W	--	--	W	10.47
East North Central	13.31	W	W	13.18	10.86	13.50	W
Illinois	W	10.87	W	13.39	11.05	W	10.87
Indiana	W	10.60	W	12.97	10.60	W	--
Michigan	13.01	10.50	24.0%	13.01	10.50	--	--
Ohio	13.69	W	W	14.05	11.42	13.54	W
Wisconsin	W	W	W	12.60	11.48	W	W
West North Central	13.07	W	W	13.07	10.66	--	W
Iowa	13.09	10.95	20.0%	13.09	10.95	--	--
Kansas	13.15	10.43	26.0%	13.15	10.43	--	--
Minnesota	13.15	W	W	13.15	11.34	--	W
Missouri	13.32	10.92	22.0%	13.32	10.92	--	--
Nebraska	13.49	11.28	20.0%	13.49	11.28	--	--
North Dakota	12.61	9.41	34.0%	12.61	9.41	--	--
South Dakota	11.98	8.54	40.0%	11.98	8.54	--	--
South Atlantic	12.20	9.97	22.0%	12.22	9.87	12.08	10.46
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	12.50	W	W	12.50	11.47	--	W
Georgia	W	9.39	W	12.20	9.68	W	7.86
Maryland	11.67	9.65	21.0%	--	--	11.67	9.65
North Carolina	W	10.03	W	12.94	10.58	W	8.03
South Carolina	13.22	11.17	18.0%	13.22	11.17	--	--
Virginia	W	W	W	9.58	7.99	W	W
West Virginia	13.25	W	W	13.25	11.48	--	W
East South Central	W	W	W	12.67	10.44	W	W
Alabama	W	W	W	13.52	10.12	W	W
Kentucky	12.78	10.62	20.0%	12.78	10.62	--	--
Mississippi	12.17	9.56	27.0%	12.17	9.56	--	--
Tennessee	12.28	10.47	17.0%	12.28	10.47	--	--
West South Central	12.83	10.69	20.0%	12.96	10.55	12.67	11.10
Arkansas	W	W	W	12.82	10.38	W	W
Louisiana	13.78	W	W	13.78	9.70	--	W
Oklahoma	14.71	12.16	21.0%	14.71	12.16	--	--
Texas	W	W	W	12.46	10.66	W	W
Mountain	14.24	11.45	24.0%	14.28	11.37	13.81	12.16
Arizona	13.78	11.31	22.0%	13.78	11.31	--	--
Colorado	14.69	10.25	43.0%	14.69	10.25	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	12.34	11.79	W	W
New Mexico	14.40	11.32	27.0%	14.40	11.32	--	--
Utah	W	W	W	14.90	11.75	W	W
Wyoming	14.48	11.49	26.0%	14.48	11.49	--	--
Pacific Contiguous	W	W	W	13.87	11.43	W	W
California	--	--	--	--	--	--	--
Oregon	12.71	11.19	14.0%	12.71	11.19	--	--
Washington	W	W	W	17.51	12.29	W	W
Pacific Noncontiguous	W	W	W	11.00	8.50	W	W
Alaska	16.77	14.43	16.0%	16.77	14.43	--	--
Hawaii	W	W	W	11.00	8.50	W	W
U.S. Total	11.83	9.36	26.0%	11.56	9.16	12.64	9.93

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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, December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	W	W	--	--	--	W
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	W	W	--	--	--	W
East North Central	1.34	W	W	1.34	1.36	--	W
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.31	1.30	0.8%	1.31	1.30	--	--
Ohio	--	W	W	--	--	--	W
Wisconsin	1.77	1.77	0.0%	1.77	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.17	1.75	81.0%	3.17	1.75	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	3.17	1.75	81.0%	3.17	1.75	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	1.54	--	--	1.54	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	1.54	--	--	1.54	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.24	2.21	1.4%	2.24	2.21	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.24	2.21	1.4%	2.24	2.21	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.17	W	W	2.17	1.99	--	W

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Notes:
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 See Technical Notes for a discussion of the sample design for the Form EIA-923.
 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 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) December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017 YTD	December 2016 YTD	Percentage Change	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	W	W	--	--	--	W
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	W	W	--	--	--	W
East North Central	1.48	W	W	1.48	1.23	--	W
Illinois	--	--	--	--	--	--	--
Indiana	--	0.96	--	--	0.96	--	--
Michigan	1.44	1.30	11.0%	1.44	1.30	--	--
Ohio	--	W	W	--	--	--	W
Wisconsin	1.79	1.72	4.1%	1.79	1.72	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.66	1.55	72.0%	2.66	1.55	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.66	1.55	72.0%	2.66	1.55	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	1.50	1.55	-3.2%	1.50	1.55	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	1.50	1.55	-3.2%	1.50	1.55	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.20	1.58	39.0%	2.20	1.58	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.20	1.58	39.0%	2.20	1.58	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.15	1.64	31.0%	2.15	1.52	--	2.50

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 See Technical Notes for a discussion of the sample design for the Form EIA-923.
 Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
 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 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
New England	7.00	5.88	19.0%	14.97	7.25	6.99	5.87
Connecticut	W	5.34	W	--	--	W	5.34
Maine	W	W	W	--	--	W	W
Massachusetts	8.43	5.82	45.0%	--	7.46	8.43	5.81
New Hampshire	W	W	W	14.97	6.84	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	4.45	4.14	7.5%	4.94	6.52	4.37	3.93
New Jersey	5.23	3.87	35.0%	--	--	5.23	3.87
New York	4.95	5.30	-6.6%	4.94	6.52	4.96	4.93
Pennsylvania	3.78	3.40	11.0%	--	--	3.78	3.40
East North Central	2.94	3.67	-20.0%	2.93	3.78	2.96	3.58
Illinois	W	W	W	3.68	3.80	W	W
Indiana	W	W	W	2.95	3.85	W	W
Michigan	2.98	3.80	-22.0%	3.15	4.06	2.95	3.69
Ohio	2.84	3.25	-13.0%	2.73	3.38	2.88	3.20
Wisconsin	2.96	W	W	2.96	3.72	--	W
West North Central	4.71	4.02	17.0%	4.71	4.01	--	4.03
Iowa	5.22	3.64	43.0%	5.22	3.64	--	--
Kansas	4.13	4.89	-16.0%	4.13	4.89	--	--
Minnesota	3.09	W	W	3.09	4.33	--	W
Missouri	2.90	W	W	2.90	3.82	--	W
Nebraska	5.65	4.46	27.0%	5.65	4.46	--	--
North Dakota	7.74	3.37	130.0%	7.74	3.37	--	--
South Dakota	--	3.67	--	--	3.67	--	--
South Atlantic	4.20	4.39	-4.3%	4.30	4.43	3.49	3.88
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	4.49	W	W	4.49	4.53	--	W
Georgia	W	W	W	3.51	4.18	W	W
Maryland	4.80	4.68	2.6%	--	--	4.80	4.68
North Carolina	W	W	W	4.48	4.42	W	W
South Carolina	W	W	W	3.48	3.99	W	W
Virginia	W	W	W	4.77	4.51	W	W
West Virginia	W	5.44	W	3.16	3.48	W	6.51
East South Central	3.11	3.75	-17.0%	3.13	3.77	3.06	3.68
Alabama	W	W	W	3.20	4.03	W	W
Kentucky	W	W	W	4.14	4.56	W	W
Mississippi	W	W	W	2.97	3.63	W	W
Tennessee	3.02	3.42	-12.0%	3.02	3.42	--	--
West South Central	2.91	3.53	-18.0%	3.09	3.91	2.84	3.28
Arkansas	W	W	W	3.43	5.52	W	W
Louisiana	W	W	W	3.19	3.89	W	W
Oklahoma	W	W	W	3.02	3.93	W	W
Texas	2.87	3.34	-14.0%	2.97	3.73	2.85	3.24
Mountain	3.39	3.90	-13.0%	3.37	3.90	3.71	3.96
Arizona	W	W	W	3.42	4.64	W	W
Colorado	W	W	W	3.42	3.96	W	W
Idaho	--	4.05	--	--	4.05	--	--
Montana	1.90	2.32	-18.0%	1.90	2.32	--	--
Nevada	3.33	3.62	-8.0%	3.33	3.62	--	--
New Mexico	3.48	4.02	-13.0%	3.48	4.02	--	--
Utah	W	W	W	3.25	3.57	W	W
Wyoming	2.95	11.45	-74.0%	2.95	11.45	--	--
Pacific Contiguous	3.60	3.79	-5.0%	3.88	3.99	3.32	3.55
California	W	3.93	W	4.03	4.45	W	3.47
Oregon	W	W	W	2.86	2.83	W	W
Washington	3.80	W	W	3.80	4.09	--	W
Pacific Noncontiguous	8.13	7.17	13.0%	8.13	7.17	--	--
Alaska	8.13	7.17	13.0%	8.13	7.17	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.69	4.01	-8.0%	3.77	4.15	3.57	3.83

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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) December 2017 and 2016
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	December 2017	December 2016	Percentage Change	December 2017	December 2016	December 2017	December 2016
	YTD	YTD		YTD	YTD	YTD	YTD
New England	W	3.32	W	3.55	3.64	W	3.32
Connecticut	W	3.58	W	--	--	W	3.58
Maine	W	W	W	--	--	W	W
Massachusetts	3.69	3.20	15.0%	3.13	3.51	3.70	3.19
New Hampshire	W	W	W	4.26	4.07	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.87	2.22	29.0%	3.51	2.74	2.79	2.17
New Jersey	2.91	2.13	37.0%	--	--	2.91	2.13
New York	3.33	2.68	24.0%	3.51	2.74	3.26	2.66
Pennsylvania	2.49	1.87	33.0%	--	--	2.49	1.87
East North Central	3.06	2.64	16.0%	3.10	2.78	3.03	2.53
Illinois	3.10	2.82	9.9%	3.73	3.04	3.09	2.79
Indiana	W	W	W	3.06	2.92	W	W
Michigan	3.15	2.71	16.0%	3.36	2.88	3.10	2.62
Ohio	2.88	2.23	29.0%	2.81	2.25	2.91	2.22
Wisconsin	W	W	W	3.26	2.77	W	W
West North Central	W	2.91	W	3.35	2.90	W	2.95
Iowa	3.04	2.66	14.0%	3.04	2.66	--	--
Kansas	3.57	3.36	6.3%	3.57	3.36	--	--
Minnesota	W	W	W	3.42	3.05	W	W
Missouri	2.98	W	W	2.98	2.85	--	W
Nebraska	3.93	3.10	27.0%	3.93	3.10	--	--
North Dakota	5.30	2.58	105.0%	5.30	2.58	--	--
South Dakota	--	2.46	--	--	2.46	--	--
South Atlantic	3.90	3.45	13.0%	4.00	3.56	3.08	2.63
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	3.78	W	4.21	3.80	W	2.87
Georgia	W	2.99	W	3.61	3.05	W	2.75
Maryland	W	2.85	W	--	--	W	2.85
North Carolina	W	W	W	4.01	3.68	W	W
South Carolina	W	W	W	3.52	3.28	W	W
Virginia	3.31	W	W	3.60	3.07	2.50	W
West Virginia	W	W	W	3.00	2.45	W	W
East South Central	3.23	2.82	15.0%	3.22	2.83	3.25	2.80
Alabama	W	W	W	3.35	2.95	W	W
Kentucky	W	W	W	3.69	3.19	W	W
Mississippi	W	W	W	3.14	2.79	W	W
Tennessee	3.02	2.59	17.0%	3.02	2.59	--	--
West South Central	3.08	2.63	17.0%	3.20	2.74	3.02	2.54
Arkansas	W	W	W	3.18	3.08	W	W
Louisiana	W	2.68	W	3.26	2.72	W	2.45
Oklahoma	W	W	W	3.17	2.75	W	W
Texas	3.04	2.60	17.0%	3.14	2.70	3.02	2.56
Mountain	3.44	2.97	16.0%	3.45	2.98	3.37	2.82
Arizona	3.54	W	W	3.61	3.17	3.03	W
Colorado	W	W	W	3.44	3.12	W	W
Idaho	--	2.92	--	--	2.92	--	--
Montana	1.78	W	W	1.78	1.77	--	W
Nevada	3.37	2.90	16.0%	3.37	2.90	--	--
New Mexico	3.41	2.92	17.0%	3.41	2.92	--	--
Utah	W	W	W	3.34	2.65	W	W
Wyoming	W	W	W	3.35	9.06	W	W
Pacific Contiguous	3.58	2.96	21.0%	3.89	3.28	3.26	2.63
California	W	3.07	W	4.02	3.53	W	2.68
Oregon	W	W	W	2.68	2.35	W	W
Washington	3.76	W	W	3.76	3.41	--	W
Pacific Noncontiguous	8.10	6.61	23.0%	8.10	6.61	--	--
Alaska	8.10	6.61	23.0%	8.10	6.61	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.41	2.89	18.0%	3.65	3.15	3.07	2.54

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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, December 2017

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	7	0.67	7.1	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	7	0.67	7.1	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,465	2.89	8.8	0	--	--	0	--	--
New Jersey	70	1.74	7.4	0	--	--	0	--	--
New York	21	2.38	8.4	0	--	--	0	--	--
Pennsylvania	1,374	2.96	8.9	0	--	--	0	--	--
East North Central	5,577	3.17	10.1	5,679	0.24	4.8	0	--	--
Illinois	890	4.02	20.0	2,414	0.21	4.7	0	--	--
Indiana	2,436	2.70	8.6	174	0.24	4.5	0	--	--
Michigan	141	2.18	7.4	1,363	0.27	4.8	0	--	--
Ohio	2,078	3.48	8.9	0	--	--	0	--	--
Wisconsin	31	3.25	7.9	1,729	0.24	5.0	0	--	--
West North Central	100	3.02	9.2	8,117	0.28	5.1	2,023	0.78	10.2
Iowa	35	2.75	8.3	1,325	0.25	4.8	0	--	--
Kansas	15	3.61	13.9	1,100	0.33	5.0	0	--	--
Minnesota	0	--	--	1,152	0.38	6.3	0	--	--
Missouri	50	3.04	8.5	3,315	0.23	4.8	0	--	--
Nebraska	0	--	--	1,086	0.26	5.0	0	--	--
North Dakota	0	--	--	0	--	--	2,023	0.78	10.2
South Dakota	0	--	--	139	0.32	5.3	0	--	--
South Atlantic	5,623	2.16	9.8	664	0.33	5.0	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	988	2.58	8.0	0	--	--	0	--	--
Georgia	461	2.52	8.1	636	0.33	5.0	0	--	--
Maryland	320	2.32	10.5	28	0.20	5.0	0	--	--
North Carolina	888	1.52	9.9	0	--	--	0	--	--
South Carolina	439	1.58	8.9	0	--	--	0	--	--
Virginia	368	0.95	20.0	0	--	--	0	--	--
West Virginia	2,160	2.44	9.6	0	--	--	0	--	--
East South Central	2,484	2.72	8.7	1,633	0.29	5.0	220	0.38	12.3
Alabama	326	1.18	7.5	962	0.31	5.1	0	--	--
Kentucky	1,721	3.09	9.1	521	0.25	5.0	0	--	--
Mississippi	0	--	--	56	0.22	5.0	220	0.38	12.3
Tennessee	437	2.43	8.1	94	0.26	4.7	0	--	--
West South Central	57	1.73	16.4	6,679	0.27	5.1	2,992	1.04	18.0
Arkansas	6	0.37	10.8	1,413	0.23	4.7	0	--	--
Louisiana	19	2.76	8.2	395	0.26	5.1	154	0.55	19.1
Oklahoma	31	1.35	23.4	859	0.24	5.0	0	--	--
Texas	0	--	--	4,011	0.30	5.3	2,837	1.07	17.9
Mountain	1,980	0.57	13.8	4,927	0.54	8.5	0	0.51	8.5
Arizona	545	0.62	10.4	662	0.67	10.1	0	--	--
Colorado	98	0.48	11.1	1,045	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	885	0.72	10.2	0	0.51	8.5
Nevada	0	--	--	30	0.26	4.4	0	--	--
New Mexico	500	0.68	22.0	235	0.77	19.8	0	--	--
Utah	837	0.50	12.0	65	0.91	9.2	0	--	--
Wyoming	0	--	--	2,005	0.50	7.4	0	--	--
Pacific Contiguous	54	0.51	10.8	369	0.41	7.7	0	--	--
California	54	0.51	10.8	0	--	--	0	--	--
Oregon	0	--	--	121	0.24	4.8	0	--	--
Washington	0	--	--	248	0.49	9.2	0	--	--
Pacific Noncontiguous	0	--	--	121	0.36	5.1	11	0.12	6.5
Alaska	0	--	--	0	--	--	11	0.12	6.5
Hawaii	0	--	--	121	0.36	5.1	0	--	--
U.S. Total	17,347	2.46	10.1	28,190	0.32	5.7	5,246	0.91	14.7

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 2017 are preliminary. Values for 2016 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, December 2017

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	3,206	2.78	8.5	3,693	0.25	4.8	0	--	--
Illinois	176	3.06	11.0	428	0.20	4.6	0	--	--
Indiana	2,325	2.65	8.5	174	0.24	4.5	0	--	--
Michigan	108	2.34	7.6	1,363	0.27	4.8	0	--	--
Ohio	565	3.25	8.1	0	--	--	0	--	--
Wisconsin	31	3.25	7.9	1,729	0.24	5.0	0	--	--
West North Central	61	3.18	9.7	7,823	0.28	5.1	2,023	0.78	10.2
Iowa	0	--	--	1,177	0.25	4.8	0	--	--
Kansas	15	3.61	13.9	1,100	0.33	5.0	0	--	--
Minnesota	0	--	--	1,085	0.39	6.3	0	--	--
Missouri	46	3.04	8.4	3,315	0.23	4.8	0	--	--
Nebraska	0	--	--	1,007	0.27	5.1	0	--	--
North Dakota	0	--	--	0	--	--	2,023	0.78	10.2
South Dakota	0	--	--	139	0.32	5.3	0	--	--
South Atlantic	4,759	2.09	9.6	636	0.33	5.0	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	968	2.63	8.0	0	--	--	0	--	--
Georgia	455	2.54	8.0	636	0.33	5.0	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	859	1.55	10.0	0	--	--	0	--	--
South Carolina	439	1.58	8.9	0	--	--	0	--	--
Virginia	271	1.03	24.8	0	--	--	0	--	--
West Virginia	1,768	2.21	9.0	0	--	--	0	--	--
East South Central	2,419	2.78	8.7	1,633	0.29	5.0	0	--	--
Alabama	326	1.18	7.5	962	0.31	5.1	0	--	--
Kentucky	1,721	3.09	9.1	521	0.25	5.0	0	--	--
Mississippi	0	--	--	56	0.22	5.0	0	--	--
Tennessee	372	2.72	8.0	94	0.26	4.7	0	--	--
West South Central	19	2.76	8.2	4,106	0.26	5.0	807	1.40	20.9
Arkansas	0	--	--	1,133	0.23	4.7	0	--	--
Louisiana	19	2.76	8.2	197	0.25	5.0	154	0.55	19.1
Oklahoma	0	--	--	788	0.23	5.0	0	--	--
Texas	0	--	--	1,987	0.29	5.2	653	1.62	21.3
Mountain	1,980	0.57	13.8	3,965	0.50	8.2	0	0.51	8.5
Arizona	545	0.62	10.4	662	0.67	10.1	0	--	--
Colorado	98	0.48	11.1	1,045	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	0.51	8.5
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	500	0.68	22.0	235	0.77	19.8	0	--	--
Utah	837	0.50	12.0	65	0.91	9.2	0	--	--
Wyoming	0	--	--	1,958	0.50	7.5	0	--	--
Pacific Contiguous	0	--	--	121	0.24	4.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	121	0.24	4.8	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	11	0.12	6.5
Alaska	0	--	--	0	--	--	11	0.12	6.5
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,444	2.19	9.8	21,978	0.31	5.6	2,842	0.95	13.0

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 2017 are preliminary. Values for 2016 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, December 2017

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	7	0.67	7.1	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	7	0.67	7.1	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,445	2.90	8.8	0	--	--	0	--	--
New Jersey	70	1.74	7.4	0	--	--	0	--	--
New York	13	2.38	8.9	0	--	--	0	--	--
Pennsylvania	1,363	2.97	8.9	0	--	--	0	--	--
East North Central	2,216	3.56	12.6	1,970	0.21	4.8	0	--	--
Illinois	559	3.73	27.6	1,970	0.21	4.8	0	--	--
Indiana	111	3.62	9.4	0	--	--	0	--	--
Michigan	33	1.60	6.8	0	--	--	0	--	--
Ohio	1,513	3.56	9.2	0	--	--	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	779	2.73	11.2	28	0.20	5.0	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	301	2.33	10.0	28	0.20	5.0	0	--	--
North Carolina	6	0.62	6.6	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	80	0.80	10.3	0	--	--	0	--	--
West Virginia	392	3.49	12.4	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	220	0.38	12.3
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	220	0.38	12.3
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	31	1.35	23.4	2,558	0.30	5.3	2,184	0.91	17.0
Arkansas	0	--	--	280	0.22	4.6	0	--	--
Louisiana	0	--	--	198	0.26	5.1	0	--	--
Oklahoma	31	1.35	23.4	56	0.30	5.2	0	--	--
Texas	0	--	--	2,024	0.31	5.4	2,184	0.91	17.0
Mountain	0	--	--	962	0.69	9.8	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	885	0.72	10.2	0	--	--
Nevada	0	--	--	30	0.26	4.4	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	47	0.40	6.2	0	--	--
Pacific Contiguous	0	--	--	248	0.49	9.2	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	248	0.49	9.2	0	--	--
Pacific Noncontiguous	0	--	--	121	0.36	5.1	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	121	0.36	5.1	0	--	--
U.S. Total	4,479	3.17	11.1	5,886	0.34	6.0	2,404	0.87	16.6

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 2017 are preliminary. Values for 2016 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, December 2017

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	4	3.01	8.8	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	4	3.01	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	4	3.01	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 2017 are preliminary. Values for 2016 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, December 2017

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	19	2.29	7.8	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	8	2.37	7.6	0	--	--	0	--	--
Pennsylvania	11	2.24	7.9	0	--	--	0	--	--
East North Central	155	5.90	8.9	16	0.80	6.5	0	--	--
Illinois	155	5.90	8.9	16	0.80	6.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	35	2.75	8.3	294	0.22	4.7	0	--	--
Iowa	35	2.75	8.3	148	0.22	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	67	0.25	5.6	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	79	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	85	1.04	10.0	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	20	0.70	7.8	0	--	--	0	--	--
Georgia	7	1.35	10.6	0	--	--	0	--	--
Maryland	18	2.01	20.6	0	--	--	0	--	--
North Carolina	23	0.82	6.9	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	17	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	65	0.90	8.2	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	65	0.90	8.2	0	--	--	0	--	--
West South Central	6	0.37	10.8	15	0.19	4.7	0	--	--
Arkansas	6	0.37	10.8	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	15	0.19	4.7	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	54	0.51	10.8	0	--	--	0	--	--
California	54	0.51	10.8	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	420	2.79	9.2	325	0.25	4.8	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 2017 are preliminary. Values for 2016 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, 2007 - December 2017 (Thousand Megawatthours)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2016	1,411,058	1,367,191	976,715	7,497	3,762,462
2017	1,378,819	1,349,208	946,443	7,524	3,681,995
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	130,972	110,410	78,848	660	320,890
February	115,959	103,452	76,748	646	296,806
March	100,227	105,739	79,237	609	285,812
April	88,244	102,045	78,647	595	269,531
May	94,198	108,437	81,491	581	284,708
June	125,211	120,363	83,672	631	329,878
July	154,409	130,038	87,076	648	372,172
August	156,442	135,019	89,101	631	381,192
Sept	129,363	123,493	83,259	637	336,752
October	101,508	112,963	81,597	613	296,681
November	93,244	105,060	78,421	592	277,317
December	121,281	110,172	78,616	653	310,722
Year 2017					
January	129,253	109,414	75,814	666	315,148
February	101,349	99,607	71,958	636	273,550
March	103,434	107,171	77,587	644	288,836
April	90,966	101,796	75,917	590	269,269
May	98,977	109,912	80,147	583	289,619
June	122,034	119,289	82,224	629	324,176
July	149,075	128,324	84,240	630	362,268
August	142,026	128,144	85,905	641	356,716
Sept	119,077	118,836	80,260	619	318,793
October	102,983	113,036	79,471	626	296,116
November	97,870	104,959	76,195	598	279,622
December	121,775	108,720	76,724	663	307,882
Year to Date					
2015	1,404,096	1,360,752	986,508	7,637	3,758,992
2016	1,411,058	1,367,191	976,715	7,497	3,762,462
2017	1,378,819	1,349,208	946,443	7,524	3,681,995
Rolling 12 Months Ending in December					
2016	1,411,058	1,367,191	976,715	7,497	3,762,462
2017	1,378,819	1,349,208	946,443	7,524	3,681,995

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 2016 and prior years are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Industry Power Report.
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, 2007 - December 2017 (Million Dollars)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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	391,341
2016	177,077	142,643	66,068	722	386,509
2017	177,860	144,108	65,394	727	388,089
Year 2015					
January	16,665	11,506	5,310	70	33,551
February	15,215	11,203	5,277	73	31,768
March	14,450	11,460	5,441	69	31,419
April	11,379	10,803	5,323	60	27,566
May	12,300	11,456	5,589	60	29,405
June	15,537	12,992	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	15,704	11,133	5,080	63	31,980
February	14,076	10,605	4,927	62	29,670
March	12,593	10,815	5,122	58	28,587
April	10,967	10,398	5,065	57	26,486
May	12,048	11,184	5,357	54	28,643
June	15,942	12,828	5,879	62	34,710
July	19,575	13,891	6,294	64	39,823
August	20,157	14,530	6,440	63	41,191
Sept	16,652	13,298	5,947	64	35,961
October	12,648	11,914	5,491	59	30,111
November	11,886	10,840	5,225	55	28,007
December	14,830	11,206	5,242	62	31,339
Year 2017					
January	15,783	11,190	4,988	62	32,023
February	12,952	10,439	4,763	60	28,215
March	13,332	11,224	5,224	61	29,841
April	11,542	10,584	5,021	56	27,203
May	12,879	11,633	5,459	56	30,027
June	16,123	13,120	5,937	64	35,243
July	19,547	14,108	6,194	64	39,912
August	18,727	14,153	6,231	64	39,175
Sept	15,838	13,150	5,795	62	34,844
October	13,220	12,231	5,525	60	31,036
November	12,691	11,054	5,171	57	28,974
December	15,226	11,222	5,084	62	31,594
Year to Date					
2015	177,624	144,781	68,166	771	391,341
2016	177,077	142,643	66,068	722	386,509
2017	177,860	144,108	65,394	727	388,089
Rolling 12 Months Ending in December					
2016	177,077	142,643	66,068	722	386,509
2017	177,860	144,108	65,394	727	388,089

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 2016 and prior years are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Industry Power Report.
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, 2007 - December 2017 (Cents per Kilowatthour)**

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2016	12.55	10.43	6.76	9.63	10.27
2017	12.90	10.68	6.91	9.67	10.54
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	11.99	10.08	6.44	9.52	9.97
February	12.14	10.25	6.42	9.61	10.00
March	12.56	10.23	6.46	9.56	10.00
April	12.43	10.19	6.44	9.53	9.83
May	12.79	10.31	6.57	9.28	10.06
June	12.73	10.66	7.03	9.75	10.52
July	12.68	10.68	7.23	9.84	10.70
August	12.88	10.76	7.23	10.04	10.81
Sept	12.87	10.77	7.14	10.00	10.68
October	12.46	10.55	6.73	9.62	10.15
November	12.75	10.32	6.66	9.22	10.10
December	12.23	10.17	6.67	9.49	10.09
Year 2017					
January	12.21	10.23	6.58	9.38	10.16
February	12.78	10.48	6.62	9.47	10.31
March	12.89	10.47	6.73	9.47	10.33
April	12.69	10.40	6.61	9.44	10.10
May	13.01	10.58	6.81	9.58	10.37
June	13.21	11.00	7.22	10.14	10.87
July	13.11	10.99	7.35	10.11	11.02
August	13.19	11.04	7.25	10.05	10.98
Sept	13.30	11.07	7.22	9.99	10.93
October	12.84	10.82	6.95	9.55	10.48
November	12.97	10.53	6.79	9.49	10.36
December	12.50	10.32	6.63	9.32	10.26
Year to Date					
2015	12.65	10.64	6.91	10.09	10.41
2016	12.55	10.43	6.76	9.63	10.27
2017	12.90	10.68	6.91	9.67	10.54
Rolling 12 Months Ending in December					
2016	12.55	10.43	6.76	9.63	10.27
2017	12.90	10.68	6.91	9.67	10.54

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 2016 and prior years are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Industry Power Report.
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, December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	4,602	4,062	4,583	4,254	1,389	1,452	51	52	10,625	9,821
Connecticut	1,242	1,097	1,019	1,030	241	263	15	16	2,517	2,407
Maine	444	445	355	349	240	241	0	0	1,038	1,034
Massachusetts	1,975	1,696	2,363	2,058	578	601	33	34	4,950	4,389
New Hampshire	443	380	377	356	148	154	0	0	968	889
Rhode Island	294	247	300	293	55	62	2	2	652	605
Vermont	204	197	169	169	126	131	0	0	500	497
Middle Atlantic	11,684	11,381	12,928	12,847	5,950	6,010	326	318	30,887	30,556
New Jersey	2,371	2,287	3,220	3,108	581	593	25	26	6,197	6,013
New York	4,211	4,122	6,144	6,146	1,466	1,459	234	232	12,055	11,959
Pennsylvania	5,103	4,972	3,564	3,592	3,902	3,958	67	61	12,635	12,584
East North Central	17,657	17,615	15,041	15,363	14,894	15,763	63	63	47,656	48,804
Illinois	4,049	4,132	4,265	4,322	3,501	3,675	56	56	11,871	12,186
Indiana	3,205	3,197	1,857	1,940	3,163	3,663	2	2	8,227	8,802
Michigan	3,147	3,129	3,132	3,182	2,448	2,421	1	0	8,728	8,733
Ohio	5,156	5,009	3,790	3,889	3,837	4,090	4	4	12,788	12,992
Wisconsin	2,100	2,147	1,998	2,029	1,944	1,914	0	0	6,042	6,091
West North Central	9,718	10,194	8,600	8,712	7,140	7,312	5	5	25,463	26,223
Iowa	1,315	1,468	1,073	1,100	1,877	1,844	0	0	4,265	4,411
Kansas	1,103	1,147	1,234	1,259	884	936	0	0	3,220	3,343
Minnesota	2,103	2,199	1,953	2,019	1,751	1,765	2	3	5,809	5,987
Missouri	3,223	3,286	2,506	2,499	900	1,036	2	2	6,632	6,824
Nebraska	947	1,006	808	806	832	878	0	0	2,587	2,690
North Dakota	558	589	607	621	673	626	0	0	1,838	1,835
South Dakota	468	499	419	409	224	227	0	0	1,111	1,134
South Atlantic	30,393	29,683	24,575	24,785	11,192	10,985	117	108	66,277	65,560
Delaware	421	394	352	337	169	181	0	0	943	912
District of Columbia	189	193	674	659	17	14	28	23	909	889
Florida	8,529	8,640	7,215	7,505	1,331	1,354	6	8	17,082	17,507
Georgia	4,768	4,549	3,642	3,614	2,568	2,518	15	15	10,994	10,695
Maryland	2,679	2,534	2,440	2,431	312	312	51	46	5,483	5,324
North Carolina	5,376	5,256	3,747	3,781	2,082	2,172	0	0	11,206	11,210
South Carolina	2,599	2,507	1,627	1,623	2,092	2,066	0	0	6,318	6,196
Virginia	4,567	4,374	4,231	4,188	1,426	1,320	15	15	10,238	9,898
West Virginia	1,264	1,235	646	647	1,195	1,048	0	0	3,105	2,930
East South Central	10,257	9,753	6,873	7,095	7,995	8,189	0	0	25,125	25,037
Alabama	2,791	2,579	1,741	1,773	2,780	2,689	0	0	7,312	7,042
Kentucky	2,525	2,410	1,524	1,593	2,247	2,330	0	0	6,296	6,333
Mississippi	1,441	1,365	1,029	1,068	1,377	1,318	0	0	3,846	3,752
Tennessee	3,501	3,398	2,579	2,660	1,591	1,852	0	0	7,671	7,910
West South Central	16,042	16,077	14,666	15,091	14,840	14,949	16	16	45,564	46,133
Arkansas	1,395	1,413	897	909	1,360	1,287	0	0	3,653	3,609
Louisiana	2,309	2,156	1,899	1,871	2,933	2,745	1	1	7,142	6,774
Oklahoma	1,877	1,968	1,673	1,673	1,439	1,495	0	0	4,989	5,137
Texas	10,461	10,539	10,198	10,638	9,106	9,422	15	14	29,779	30,613
Mountain	7,895	8,185	7,693	7,754	6,488	6,580	14	12	22,090	22,531
Arizona	2,198	2,253	2,162	2,142	1,130	1,141	1	1	5,492	5,537
Colorado	1,643	1,697	1,696	1,762	1,278	1,257	8	6	4,625	4,721
Idaho	951	1,021	564	589	508	504	0	0	2,023	2,115
Montana	530	539	445	430	343	369	0	0	1,317	1,338
Nevada	891	932	844	822	973	1,022	1	1	2,709	2,777
New Mexico	562	579	713	704	629	619	0	0	1,904	1,901
Utah	820	843	939	966	757	803	4	5	2,520	2,616
Wyoming	300	322	329	340	870	865	0	0	1,499	1,527
Pacific Contiguous	13,099	13,874	13,280	13,769	6,445	6,951	72	79	32,897	34,673
California	6,920	7,309	9,195	9,583	3,567	3,788	70	77	19,753	20,757
Oregon	2,206	2,297	1,465	1,484	914	1,051	2	2	4,587	4,833
Washington	3,973	4,269	2,620	2,702	1,964	2,111	1	1	8,557	9,083
Pacific Noncontiguous	427	457	482	502	390	425	0	0	1,299	1,384
Alaska	211	NM	245	250	117	121	0	0	573	595
Hawaii	216	233	237	252	273	304	0	0	726	788
U.S. Total	121,775	121,281	108,720	110,172	76,724	78,616	663	653	307,882	310,722

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 2016 are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through December 2017 and 2016 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	48,459	46,532	56,855	52,753	17,118	17,965	555	552	122,987	117,802
Connecticut	12,404	12,677	12,291	12,701	3,120	3,370	180	183	27,994	28,931
Maine	4,609	4,586	4,030	3,986	2,768	2,877	0	0	11,407	11,449
Massachusetts	21,972	19,693	30,577	25,934	7,162	7,507	348	342	60,058	53,476
New Hampshire	4,433	4,438	4,379	4,466	1,938	2,000	0	0	10,750	10,905
Rhode Island	3,028	3,082	3,602	3,651	727	764	28	27	7,385	7,524
Vermont	2,014	2,056	1,975	2,014	1,403	1,446	0	0	5,392	5,516
Middle Atlantic	128,206	133,799	155,137	158,715	71,645	72,130	3,828	3,846	358,816	368,490
New Jersey	27,787	29,091	37,772	38,672	6,987	7,293	305	303	72,850	75,359
New York	48,946	50,831	74,855	76,507	17,186	17,709	2,768	2,756	143,755	147,803
Pennsylvania	51,473	53,877	42,510	43,535	47,472	47,128	755	787	142,210	145,328
East North Central	179,044	187,898	181,930	185,751	183,360	195,324	586	585	544,919	569,557
Illinois	43,696	45,990	49,972	50,910	41,450	43,632	520	519	139,637	141,050
Indiana	31,144	33,026	23,628	24,229	40,290	46,429	20	21	95,083	103,705
Michigan	33,013	34,543	38,568	38,986	29,682	30,934	6	4	101,269	104,468
Ohio	49,801	52,524	46,127	47,742	47,827	50,291	39	41	143,795	150,598
Wisconsin	21,390	21,814	23,634	23,884	24,111	24,038	0	0	69,135	69,736
West North Central	100,994	102,860	101,563	102,760	87,203	89,589	47	46	289,807	295,255
Iowa	13,734	14,094	12,171	12,291	22,537	22,046	0	0	48,442	48,431
Kansas	13,003	13,509	15,449	15,887	10,866	11,414	0	0	39,319	40,810
Minnesota	21,512	21,804	22,962	23,502	20,832	21,217	24	24	65,330	66,546
Missouri	33,479	34,355	30,283	30,728	11,753	13,513	23	21	75,537	78,618
Nebraska	9,833	9,738	9,546	9,307	10,683	11,154	0	0	30,062	30,199
North Dakota	4,785	4,741	6,295	6,346	7,762	7,433	0	0	18,843	18,520
South Dakota	4,648	4,619	4,856	4,698	2,770	2,813	0	0	12,274	12,130
South Atlantic	347,092	361,426	309,069	313,557	137,736	139,870	1,301	1,326	795,199	816,179
Delaware	4,631	4,763	4,176	4,235	2,113	2,260	0	0	10,920	11,258
District of Columbia	2,395	2,502	8,006	8,368	180	192	335	331	10,916	11,394
Florida	119,751	123,321	94,429	95,547	16,361	16,759	86	95	230,627	235,722
Georgia	55,039	57,889	46,443	47,762	31,384	32,290	169	171	133,036	138,112
Maryland	26,058	27,317	28,844	29,676	3,743	3,821	529	540	59,174	61,354
North Carolina	55,605	58,457	47,845	48,604	26,770	27,337	4	6	130,223	134,404
South Carolina	29,247	30,616	21,563	22,275	26,813	26,687	0	0	77,622	79,578
Virginia	43,797	45,186	50,216	49,264	16,788	17,648	178	183	110,978	112,281
West Virginia	10,570	11,376	7,547	7,826	13,585	12,875	0	0	31,702	32,076
East South Central	113,042	118,627	88,564	93,577	98,925	100,383	0	0	300,531	312,587
Alabama	30,490	32,056	22,484	23,634	33,229	32,535	0	0	86,202	88,225
Kentucky	25,049	26,338	18,806	19,981	27,614	28,234	0	0	71,469	74,554
Mississippi	17,802	18,459	13,813	14,523	16,523	16,069	0	0	48,137	49,050
Tennessee	39,702	41,774	33,462	35,439	21,559	23,546	0	0	94,723	100,758
West South Central	211,217	217,197	190,890	196,873	180,503	183,555	196	194	682,806	697,819
Arkansas	17,118	17,784	11,911	12,178	16,843	16,226	0	0	45,872	46,188
Louisiana	29,664	30,650	24,571	24,896	34,584	35,895	13	12	88,832	91,453
Oklahoma	22,146	22,790	20,196	20,696	17,316	18,031	0	0	59,657	61,517
Texas	142,289	145,973	134,213	139,104	111,760	113,403	182	182	388,444	398,662
Mountain	98,757	97,005	96,847	95,538	81,489	83,442	145	137	277,239	276,122
Arizona	34,364	33,691	29,708	29,564	13,561	14,976	8	7	77,641	78,238
Colorado	18,816	18,834	20,324	20,800	15,548	15,103	73	65	54,761	54,802
Idaho	8,670	8,172	6,373	6,279	8,600	8,612	0	0	23,643	23,063
Montana	5,164	4,853	5,015	4,832	4,329	4,416	0	0	14,508	14,101
Nevada	12,921	12,692	11,219	9,929	12,491	13,515	9	8	36,640	36,145
New Mexico	6,638	6,643	8,919	8,806	7,543	7,591	0	0	23,100	23,040
Utah	9,409	9,371	11,561	11,565	9,176	9,187	56	57	30,202	30,180
Wyoming	2,774	2,751	3,729	3,762	10,241	10,041	0	0	16,744	16,555
Pacific Contiguous	147,312	141,096	162,540	161,824	83,475	89,349	866	812	394,193	393,081
California	90,771	88,311	116,007	116,775	47,780	50,979	835	782	255,393	256,847
Oregon	19,871	18,573	16,590	16,060	11,738	12,692	25	24	48,225	47,349
Washington	36,669	34,212	29,942	28,989	23,957	25,676	6	6	90,575	88,885
Pacific Noncontiguous	4,696	4,618	5,812	5,843	4,989	5,108	0	0	15,497	15,569
Alaska	2,067	NM	2,744	2,731	1,384	1,385	0	0	6,195	6,123
Hawaii	2,630	2,612	3,068	3,111	3,605	3,722	0	0	9,303	9,445
U.S. Total	1,378,819	1,411,058	1,349,208	1,367,191	946,443	976,715	7,524	7,497	3,681,995	3,762,462

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

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Notes: - See Glossary for definitions. - Values for 2016 are final. Values for 2017 are preliminary estimates based on a cutoff model sample.

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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, December 2017 and 2016 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	873	747	694	625	175	179	5	4	1,748	1,556
Connecticut	244	209	161	158	32	34	2	2	438	402
Maine	68	70	41	42	22	22	0	0	131	134
Massachusetts	387	319	365	307	81	82	3	2	837	710
New Hampshire	86	71	56	52	19	19	0	0	161	142
Rhode Island	53	45	46	42	8	8	0	0	108	96
Vermont	35	34	24	24	13	13	0	0	73	72
Middle Atlantic	1,805	1,737	1,514	1,529	408	413	35	34	3,761	3,713
New Jersey	370	350	374	360	57	59	2	2	803	770
New York	716	708	825	845	87	85	29	28	1,657	1,666
Pennsylvania	719	679	314	324	264	270	5	5	1,301	1,277
East North Central	2,260	2,247	1,481	1,530	1,028	1,092	4	4	4,772	4,873
Illinois	501	494	367	381	216	226	3	4	1,088	1,105
Indiana	362	376	189	201	230	270	0	0	781	847
Michigan	477	474	343	347	176	171	0	0	997	992
Ohio	621	615	366	388	256	287	0	0	1,244	1,291
Wisconsin	298	288	216	212	149	138	0	0	663	638
West North Central	1,078	1,085	776	777	481	492	0	0	2,335	2,355
Iowa	151	152	93	88	103	94	0	0	347	334
Kansas	140	140	124	125	60	68	0	0	323	334
Minnesota	266	262	188	186	127	127	0	0	581	575
Missouri	319	326	208	216	59	73	0	0	587	616
Nebraska	97	98	70	68	58	62	0	0	225	228
North Dakota	53	54	53	54	56	51	0	0	161	160
South Dakota	53	54	40	38	17	17	0	0	110	109
South Atlantic	3,490	3,294	2,336	2,266	709	707	8	8	6,543	6,276
Delaware	55	51	34	32	13	14	0	0	101	97
District of Columbia	25	23	80	77	1	1	2	2	109	103
Florida	1,018	943	700	666	104	104	1	1	1,822	1,714
Georgia	508	474	360	354	143	147	1	1	1,012	976
Maryland	355	355	266	274	26	25	4	4	650	657
North Carolina	560	536	314	314	124	132	0	0	997	983
South Carolina	319	306	171	169	129	128	0	0	619	603
Virginia	507	467	352	321	92	85	1	1	952	874
West Virginia	143	139	60	60	77	70	0	0	280	269
East South Central	1,120	1,073	726	748	468	501	0	0	2,314	2,322
Alabama	331	309	200	205	165	172	0	0	697	685
Kentucky	263	254	146	153	137	137	0	0	530	544
Mississippi	157	145	107	107	83	81	0	0	347	333
Tennessee	370	365	272	283	98	111	0	0	740	758
West South Central	1,680	1,664	1,197	1,241	794	810	1	1	3,672	3,716
Arkansas	135	134	74	74	78	79	0	0	287	287
Louisiana	207	202	167	169	151	153	0	0	525	524
Oklahoma	177	184	125	125	74	78	0	0	375	387
Texas	1,162	1,143	832	873	491	500	1	1	2,486	2,518
Mountain	913	907	705	695	385	397	1	1	2,005	2,000
Arizona	269	253	214	204	65	66	0	0	548	524
Colorado	193	202	161	165	88	94	1	1	443	461
Idaho	96	96	44	44	29	29	0	0	169	169
Montana	58	57	45	43	18	18	0	0	120	118
Nevada	110	105	68	62	50	47	0	0	228	214
New Mexico	70	70	67	69	35	38	0	0	172	176
Utah	85	90	74	78	41	45	0	0	200	213
Wyoming	33	34	31	31	59	59	0	0	124	125
Pacific Contiguous	1,895	1,967	1,678	1,685	548	565	6	8	4,128	4,225
California	1,279	1,327	1,323	1,325	405	412	6	8	3,013	3,072
Oregon	233	244	128	133	55	61	0	0	417	438
Washington	383	396	227	228	89	92	0	0	698	716
Pacific Noncontiguous	112	NM	115	109	88	85	0	0	315	304
Alaska	46	NM	47	44	20	20	0	0	112	NM
Hawaii	66	64	68	65	68	66	0	0	203	195
U.S. Total	15,226	14,830	11,222	11,206	5,084	5,242	62	62	31,594	31,339

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

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Notes: - See Glossary for definitions. - Values for 2016 are final. Values for 2017 are preliminary estimates based on a cutoff model sample.

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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through December 2017 and 2016 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD	December 2017 YTD	December 2016 YTD
New England	9,173	8,751	8,503	8,009	2,119	2,191	46	45	19,840	18,996
Connecticut	2,519	2,537	1,979	2,000	415	432	20	20	4,933	4,989
Maine	736	726	489	482	252	258	0	0	1,476	1,465
Massachusetts	4,157	3,742	4,551	4,046	965	1,004	22	20	9,694	8,812
New Hampshire	852	816	646	645	239	247	0	0	1,737	1,707
Rhode Island	554	574	549	543	106	103	5	5	1,214	1,225
Vermont	355	357	289	293	141	148	0	0	785	798
Middle Atlantic	20,562	20,977	19,520	19,808	4,937	5,071	432	419	45,451	46,276
New Jersey	4,359	4,574	4,651	4,740	710	741	27	26	9,747	10,082
New York	8,829	8,934	11,049	11,054	1,021	1,068	351	332	21,250	21,388
Pennsylvania	7,373	7,470	3,821	4,014	3,207	3,262	54	60	14,455	14,806
East North Central	23,690	24,536	18,333	18,498	12,870	13,525	39	40	54,922	56,600
Illinois	5,549	5,765	4,433	4,592	2,641	2,840	33	35	12,656	13,231
Indiana	3,723	3,892	2,433	2,425	2,979	3,238	2	2	9,137	9,557
Michigan	5,107	5,258	4,251	4,147	2,171	2,138	1	0	11,530	11,543
Ohio	6,162	6,551	4,597	4,762	3,199	3,509	3	3	13,962	14,825
Wisconsin	3,139	3,069	2,619	2,572	1,879	1,802	0	0	7,637	7,443
West North Central	12,186	12,127	9,942	9,802	6,378	6,378	4	4	28,511	28,312
Iowa	1,731	1,682	1,171	1,127	1,421	1,333	0	0	4,323	4,143
Kansas	1,725	1,764	1,621	1,664	814	855	0	0	4,161	4,283
Minnesota	2,836	2,763	2,429	2,316	1,610	1,564	2	2	6,877	6,646
Missouri	3,774	3,851	2,821	2,846	830	962	2	2	7,427	7,661
Nebraska	1,080	1,056	857	819	818	858	0	0	2,755	2,732
North Dakota	497	482	578	580	669	593	0	0	1,744	1,655
South Dakota	543	530	465	450	216	213	0	0	1,224	1,193
South Atlantic	41,520	41,790	29,295	28,983	8,902	9,028	100	105	79,817	79,906
Delaware	622	639	415	426	163	183	0	0	1,200	1,249
District of Columbia	310	308	935	981	15	17	29	32	1,289	1,337
Florida	14,185	13,545	9,075	8,507	1,293	1,288	7	8	24,561	23,348
Georgia	6,494	6,659	4,635	4,698	1,828	1,884	9	9	12,965	13,240
Maryland	3,645	3,886	3,103	3,262	312	301	40	42	7,099	7,492
North Carolina	6,184	6,446	4,097	4,189	1,636	1,725	0	1	11,918	12,362
South Carolina	3,739	3,874	2,261	2,289	1,633	1,625	0	0	7,633	7,788
Virginia	5,113	5,131	4,050	3,909	1,120	1,157	14	14	10,297	10,211
West Virginia	1,229	1,302	722	732	903	846	0	0	2,853	2,879
East South Central	12,729	12,888	9,373	9,542	5,921	5,835	0	0	28,022	28,264
Alabama	3,845	3,843	2,613	2,627	2,070	1,966	0	0	8,529	8,436
Kentucky	2,665	2,763	1,824	1,912	1,540	1,600	0	0	6,029	6,276
Mississippi	1,992	1,932	1,423	1,390	1,011	931	0	0	4,425	4,253
Tennessee	4,227	4,350	3,513	3,612	1,300	1,337	0	0	9,040	9,299
West South Central	22,794	22,999	15,957	16,211	9,923	9,755	16	16	48,690	48,980
Arkansas	1,749	1,765	1,005	1,002	998	986	0	0	3,752	3,753
Louisiana	2,821	2,862	2,190	2,139	1,874	1,822	1	1	6,886	6,825
Oklahoma	2,320	2,324	1,610	1,586	913	905	0	0	4,844	4,814
Texas	15,904	16,048	11,151	11,484	6,138	6,042	15	14	33,208	33,588
Mountain	11,790	11,298	9,370	9,066	5,295	5,320	14	13	26,470	25,698
Arizona	4,294	4,094	3,142	3,078	875	909	1	1	8,312	8,082
Colorado	2,282	2,274	2,022	1,996	1,133	1,110	7	6	5,445	5,386
Idaho	877	813	511	487	575	564	0	0	1,963	1,865
Montana	574	531	512	492	223	223	0	0	1,308	1,246
Nevada	1,550	1,448	895	788	766	795	1	1	3,211	3,031
New Mexico	858	799	916	858	453	443	0	0	2,227	2,101
Utah	1,039	1,032	1,010	1,012	561	581	6	6	2,616	2,632
Wyoming	316	306	363	354	708	695	0	0	1,388	1,355
Pacific Contiguous	22,205	20,585	22,458	21,477	7,993	7,984	75	79	52,731	50,125
California	16,555	15,360	18,435	17,603	6,149	6,077	72	77	41,212	39,116
Oregon	2,129	1,981	1,474	1,431	727	768	2	2	4,332	4,182
Washington	3,521	3,245	2,549	2,443	1,117	1,139	1	1	7,188	6,827
Pacific Noncontiguous	1,222	1,125	1,357	1,246	1,056	981	0	0	3,634	3,352
Alaska	446	NM	534	480	229	211	0	0	1,209	1,098
Hawaii	776	717	823	767	826	770	0	0	2,425	2,254
U.S. Total	177,860	177,077	144,108	142,643	65,394	66,068	727	722	388,089	386,509

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Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, December 2017 and 2016 (Cents per Kilowatt-hour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	18.97	18.40	15.15	14.70	12.64	12.30	9.17	8.22	16.45	15.84
Connecticut	19.65	19.03	15.77	15.35	13.14	12.73	10.44	9.85	17.40	16.70
Maine	15.25	15.63	11.68	11.97	9.22	9.25	--	--	12.64	12.91
Massachusetts	19.61	18.81	15.45	14.94	14.08	13.59	8.05	6.89	16.90	16.19
New Hampshire	19.40	18.61	14.97	14.57	12.89	12.65	--	--	16.68	15.96
Rhode Island	18.00	18.35	15.37	14.29	15.17	13.53	16.82	18.58	16.54	15.89
Vermont	17.33	17.26	14.47	14.37	10.15	10.18	--	--	14.55	14.41
Middle Atlantic	15.44	15.26	11.71	11.90	6.86	6.88	10.82	10.79	12.18	12.15
New Jersey	15.59	15.29	11.62	11.58	9.84	9.87	8.22	8.01	12.96	12.81
New York	17.00	17.17	13.44	13.75	5.94	5.83	12.21	11.95	13.75	13.93
Pennsylvania	14.09	13.66	8.81	9.01	6.75	6.81	6.90	7.52	10.30	10.15
East North Central	12.80	12.76	9.85	9.96	6.90	6.93	6.47	6.69	10.01	9.99
Illinois	12.38	11.95	8.60	8.82	6.18	6.16	6.21	6.44	9.16	9.07
Indiana	11.29	11.75	10.17	10.37	7.27	7.38	11.27	10.68	9.49	9.63
Michigan	15.17	15.16	10.95	10.89	7.20	7.06	11.55	12.10	11.42	11.36
Ohio	12.04	12.28	9.67	9.99	6.68	7.01	6.92	7.68	9.73	9.94
Wisconsin	14.21	13.41	10.83	10.46	7.65	7.22	14.50	15.50	10.98	10.48
West North Central	11.09	10.65	9.02	8.92	6.73	6.73	8.15	8.39	9.17	8.98
Iowa	11.49	10.37	8.63	8.03	5.49	5.08	--	--	8.13	7.58
Kansas	12.64	12.23	10.04	9.95	6.80	7.29	--	--	10.04	9.99
Minnesota	12.64	11.91	9.64	9.23	7.24	7.17	9.38	9.66	10.01	9.61
Missouri	9.91	9.91	8.31	8.66	6.55	7.06	6.82	6.78	8.85	9.02
Nebraska	10.21	9.70	8.72	8.44	7.01	7.04	--	--	8.72	8.46
North Dakota	9.41	9.14	8.68	8.78	8.36	8.21	--	--	8.79	8.70
South Dakota	11.24	10.74	9.48	9.40	7.77	7.42	--	--	9.88	9.59
South Atlantic	11.48	11.10	9.51	9.14	6.33	6.44	7.14	7.81	9.87	9.57
Delaware	12.99	12.90	9.55	9.63	7.73	7.76	--	--	10.76	10.67
District of Columbia	13.28	11.88	11.87	11.68	8.08	8.56	7.67	9.87	11.96	11.63
Florida	11.94	10.92	9.70	8.87	7.80	7.70	8.64	8.17	10.67	9.79
Georgia	10.66	10.43	9.90	9.79	5.55	5.85	4.82	4.84	9.21	9.13
Maryland	13.25	14.00	10.89	11.27	8.39	7.96	7.02	7.66	11.86	12.35
North Carolina	10.42	10.20	8.37	8.30	5.93	6.10	8.73	8.88	8.90	8.77
South Carolina	12.27	12.21	10.53	10.40	6.16	6.18	--	--	9.80	9.73
Virginia	11.10	10.67	8.32	7.66	6.45	6.45	8.29	7.83	9.30	8.83
West Virginia	11.29	11.22	9.23	9.27	6.48	6.66	--	--	9.01	9.16
East South Central	10.92	11.00	10.56	10.54	5.85	6.12	--	--	9.21	9.27
Alabama	11.87	11.96	11.50	11.58	5.95	6.38	--	--	9.53	9.73
Kentucky	10.40	10.56	9.57	9.59	5.43	5.89	--	--	8.42	8.60
Mississippi	10.91	10.61	10.42	10.04	6.02	6.17	--	--	9.03	8.89
Tennessee	10.56	10.74	10.57	10.63	6.14	5.99	--	--	9.65	9.59
West South Central	10.47	10.35	8.16	8.22	5.35	5.42	8.39	8.31	8.06	8.06
Arkansas	9.68	9.48	8.24	8.12	5.72	6.11	12.88	13.42	7.85	7.94
Louisiana	8.95	9.37	8.80	9.05	5.14	5.56	9.54	9.22	7.35	7.74
Oklahoma	9.41	9.37	7.44	7.45	5.16	5.23	--	--	7.52	7.54
Texas	11.11	10.85	8.16	8.21	5.39	5.31	8.30	8.24	8.35	8.23
Mountain	11.57	11.08	9.17	8.97	5.93	6.04	9.51	9.06	9.08	8.88
Arizona	12.24	11.23	9.91	9.54	5.76	5.83	8.77	8.85	9.99	9.46
Colorado	11.73	11.88	9.50	9.36	6.90	7.50	9.10	10.17	9.57	9.77
Idaho	10.11	9.44	7.85	7.46	5.63	5.67	--	--	8.35	7.99
Montana	10.93	10.54	10.06	10.05	5.13	4.90	--	--	9.13	8.82
Nevada	12.34	11.25	8.04	7.51	5.19	4.64	8.53	7.39	8.43	7.71
New Mexico	12.38	12.08	9.44	9.75	5.52	6.07	--	--	9.01	9.26
Utah	10.32	10.65	7.90	8.04	5.45	5.64	10.51	7.97	7.96	8.14
Wyoming	11.15	10.68	9.50	9.11	6.80	6.88	--	--	8.26	8.17
Pacific Contiguous	14.47	14.18	12.64	12.24	8.51	8.13	8.93	9.99	12.55	12.19
California	18.48	18.16	14.39	13.82	11.35	10.89	8.91	10.02	15.25	14.80
Oregon	10.58	10.62	8.77	8.94	5.99	5.79	9.30	9.21	9.09	9.05
Washington	9.63	9.27	8.66	8.44	4.52	4.36	9.34	8.73	8.16	7.88
Pacific Noncontiguous	26.24	23.99	23.91	21.64	22.58	20.08	--	--	24.28	21.94
Alaska	21.63	20.17	19.09	17.51	16.93	16.08	--	--	19.58	18.22
Hawaii	30.75	27.69	28.91	25.73	25.01	21.68	--	--	27.99	24.75
U.S. Total	12.50	12.23	10.32	10.17	6.63	6.67	9.32	9.49	10.26	10.09

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 2016 are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through December 2017 and 2016 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017 YTD	December 2016	December 2017 YTD	December 2016	December 2017 YTD	December 2016	December 2017 YTD	December 2016	December 2017 YTD	December 2016
New England	18.93	18.81	14.96	15.18	12.38	12.20	8.37	8.19	16.13	16.13
Connecticut	20.31	20.01	16.10	15.75	13.31	12.81	10.89	10.84	17.62	17.24
Maine	15.96	15.83	12.14	12.08	9.09	8.96	--	--	12.94	12.80
Massachusetts	18.92	19.00	14.88	15.60	13.48	13.38	6.22	5.94	16.14	16.48
New Hampshire	19.22	18.38	14.75	14.43	12.33	12.34	--	--	16.16	15.66
Rhode Island	18.30	18.62	15.24	14.88	14.58	13.48	19.03	18.71	16.44	16.28
Vermont	17.65	17.37	14.61	14.54	10.08	10.23	--	--	14.57	14.46
Middle Atlantic	16.04	15.68	12.58	12.48	6.89	7.03	11.27	10.88	12.67	12.56
New Jersey	15.69	15.72	12.31	12.26	10.16	10.16	8.82	8.68	13.38	13.38
New York	18.04	17.58	14.76	14.45	5.94	6.03	12.67	12.05	14.78	14.47
Pennsylvania	14.33	13.86	8.99	9.22	6.75	6.92	7.16	7.64	10.16	10.19
East North Central	13.23	13.06	10.08	9.96	7.02	6.92	6.66	6.91	10.08	9.94
Illinois	12.70	12.54	8.87	9.02	6.37	6.51	6.36	6.67	9.33	9.38
Indiana	11.95	11.79	10.30	10.01	7.39	6.97	11.23	9.82	9.61	9.22
Michigan	15.47	15.22	11.02	10.64	7.32	6.91	11.99	11.63	11.39	11.05
Ohio	12.37	12.47	9.97	9.97	6.69	6.98	7.51	7.93	9.71	9.84
Wisconsin	14.68	14.07	11.08	10.77	7.79	7.49	14.31	14.68	11.05	10.67
West North Central	12.07	11.79	9.79	9.54	7.31	7.12	9.01	9.24	9.84	9.59
Iowa	12.60	11.94	9.62	9.17	6.31	6.05	--	--	8.92	8.55
Kansas	13.27	13.06	10.49	10.47	7.49	7.49	--	--	10.58	10.49
Minnesota	13.19	12.67	10.58	9.86	7.73	7.37	9.56	10.06	10.53	9.99
Missouri	11.27	11.21	9.32	9.26	7.06	7.12	8.42	8.31	9.83	9.74
Nebraska	10.98	10.84	8.98	8.80	7.66	7.69	--	--	9.16	9.05
North Dakota	10.40	10.16	9.18	9.15	8.62	7.98	--	--	9.26	8.94
South Dakota	11.68	11.47	9.58	9.58	7.80	7.57	--	--	9.98	9.83
South Atlantic	11.96	11.56	9.48	9.24	6.46	6.45	7.70	7.93	10.04	9.79
Delaware	13.44	13.42	9.95	10.07	7.70	8.11	--	--	10.99	11.09
District of Columbia	12.93	12.29	11.68	11.72	8.25	8.80	8.77	9.53	11.81	11.73
Florida	11.85	10.98	9.61	8.90	7.90	7.69	8.62	8.32	10.65	9.91
Georgia	11.80	11.50	9.98	9.81	5.82	5.84	5.35	5.08	9.75	9.59
Maryland	13.99	14.23	10.76	10.99	8.32	7.89	7.52	7.85	12.00	12.21
North Carolina	11.12	11.03	8.56	8.62	6.11	6.31	8.55	7.88	9.15	9.20
South Carolina	12.78	12.65	10.49	10.28	6.09	6.09	--	--	9.83	9.79
Virginia	11.67	11.36	8.07	7.93	6.67	6.56	7.97	7.76	9.28	9.09
West Virginia	11.62	11.44	9.57	9.35	6.64	6.57	--	--	9.00	8.98
East South Central	11.26	10.86	10.58	10.20	5.98	5.81	--	--	9.32	9.04
Alabama	12.61	11.99	11.62	11.11	6.23	6.04	--	--	9.89	9.56
Kentucky	10.64	10.49	9.70	9.57	5.58	5.67	--	--	8.44	8.42
Mississippi	11.19	10.47	10.30	9.57	6.12	5.79	--	--	9.19	8.67
Tennessee	10.65	10.41	10.50	10.19	6.03	5.68	--	--	9.54	9.23
West South Central	10.79	10.59	8.36	8.23	5.50	5.31	8.28	7.99	8.35	8.19
Arkansas	10.22	9.92	8.44	8.23	5.93	6.08	12.16	10.40	8.18	8.13
Louisiana	9.51	9.34	8.91	8.59	5.42	5.08	9.93	9.03	7.75	7.46
Oklahoma	10.48	10.20	7.97	7.66	5.27	5.02	--	--	8.12	7.83
Texas	11.18	10.99	8.31	8.26	5.49	5.33	8.16	7.92	8.55	8.43
Mountain	11.94	11.65	9.68	9.49	6.50	6.38	9.88	9.67	9.55	9.31
Arizona	12.50	12.15	10.58	10.41	6.45	6.07	9.63	9.93	10.71	10.33
Colorado	12.13	12.07	9.95	9.60	7.29	7.35	9.77	9.80	9.94	9.83
Idaho	10.11	9.95	8.02	7.76	6.69	6.55	--	--	8.30	8.08
Montana	11.11	10.94	10.20	10.19	5.15	5.06	--	--	9.02	8.84
Nevada	12.00	11.41	7.98	7.93	6.13	5.88	8.61	7.83	8.76	8.38
New Mexico	12.92	12.03	10.27	9.75	6.01	5.84	--	--	9.64	9.12
Utah	11.04	11.02	8.74	8.75	6.12	6.33	10.26	9.76	8.66	8.72
Wyoming	11.41	11.13	9.75	9.40	6.91	6.92	--	--	8.29	8.19
Pacific Contiguous	15.07	14.59	13.82	13.27	9.58	8.94	8.70	9.78	13.38	12.75
California	18.24	17.39	15.89	15.07	12.87	11.92	8.68	9.80	16.14	15.23
Oregon	10.71	10.66	8.88	8.91	6.19	6.05	9.35	9.26	8.98	8.83
Washington	9.60	9.46	8.51	8.43	4.66	4.43	9.06	8.89	7.94	7.68
Pacific Noncontiguous	26.01	24.36	23.34	21.33	21.16	19.21	--	--	23.45	21.53
Alaska	21.57	NM	19.46	17.56	16.59	15.22	--	--	19.52	17.93
Hawaii	29.50	27.47	26.82	24.64	22.92	20.69	--	--	26.07	23.87
U.S. Total	12.90	12.55	10.68	10.43	6.91	6.76	9.67	9.63	10.54	10.27

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 2016 are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

**Table 5.7. Number of Ultimate Customers Served by Sector:
2008 - December 2017**

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
2016	131,068,719	18,148,290	838,099	83	150,055,191
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	130,327,243	18,001,806	829,287	78	149,158,414
February	130,114,828	18,022,657	825,209	81	148,962,775
March	131,333,340	18,185,531	835,990	86	150,354,947
April	130,452,160	18,064,005	823,879	82	149,340,126
May	131,002,108	18,133,949	840,080	85	149,976,222
June	131,282,771	18,174,804	853,646	86	150,311,307
July	131,086,905	18,130,289	847,849	83	150,065,126
August	131,346,501	18,227,261	859,607	83	150,433,452
Sept	131,374,997	18,207,555	846,336	83	150,428,971
October	131,318,899	18,203,386	838,393	84	150,360,762
November	131,325,418	18,183,746	824,510	84	150,333,758
December	131,859,453	18,244,491	832,403	84	150,936,431
Year 2017					
January	131,863,431	18,225,561	808,008	84	150,897,084
February	131,376,684	18,136,945	797,401	84	150,311,114
March	132,758,623	18,322,415	816,055	84	151,897,177
April	131,802,218	18,162,546	803,225	85	150,768,074
May	133,093,868	18,323,788	829,718	85	152,247,459
June	132,810,755	18,339,737	837,435	85	151,988,012
July	132,296,207	18,344,928	831,768	85	151,472,988
August	132,980,967	18,427,812	847,850	85	152,256,714
Sept	132,427,305	18,344,964	826,688	85	151,599,042
October	133,098,434	18,426,160	829,169	85	152,353,848
November	133,065,798	18,420,680	813,432	85	152,299,995
December	133,290,218	18,411,649	814,459	85	152,516,411
Rolling 12 Months Ending in December					
2016	131,068,719	18,148,290	838,099	83	150,055,191
2017	132,572,042	18,323,932	821,267	85	151,717,327

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 2016 and prior years are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Industry Power Report; 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:
December 2017 and 2016**

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016	December 2017	December 2016
New England	6,337,154	6,294,137	887,139	873,989	26,570	26,330	6	7	7,250,869	7,194,463
Connecticut	1,501,356	1,493,301	153,651	152,603	4,355	4,435	3	4	1,659,365	1,650,343
Maine	714,558	710,915	100,528	99,494	3,163	3,119	0	0	818,249	813,528
Massachusetts	2,763,846	2,739,000	411,349	401,296	13,935	13,534	2	2	3,189,132	3,153,832
New Hampshire	620,524	616,143	107,446	107,199	3,187	3,256	0	0	731,157	726,598
Rhode Island	422,531	422,925	57,663	57,112	1,707	1,757	1	1	481,902	481,795
Vermont	314,339	311,853	56,502	56,285	223	229	0	0	371,064	368,367
Middle Atlantic	16,099,435	16,001,312	2,325,210	2,295,031	41,997	42,539	20	19	18,466,662	18,338,901
New Jersey	3,550,704	3,524,399	524,046	515,832	11,745	11,785	6	6	4,086,501	4,052,022
New York	7,169,666	7,127,651	1,099,907	1,079,163	7,541	7,551	8	7	8,277,122	8,214,372
Pennsylvania	5,379,065	5,349,262	701,257	700,036	22,711	23,203	6	6	6,103,039	6,072,507
East North Central	20,201,805	20,023,062	2,494,334	2,479,845	52,831	54,907	9	8	22,748,979	22,557,822
Illinois	5,295,821	5,251,480	612,889	609,119	5,698	6,067	3	3	5,914,411	5,866,669
Indiana	2,848,032	2,836,013	351,430	351,564	17,669	18,005	1	1	3,217,132	3,205,583
Michigan	4,380,656	4,334,717	547,936	543,367	NM	6,292	2	1	4,934,310	4,884,377
Ohio	4,969,112	4,926,265	625,951	624,950	18,913	19,012	2	2	5,613,978	5,570,229
Wisconsin	2,708,184	2,674,587	356,128	350,845	NM	5,531	1	1	3,069,148	3,030,964
West North Central	9,499,519	9,389,790	1,457,379	1,438,490	113,995	124,008	3	3	11,070,896	10,952,291
Iowa	1,390,334	1,367,698	243,899	237,441	NM	7,736	0	0	1,641,093	1,612,875
Kansas	1,272,898	1,256,210	235,999	233,721	25,190	23,424	0	0	1,533,487	1,513,355
Minnesota	2,398,078	2,392,239	289,541	293,638	NM	8,959	1	1	2,695,770	2,694,837
Missouri	2,798,978	2,760,097	380,366	377,782	8,352	10,106	2	2	3,187,698	3,147,987
Nebraska	858,224	838,578	161,477	150,583	54,784	61,243	0	0	1,074,485	1,050,404
North Dakota	379,790	380,039	73,406	74,184	7,634	8,721	0	0	460,830	462,944
South Dakota	401,217	394,929	73,291	71,141	NM	3,819	0	0	477,533	469,889
South Atlantic	27,846,063	27,378,047	3,798,084	3,730,215	79,053	81,930	13	13	31,723,213	31,190,205
Delaware	425,699	421,328	53,873	53,475	1,187	872	0	0	480,759	475,675
District of Columbia	269,947	263,487	26,199	25,985	1	1	3	3	296,150	289,476
Florida	9,396,003	9,212,506	1,236,848	1,207,155	20,353	21,159	2	2	10,653,206	10,440,822
Georgia	4,347,957	4,265,004	582,681	569,685	19,305	21,719	1	1	4,949,944	4,856,409
Maryland	2,324,466	2,300,273	253,216	251,706	8,859	8,850	5	5	2,586,546	2,560,834
North Carolina	4,527,707	4,450,656	704,940	675,780	9,867	9,975	1	1	5,242,515	5,136,412
South Carolina	2,272,799	2,223,750	366,054	371,470	4,228	4,031	0	0	2,643,071	2,599,251
Virginia	3,421,604	3,380,931	429,693	431,621	3,753	3,691	1	1	3,855,051	3,816,244
West Virginia	859,891	860,112	144,580	143,338	11,500	11,632	0	0	1,015,971	1,015,082
East South Central	8,415,225	8,260,484	1,395,677	1,385,511	24,785	26,812	0	0	9,835,687	9,672,807
Alabama	2,242,324	2,209,160	370,207	368,400	8,169	7,250	0	0	2,620,700	2,584,810
Kentucky	1,993,887	1,961,899	301,789	303,097	7,634	7,177	0	0	2,303,310	2,272,173
Mississippi	1,309,064	1,282,431	239,436	233,851	7,584	11,230	0	0	1,556,084	1,527,512
Tennessee	2,869,950	2,806,994	484,245	480,163	1,398	1,155	0	0	3,355,593	3,288,312
West South Central	15,910,946	15,750,644	2,232,471	2,206,340	187,611	176,674	6	6	18,331,034	18,133,664
Arkansas	1,387,433	1,373,016	191,997	191,170	35,029	35,737	2	2	1,614,461	1,599,925
Louisiana	2,087,142	2,066,103	291,905	289,757	18,453	19,105	1	1	2,397,501	2,374,966
Oklahoma	1,775,306	1,743,587	284,812	279,333	17,869	19,037	0	0	2,077,987	2,041,957
Texas	10,661,065	10,567,938	1,463,757	1,446,080	116,260	102,795	3	3	12,241,085	12,116,816
Mountain	9,740,642	9,600,608	1,385,403	1,389,763	85,931	92,948	5	5	11,211,981	11,083,324
Arizona	2,784,248	2,752,474	320,720	319,499	6,639	8,194	2	2	3,111,609	3,080,169
Colorado	2,304,968	2,274,084	360,848	368,268	13,873	15,724	1	1	2,679,690	2,658,077
Idaho	734,132	720,834	109,419	108,226	28,260	27,798	0	0	871,811	856,858
Montana	509,140	500,703	109,632	106,703	NM	8,432	0	0	625,141	615,838
Nevada	1,173,718	1,152,560	163,737	162,074	NM	3,423	1	1	1,340,590	1,318,058
New Mexico	898,432	879,273	138,840	141,935	8,387	9,198	0	0	1,045,659	1,030,406
Utah	1,062,820	1,050,207	123,680	125,772	9,494	9,487	1	1	1,195,995	1,185,467
Wyoming	273,184	270,473	58,527	57,286	9,775	10,692	0	0	341,486	338,451
Pacific Contiguous	18,516,793	18,445,414	2,322,373	2,331,003	199,516	204,118	23	23	21,038,705	20,980,558
California	13,732,781	13,711,312	1,690,881	1,722,735	147,294	152,166	15	15	15,570,971	15,586,228
Oregon	1,746,914	1,716,702	239,801	233,455	23,805	23,029	2	2	2,010,522	1,973,188
Washington	3,037,098	3,017,400	391,691	374,813	28,417	28,923	6	6	3,457,212	3,421,142
Pacific Noncontiguous	722,636	715,955	113,579	114,304	NM	NM	0	0	838,385	832,396
Alaska	287,532	NM	53,517	NM	NM	NM	0	0	342,439	NM
Hawaii	435,104	432,069	60,062	60,923	780	800	0	0	495,946	493,792
U.S. Total	133,290,218	131,859,453	18,411,649	18,244,491	814,459	832,403	85	84	152,516,411	150,936,431

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 2016 are final. Values for 2017 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-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 6.1. Electric Generating Summer Capacity Changes (MW), November 2017 to December 2017

Technology	Capacity Source	As of End of November 2017	Activity During December 2017 as Reported to EIA		As of End of December 2017	Net Change in Capacity - Current Month and Prior Periods			Changes in and Total Net Summer Capacity -- Outlook Based on Reports to EIA							
		Total In-Service Capacity	Actual Capacity Additions	Actual Capacity Reductions	Total In-Service Capacity	Current Month	Year to Date	Past 12 Months	Planned Capacity Additions		Planned Capacity Reductions		Planned Net Change		Planned Total Net Summer	
									Next Month	Next 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	At End of Next Month	At End of Next 12 Months
..... Onshore Wind (Summer Capacity)	Utility Scale Facilities	85,348.0	2,166.3	0.0	87,514.3	2,166.3	6,257.0	6,257.0	810.6	7,659.9	0.0	17.0	810.6	7,642.9	88,324.9	95,157.2
..... Offshore Wind (Summer Capacity)	Utility Scale Facilities	29.3	0.0	0.0	29.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3
..... Wind (Summer Capacity)	Utility Scale Facilities	85,377.3	2,166.3	0.0	87,543.6	2,166.3	6,257.0	6,257.0	810.6	7,659.9	0.0	17.0	810.6	7,642.9	88,354.2	95,186.5
..... Solar Photovoltaic	Utility Scale Facilities	23,538.3	1,368.5	0.0	24,906.8	1,368.5	4,713.9	4,713.9	619.1	4,560.3	0.0	0.5	619.1	4,559.8	25,525.9	29,466.6
..... Solar Thermal without Energy Storage	Utility Scale Facilities	1,352.5	0.0	0.0	1,352.5	0.0	0.0	0.0	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	0.0	0.0	0.0	0.0	0.0	0.0	0.0	405.4	405.4
..... Solar Subtotal	Utility Scale Facilities	25,296.2	1,368.5	0.0	26,664.7	1,368.5	4,713.9	4,713.9	619.1	4,560.3	0.0	0.5	619.1	4,559.8	27,283.8	31,224.5
..... Conventional Hydroelectric	Utility Scale Facilities	80,057.8	0.0	0.0	80,057.8	0.0	144.9	144.9	16.0	320.0	0.0	6.2	16.0	313.8	80,073.8	80,371.6
..... Wood/Wood Waste Biomass	Utility Scale Facilities	9,067.9	0.0	5.5	9,062.4	-5.5	126.3	126.3	0.0	102.9	0.0	0.0	0.0	102.9	9,062.4	9,165.3
..... Landfill Gas	Utility Scale Facilities	2,109.0	0.0	0.9	2,108.1	-0.9	18.6	18.6	0.0	1.6	1.4	1.4	-1.4	0.2	2,106.7	2,108.3
..... Municipal Solid Waste	Utility Scale Facilities	2,246.8	0.0	0.0	2,246.8	0.0	-1.6	-1.6	0.0	0.0	0.0	0.0	0.0	0.0	2,246.8	2,246.8
..... Other Waste Biomass	Utility Scale Facilities	789.2	0.0	11.0	778.2	-11.0	27.3	27.3	1.0	89.2	0.0	0.0	1.0	89.2	779.2	867.4
..... Biomass Sources Subtotal	Utility Scale Facilities	14,212.9	0.0	17.4	14,195.5	-17.4	170.6	170.6	1.0	193.7	1.4	1.4	-0.4	192.3	14,195.1	14,387.8
..... Geothermal	Utility Scale Facilities	2,455.6	37.0	0.0	2,492.6	37.0	-24.0	-24.0	0.0	6.0	0.0	0.0	0.0	6.0	2,492.6	2,498.6
... Renewable Sources Subtotal	Utility Scale Facilities	207,399.8	3,571.8	17.4	210,954.2	3,554.4	11,262.4	11,262.4	1,446.7	12,739.9	1.4	25.1	1,445.3	12,714.8	212,399.5	223,669.0
..... Natural Gas Fired Combined Cycle	Utility Scale Facilities	245,177.9	1,224.0	26.0	246,375.9	1,198.0	7,893.8	7,893.8	2,650.6	18,282.7	0.0	163.0	2,650.6	18,119.7	249,026.5	264,495.6
..... Natural Gas Fired Combustion Turbine	Utility Scale Facilities	127,094.7	171.0	61.0	127,204.7	110.0	647.0	647.0	456.8	3,883.0	1.0	313.3	455.8	3,569.7	127,660.5	130,774.4
..... Natural Gas Steam Turbine	Utility Scale Facilities	75,096.9	0.0	388.4	74,710.5	-388.4	-2,852.5	-2,852.5	0.0	0.0	0.0	2,023.6	0.0	-2,023.6	74,710.5	72,686.9
..... Natural Gas Internal Combustion Engine	Utility Scale Facilities	4,288.9	0.0	4.0	4,284.9	-4.0	295.9	295.9	12.0	148.2	0.0	5.3	12.0	142.9	4,296.9	4,427.8
..... 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	121.8	0.0	0.0	121.8	0.0	0.4	0.4	3.7	30.6	0.0	0.0	3.7	30.6	125.5	152.4
..... Natural Gas Subtotal	Utility Scale Facilities	451,892.2	1,395.0	479.4	452,807.8	915.6	5,984.6	5,984.6	3,123.1	22,344.5	1.0	2,505.2	3,122.1	19,839.3	455,929.9	472,647.1
..... Conventional Steam Coal	Utility Scale Facilities	261,198.2	0.0	1,748.0	259,450.2	-1,748.0	-6,354.7	-6,354.7	0.0	17.0	4,317.0	11,904.3	-4,317.0	-11,887.3	255,133.2	247,562.9
..... 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	262,013.2	0.0	1,748.0	260,265.2	-1,748.0	-6,354.7	-6,354.7	0.0	17.0	4,317.0	11,904.3	-4,317.0	-11,887.3	255,948.2	248,377.9
..... Petroleum Coke	Utility Scale Facilities	1,466.7	0.0	0.0	1,466.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,466.7	1,466.7
..... Petroleum Liquids	Utility Scale Facilities	32,258.5	7.8	43.1	32,223.2	-35.3	-692.5	-692.5	1.4	22.9	0.5	93.0	0.9	-70.1	32,224.1	32,153.1
..... Other Gases	Utility Scale Facilities	2,456.9	0.0	0.0	2,456.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,456.9	2,456.9
... Fossil Fuels Subtotal	Utility Scale Facilities	750,087.5	1,402.8	2,270.5	749,219.8	-867.7	-1,062.6	-1,062.6	3,124.5	22,384.4	4,318.5	14,502.5	-1,194.0	7,881.9	748,025.8	757,101.7
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,808.7	0.0	0.0	22,808.7	0.0	30.0	30.0	0.0	57.0	0.0	0.0	0.0	57.0	22,808.7	22,865.7
..... 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	694.8	10.4	0.0	705.2	10.4	146.1	146.1	9.9	64.0	0.0	9.9	64.0	715.1	769.2	
... Energy Storage Subtotal	Utility Scale Facilities	23,545.5	10.4	0.0	23,555.9	10.4	176.1	176.1	9.9	121.0	0.0	0.0	9.9	121.0	23,565.8	23,676.9
... Nuclear	Utility Scale Facilities	99,634.6	0.0	0.0	99,634.6	0.0	69.8	69.8	4.0	22.0	0.0	607.7	4.0	-585.7	99,638.6	99,048.9
... All Other	Utility Scale Facilities	1,418.9	0.0	0.0	1,418.9	0.0	4.9	4.9	6.0	54.8	0.0	0.0	6.0	54.8	1,424.9	1,473.7
TOTAL	UTILITY SCALE FACILITIES	1,082,086.3	4,985.0	2,287.9	1,084,783.4	2,697.1	10,450.6	10,450.6	4,591.1	35,322.1	4,319.9	15,135.3	271.2	20,186.8	1,085,054.6	1,104,970.2
..... Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	15,868.6			16,224.2	355.6	3,459.1	3,459.1								
..... Estimated Total Solar Photovoltaic	All Facilities	39,406.9			41,131.0	1,724.1	8,173.0	8,173.0								
... Estimated Total Solar	All Facilities	41,164.8			42,888.9	1,724.1	8,173.0	8,173.0								

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 small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

**Table 6.1.A. Estimated Net Summer Solar Photovoltaic Capacity From Utility and Small Scale Facilities (Megawatts)
2008 - December 2017**

Period	Utility Solar Photovoltaic	Estimated Small Scale 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
2016	20,192.9	12,765.1	32,958.0
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	12,470.5	9,865.6	22,336.1
February	12,615.2	10,123.1	22,738.3
March	12,822.0	10,440.2	23,262.2
April	13,298.0	10,687.8	23,985.8
May	13,419.8	10,927.9	24,347.7
June	13,635.3	11,185.2	24,820.5
July	14,360.4	11,385.3	25,745.7
August	15,297.1	11,670.6	26,967.7
Sept	16,064.3	11,913.3	27,977.6
October	16,477.2	12,156.4	28,633.6
November	17,192.0	12,446.4	29,638.4
December	20,192.9	12,765.1	32,958.0
Year 2017			
January	20,487.3	13,028.2	33,515.5
February	20,674.8	13,332.8	34,007.6
March	21,013.3	13,722.5	34,735.8
April	21,530.7	13,971.4	35,502.1
May	21,927.8	14,259.4	36,187.2
June	22,151.3	14,543.5	36,694.8
July	22,264.5	14,810.2	37,074.7
August	22,443.8	15,104.9	37,548.7
Sept	22,653.0	15,340.6	37,993.6
October	23,001.1	15,582.9	38,584.0
November	23,538.3	15,868.6	39,406.9
December	24,906.8	16,224.2	41,131.0

Values for 2016 are final. Values for 2017 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 small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861, and from estimation methods described in the technical notes.

**Table 6.1.B. Estimated Net Summer Solar Photovoltaic Capacity From Small Scale Facilities by Sector (Megawatts):
2014 - December 2017**

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
2016	7,527.0	4,022.8	1,215.3	12,765.1
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	5,428.5	3,419.8	1,017.3	9,865.6
February	5,627.1	3,458.3	1,037.7	10,123.1
March	5,852.7	3,521.8	1,065.8	10,440.2
April	6,051.1	3,552.6	1,084.1	10,687.8
May	6,238.7	3,589.1	1,100.0	10,927.9
June	6,432.3	3,640.4	1,112.5	11,185.2
July	6,592.9	3,660.7	1,131.7	11,385.3
August	6,785.8	3,734.2	1,150.5	11,670.6
Sept	6,957.7	3,794.2	1,161.5	11,913.3
October	7,147.1	3,837.6	1,171.8	12,156.4
November	7,332.8	3,930.7	1,182.9	12,446.4
December	7,527.0	4,022.8	1,215.3	12,765.1
Year 2017				
January	7,708.1	4,105.9	1,214.2	13,028.2
February	7,895.4	4,151.7	1,285.7	13,332.8
March	8,124.1	4,286.3	1,312.1	13,722.5
April	8,275.0	4,372.5	1,324.0	13,971.4
May	8,456.1	4,456.1	1,347.2	14,259.4
June	8,618.5	4,555.2	1,369.8	14,543.5
July	8,776.9	4,637.7	1,395.5	14,810.2
August	8,956.2	4,734.4	1,414.3	15,104.9
Sept	9,105.0	4,797.4	1,438.2	15,340.6
October	9,254.3	4,884.2	1,444.4	15,582.9
November	9,416.4	4,978.0	1,474.3	15,868.6
December	9,574.0	5,146.5	1,503.7	16,224.2

Values for 2016 are final. Values for 2017 are preliminary.

Final data for 2016 monthly has changed based on new data elements collected from EIA-861 Schedule 7B. Data is now collected by sector, previously it was allocated to the commercial sector.

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

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

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	1	60639	AEP Renewables	IPP	Boulder Solar II, LLC	NV	60885	BSII	50.0	Solar Photovoltaic	SUN	PV
2017	1	59050	Algonquin Power Co	IPP	Algonquin SKIC 10 Solar, LLC	CA	60242	SK10	10.0	Solar Photovoltaic	SUN	PV
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	11	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	12	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	13	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	14	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	15	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	16	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	17	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	18	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	19	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	20	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	21	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	1307	Basin Electric Power Coop	Electric Utility	Pioneer Generating Station	ND	57881	22	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	1	58540	California PV Energy LLC	IPP	CA Dept of Public Health at Richmond	CA	60428	PV1	2.2	Solar Photovoltaic	SUN	PV
2017	1	58871	Citizens Enterprises Corporation	IPP	Norton Landfill Solar	MA	61597	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	1	58871	Citizens Enterprises Corporation	IPP	Tyngsborough Solar	MA	61598	PV1	2.6	Solar Photovoltaic	SUN	PV
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
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
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
2017	1	56769	Consolidated Edison Development Inc.	IPP	CED Avenal	CA	60077	AVCA	15.8	Solar Photovoltaic	SUN	PV
2017	1	56769	Consolidated Edison Development Inc.	IPP	Oro Loma	CA	59915	ORCA	20.0	Solar Photovoltaic	SUN	PV
2017	1	58549	County of Alameda GSA	Electric CHP	Santa Rita Jail	CA	58625	SRFC2	1.4	Other Natural Gas	NG	FC
2017	1	58549	County of Alameda GSA	Electric CHP	Santa Rita Jail	CA	58625	SRFPV3	0.5	Solar Photovoltaic	SUN	PV
2017	1	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Bowling Green	OH	60622	AMPBG	20.0	Solar Photovoltaic	SUN	PV
2017	1	61024	Deep Branch Farm, LLC	IPP	Deep Branch Farm	NC	61403	1	5.0	Solar Photovoltaic	SUN	PV
2017	1	15470	Duke Energy Indiana, LLC	Electric Utility	Crane Solar Facility	IN	60435	XXXXX	7.1	Solar Photovoltaic	SUN	PV
2017	1	60793	EE Waianae Solar Project LLC	IPP	EE Waianae Solar Project	HI	61172	WAIAN	27.6	Solar Photovoltaic	SUN	PV
2017	1	61077	IGS ORIX Solar I, LLC	IPP	IOS - MEW Phase 1	ME	61460	MEW1	4.1	Solar Photovoltaic	SUN	PV
2017	1	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park	IN	60253	SANDE	5.0	Solar Photovoltaic	SUN	PV
2017	1	60304	Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0	Solar Photovoltaic	SUN	PV
2017	1	49893	Invernergy Services LLC	IPP	Bethel Wind Farm LLC	TX	60414	GEN1	276.0	Onshore Wind Turbine	WND	WT
2017	1	59973	Marshall Solar Energy Project	IPP	Marshall Solar Energy Project	MN	59875	PV1	62.3	Solar Photovoltaic	SUN	PV
2017	1	59483	Metropolitan Airports Commission	IPP	St. Paul Intl Airport Red & Blue Parking	MN	59709	PV2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	PV1	4.5	Solar Photovoltaic	SUN	PV
2017	1	13683	North Carolina EI Member Corp	Electric Utility	Ocracoke	NC	6377	BAT	1.0	Batteries	MWH	BA
2017	1	60562	Oliver Wind III, LLC	IPP	Oliver Wind III, LLC	ND	60905	WT1	99.3	Onshore Wind Turbine	WND	WT
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS1	0.9	Solar Photovoltaic	SUN	PV
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60439	Orion Community Solar	IPP	Orion Community Solar	MN	60716	OCS3	0.9	Solar Photovoltaic	SUN	PV
2017	1	60438	Paynesville Community Solar	IPP	Paynesville Community Solar	MN	60715	PCS5	0.9	Solar Photovoltaic	SUN	PV
2017	1	60834	Pima Energy Storage System	IPP	Pima Energy Storage System	AZ	61197	PIMA	10.0	Batteries	MWH	BA
2017	1	57440	SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	COGN1	78.6	Natural Gas Fired Combustion Turbine	NG	GT
2017	1	60520	SoCore Energy LLC	IPP	Mt. Hope DPC Solar	WI	60893	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	1	60520	SoCore Energy LLC	IPP	Sauk DPC Solar	WI	60887	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC27	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC28	1.0	Solar Photovoltaic	SUN	PV
2017	1	60970	SunShare Management	IPP	WakeSun, LLC CSG	MN	60694	MLC29	1.0	Solar Photovoltaic	SUN	PV
2017	1	60046	TPE Alta Luna, LLC	IPP	Alta Luna	NM	60258	ALPV1	28.1	Solar Photovoltaic	SUN	PV
2017	1	18454	Tampa Electric Co	Electric Utility	Polk	FL	7242	2CC	459.0	Natural Gas Fired Combined Cycle	NG	CA
2017	1	60947	Tesla Inc.	IPP	Weber State University - Davis Campus PV	UT	60821	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	1	24211	Tucson Electric Power Co	Electric Utility	Demoss Petrie	AZ	124	BA1	10.0	Batteries	MWH	BA
2017	1	24211	Tucson Electric Power Co	Electric Utility	Fort Huachuca Solar PV Project	AZ	58972	FHUA2	4.1	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS1	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS2	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS3	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS4	0.9	Solar Photovoltaic	SUN	PV
2017	1	60435	Ursa Community Solar	IPP	Ursa Community Solar	MN	60712	UCS5	0.9	Solar Photovoltaic	SUN	PV
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	1-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	2-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	3-III	1.6	Landfill Gas	LFG	IC
2017	1	40211	Wabash Valley Power Assn, Inc	Electric Utility	Liberty I & II LFGTE	IN	56465	4-III	1.6	Landfill Gas	LFG	IC
2017	1	58918	West Siler Farm LLC	IPP	West Siler Farm LLC	NC	59112	1	5.0	Solar Photovoltaic	SUN	PV
2017	1	60607	Wildwood Solar II, LLC	IPP	Wildwood Solar II	CA	59253	PV1	14.7	Solar Photovoltaic	SUN	PV
2017	2	55918	Acciona Wind Energy USA LLC	IPP	San Roman Wind I, LLC	TX	59712	SRWI	95.3	Onshore Wind Turbine	WND	WT
2017	2	59050	Algonquin Power Co	IPP	Luning Energy	NV	61084	LNING	50.0	Solar Photovoltaic	SUN	PV
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	10	50.0	Natural Gas Fired Combined Cycle	NG	CT

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source	Prime Mover Code
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	11	29.0	Natural Gas Fired Combined Cycle	NG	CA
2017	2	599	Anchorage Municipal Light and Power	Electric Utility	George M Sullivan Generation Plant 2	AK	6559	9	50.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	803	Arizona Public Service Co	Electric Utility	Red Rock	AZ	60467	PV1	40.0	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 35, LLC	NC	61258	ISS35	1.9	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 59, LLC	NC	61259	ISS59	1.9	Solar Photovoltaic	SUN	PV
2017	2	60865	CD Global Solar Holdings, LLC	IPP	Innovative Solar 60, LLC	NC	61260	ISS60	1.9	Solar Photovoltaic	SUN	PV
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG2	205.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	STGEN	316.0	Natural Gas Fired Combined Cycle	NG	CA
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT1	41.6	Onshore Wind Turbine	WND	WT
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT2	74.5	Onshore Wind Turbine	WND	WT
2017	2	60537	Deerfield Wind Energy, LLC	IPP	Deerfield Wind Energy, LLC	MI	60883	WT3	32.9	Onshore Wind Turbine	WND	WT
2017	2	60501	Farmington Holdco LLC	IPP	Farmington Holdco Solar	MN	60832	FARM1	5.0	Solar Photovoltaic	SUN	PV
2017	2	60507	Fresh Air Energy XXXV, LLC	IPP	Turkey Creek PV1	NC	60000	TRKCK	13.5	Solar Photovoltaic	SUN	PV
2017	2	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 2	NC	61275	WILS2	3.8	Solar Photovoltaic	SUN	PV
2017	2	61077	IGS Orix Solar I, LLC	IPP	IGS Solar I - BW12	MD	61465	BW12	1.4	Solar Photovoltaic	SUN	PV
2017	2	4361	Ingredion Inc - Stockton	Industrial	Ingredion Stockton	CA	52115	GEN2	6.5	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	60618	Lindberg Field Solar 2, LLC	IPP	Lindberg Field Solar 2	CA	60984	PV1	1.9	Solar Photovoltaic	SUN	PV
2017	2	58887	Michelangelo Wind 3 LLC	IPP	Michelangelo Wind 3 LLC	IA	59053	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA01	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA02	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA03	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA04	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	12667	Minnesota Municipal Power Agny	Electric Utility	Shakopee Energy Park	MN	60647	SQA05	9.3	Natural Gas Internal Combustion Engine	NG	IC
2017	2	61233	NRG DG Tufts Science LLC	IPP	NRG DG Tufts Science LLC	MA	61633	SCIEN	1.0	Solar Photovoltaic	SUN	PV
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 4	0.6	Natural Gas Steam Turbine	NG	ST
2017	2	58159	Penn State University	Commercial	West Campus Steam Plant	PA	58194	WC 5	0.6	Natural Gas Steam Turbine	NG	ST
2017	2	60490	Pine Island Holdco, LLC	IPP	Pine Island Solar	MN	60835	PINEI	3.9	Solar Photovoltaic	SUN	PV
2017	2	60412	Portal Ridge Solar, LLC	IPP	Portal Ridge Solar B, LLC	CA	60310	GEN01	20.0	Solar Photovoltaic	SUN	PV
2017	2	60412	Portal Ridge Solar, LLC	IPP	Portal Ridge Solar C, LLC	CA	60311	GEN01	11.4	Solar Photovoltaic	SUN	PV
2017	2	60336	SDGE Batteries	Electric Utility	El Cajon Energy Storage	CA	80569	SES	7.5	Batteries	MWH	BA
2017	2	58544	Sierra Nevada Brewing Co	Industrial	Sierra Nevada Brewing Co	CA	58585	BESS	0.5	Batteries	MWH	BA
2017	2	60520	SoCore Energy LLC	IPP	Bandera Electric Coop PV	TX	61205	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	2	60520	SoCore Energy LLC	IPP	Downsville DPC Solar	WI	60892	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	2	60520	SoCore Energy LLC	IPP	Medford DPC Solar	WI	60894	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	2	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	1	19.0	Solar Photovoltaic	SUN	PV
2017	2	60947	Tesla Inc.	IPP	CMEEC - Rogers Rd Solar	CT	60605	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	2	57081	WGL Energy Systems, Inc	IPP	Lind Solar CSG	MN	60966	S0222	4.9	Solar Photovoltaic	SUN	PV
2017	3	60571	AEP Onsite Partners	IPP	Canandaigua Westbrook Solar Array	NY	61042	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	3	60281	Altus Power America Management, LLC	IPP	Aloha Solar Energy Fund 1 PK1	HI	58659	PK-1	5.0	Solar Photovoltaic	SUN	PV
2017	3	60281	Altus Power America Management, LLC	IPP	Spartan	NJ	60755	PV1	8.3	Solar Photovoltaic	SUN	PV
2017	3	59758	American Falls Solar II, LLC	IPP	American Falls Solar II	ID	60012	IPAF2	20.0	Solar Photovoltaic	SUN	PV
2017	3	59757	American Falls Solar LLC	IPP	American Falls Solar	ID	60011	IPAF	20.0	Solar Photovoltaic	SUN	PV
2017	3	58308	Bearford Farm, LLC	IPP	Bearford Farm Solar Project	NC	59567	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	3	59861	Benson Creek	IPP	Benson Creek Windfarm	OR	59491	BCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00603	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00696	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00697	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00698	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00699	1.4	Landfill Gas	LFG	IC
2017	3	60429	Chicago Bridge & Iron Company	IPP	JED Solid Waste Mgmt Renewable Energy	FL	60701	00700	1.4	Landfill Gas	LFG	IC
2017	3	60407	Cimarron Bend Wind Project II, LLC	IPP	Cimarron Bend Wind Project II, LLC	KS	60688	1	200.0	Onshore Wind Turbine	WND	WT
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT4	2.0	Petroleum Liquids	DFO	IC
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT5	2.0	Petroleum Liquids	DFO	IC
2017	3	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant South Sub	KS	60750	CAT6	2.0	Petroleum Liquids	DFO	IC
2017	3	59979	Cotton Plains Wind I, LLC	IPP	Cotton Plains Wind Farm	TX	60210	CPWF	50.4	Onshore Wind Turbine	WND	WT
2017	3	61060	Cypress Creek Renewables	IPP	Franklinton Solar	NC	59708	5MWPV	5.0	Solar Photovoltaic	SUN	PV
2017	3	60814	Drop 5 Hydro LLC	IPP	Drop 5	CO	61191	GEN1	2.4	Conventional Hydroelectric	WAT	HY
2017	3	5416	Duke Energy Carolinas, LLC	Electric Utility	Monroe Solar Facility	NC	60383	MONPV	27.6	Solar Photovoltaic	SUN	PV
2017	3	59862	Durbin Creek	IPP	Durbin Creek Windfarm	OR	59492	DCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	59380	Enel Green Power NA, Inc.	IPP	Lindahl Wind Project, LLC	ND	59684	LWP01	150.0	Onshore Wind Turbine	WND	WT
2017	3	60888	GCL New Energy, Inc.	IPP	Jackson Solar Farm	NC	61292	JAKSN	8.6	Solar Photovoltaic	SUN	PV
2017	3	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	4TG	62.0	Wood/Wood Waste Biomass	BLQ	ST
2017	3	60343	Hector Farm, LLC	IPP	Hector Farm	NC	60577	1	5.0	Solar Photovoltaic	SUN	PV
2017	3	59977	Hemlock Solar LLC	IPP	Hemlock Solar	NC	60207	HEMLK	5.0	Solar Photovoltaic	SUN	PV
2017	3	59860	Jett Creek	IPP	Jett Creek Windfarm	OR	59490	JCW	10.0	Onshore Wind Turbine	WND	WT
2017	3	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 300A	CA	61249	W5531	2.9	Solar Photovoltaic	SUN	PV

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

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	3	58822	MC Power Companies Inc	IPP	Independence Solar Farm	MO	61092	1PL1	3.0	Solar Photovoltaic	SUN	PV
2017	3	59026	Michelangelo Wind 1 LLC	IPP	Michelangelo Wind 1 LLC	IA	59231	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	1	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	2	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	3	58689	Milan Energy LLC	IPP	Milan	PA	58818	3	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	3	59469	Mt. Home Solar 1, LLC	IPP	Mt. Home Solar 1, LLC	ID	59695	MHPV1	20.0	Solar Photovoltaic	SUN	PV
2017	3	58489	OCT Solar Power	IPP	Alamo 6	TX	59206	OClA6	105.0	Solar Photovoltaic	SUN	PV
2017	3	59025	Optimum Wind 3 LLC	IPP	Optimum Wind 3 LLC	IA	59227	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59024	Optimum Wind 4 LLC	IPP	Optimum Wind 4 LLC	IA	59226	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59017	Optimum Wind 5 LLC	IPP	Optimum Wind 5 LLC	IA	59223	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59018	Optimum Wind 6 LLC	IPP	Optimum Wind 6 LLC	IA	59224	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59019	Optimum Wind 7 LLC	IPP	Optimum Wind 7 LLC	IA	59225	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59756	Orchard Ranch Solar, LLC	IPP	Orchard Ranch Solar	ID	60010	IPOR	20.0	Solar Photovoltaic	SUN	PV
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy JN, LLC	NM	60145	1	181.7	Onshore Wind Turbine	WND	WT
2017	3	56545	Pattern Operators LP	IPP	Broadview Energy KW, LLC	NM	60152	1	142.6	Onshore Wind Turbine	WND	WT
2017	3	59863	Prospector	IPP	Prospector Windfarm	OR	59493	PW	10.0	Onshore Wind Turbine	WND	WT
2017	3	60336	SDGE Batteries	Electric Utility	Escondido Energy Storage	CA	60570	SES	30.0	Batteries	MWH	BA
2017	3	60448	Simcoe Solar	IPP	Simcoe Solar	ID	60748	IDSS	20.0	Solar Photovoltaic	SUN	PV
2017	3	60651	Spring Street Solar 1, LLC	IPP	Spring Street Solar 1 CSG	MA	61009	SPRIN	2.0	Solar Photovoltaic	SUN	PV
2017	3	19728	UNS Electric, Inc	Electric Utility	Jacobson 5 MW Solar	AZ	60603	PV1	4.1	Solar Photovoltaic	SUN	PV
2017	3	59021	Venus Wind 3 LLC	IPP	Venus Wind 3 LLC	IA	59230	WT1	3.0	Onshore Wind Turbine	WND	WT
2017	3	59116	WED Coventry Five, LLC	IPP	WED Coventry 5	RI	59313	COV5	1.5	Onshore Wind Turbine	WND	WT
2017	3	60487	Wabasha Holdco LLC	IPP	Wabasha Holdco Solar	MN	60838	WABAS	3.0	Solar Photovoltaic	SUN	PV
2017	3	22500	Westar Energy Inc	Electric Utility	Western Plains Wind Farm	KS	60689	1	280.6	Onshore Wind Turbine	WND	WT
2017	3	20447	Western Farmers Elec Coop, Inc	Electric Utility	Pine Ridge	OK	61617	1	3.0	Solar Photovoltaic	SUN	PV
2017	3	20447	Western Farmers Elec Coop, Inc	Electric Utility	Tuttle	OK	61618	1	4.0	Solar Photovoltaic	SUN	PV
2017	3	60614	Westside Solar, LLC	IPP	NextEra Westside PV	CA	60981	WS526	20.0	Solar Photovoltaic	SUN	PV
2017	3	60619	Whitney Point Solar, LLC	IPP	Whitney Point Solar	CA	60975	WS532	20.0	Solar Photovoltaic	SUN	PV
2017	3	59864	Willow Spring	IPP	Willow Spring Windfarm	OR	59494	WSW	10.0	Onshore Wind Turbine	WND	WT
2017	4	61125	301 Chestnut Solar NG, LLC	IPP	301 Chestnut Solar NG	MA	61518	3010	4.3	Solar Photovoltaic	SUN	PV
2017	4	195	Alabama Power Co	Electric Utility	Fort Rucker Solar Array	AL	60679	1	10.6	Solar Photovoltaic	SUN	PV
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	1	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	2	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	58686	Alpaca Energy LLC	IPP	Alpaca	PA	58813	3	6.8	Natural Gas Internal Combustion Engine	NG	IC
2017	4	60484	Bashaw Solar 1, LLC	IPP	Bashaw Solar CSG 1, LLC	MA	60866	4MID	2.0	Solar Photovoltaic	SUN	PV
2017	4	60816	Boston Medical Center	Commercial	Boston Medical Center CHP Plant	MA	61186	COGEN	2.0	Natural Gas Internal Combustion Engine	NG	IC
2017	4	58871	Citizens Enterprises Corporation	IPP	Citizens Agawam Landfill Solar	MA	61596	PV1	1.8	Solar Photovoltaic	SUN	PV
2017	4	58871	Citizens Enterprises Corporation	IPP	Falmouth Landfill Solar	MA	61562	FAL1	3.0	Solar Photovoltaic	SUN	PV
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	CTG1	10.0	Other Waste Biomass	OBG	GT
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	CTG2	10.0	Other Waste Biomass	OBG	GT
2017	4	60396	Constellation New Energy Inc.	IPP	Hyperion Treatment Plant CHP Plant	CA	60960	STG1	2.0	Other Waste Biomass	OBG	GT
2017	4	59997	Customized Energy Solutions	IPP	NA 1(Hagerstown)	MD	60213	MPSHG	2.0	Batteries	MWH	BA
2017	4	60496	Enerparc Inc.	IPP	Green Meadow Solar, LLC	MT	61291	GMSMT	3.0	Solar Photovoltaic	SUN	PV
2017	4	60496	Enerparc Inc.	IPP	River Bend Solar, LLC	MT	61289	RBSMT	2.0	Solar Photovoltaic	SUN	PV
2017	4	60496	Enerparc Inc.	IPP	South Mills Solar, LLC	MT	61290	SMSMT	3.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 1	NC	61274	WLS1	3.3	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 3	NC	61276	WLS3	9.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 4	NC	61277	WLS4	9.0	Solar Photovoltaic	SUN	PV
2017	4	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 7	NC	61280	WLS7	9.2	Solar Photovoltaic	SUN	PV
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN1	220.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN2	220.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	58848	Green Energy Partners LLC	IPP	Stonewall	VA	59004	GEN3	326.0	Natural Gas Fired Combined Cycle	NG	CA
2017	4	59436	Innovative Solar 47, LLC	IPP	Innovative Solar 47	NC	59666	IS047	33.8	Solar Photovoltaic	SUN	PV
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG1	211.7	Natural Gas Fired Combined Cycle	NG	CT
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	CTG2	211.8	Natural Gas Fired Combined Cycle	NG	CT
2017	4	9417	Interstate Power and Light Co	Electric Utility	Marshalltown Generating Station	IA	58236	STG1	230.1	Natural Gas Fired Combined Cycle	NG	CA
2017	4	60633	Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	BA1	10.0	Batteries	MWH	BA
2017	4	60633	Iron Horse Battery Storage, LLC	IPP	Iron Horse Battery Storage	AZ	60996	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	4	60198	Kennedy Solar, LLC	IPP	Kennedy Solar, LLC	NC	60397	FLS1	4.9	Solar Photovoltaic	SUN	PV
2017	4	11208	Los Angeles Department of Water & Power	Electric Utility	Maclay Solar Project	CA	57308	1	2.2	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS1	0.9	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS2	0.9	Solar Photovoltaic	SUN	PV
2017	4	60592	Morgan Community Solar	IPP	Morgan Community Solar	MN	60942	BMCS3	0.9	Solar Photovoltaic	SUN	PV
2017	4	59755	Murphy Flat Power, LLC	IPP	Murphy Flat Solar	ID	60009	IPMF	20.0	Solar Photovoltaic	SUN	PV
2017	4	60307	NRG Solar Blythe II LLC	IPP	Solar Blythe 2	CA	60558	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	4	60155	Old Settler Wind, LLC	IPP	Old Settler Wind	TX	60366	OSWF	151.2	Onshore Wind Turbine	WND	WT
2017	4	60584	Onyx Asset Services Group	IPP	Onyx - Allen Harim	DE	61206	10021	1.5	Solar Photovoltaic	SUN	PV

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

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	4	60920	Peterson Road Solar, LLC	IPP	Peterson Road Solar	MA	61307	02076	2.5	Solar Photovoltaic	SUN	PV
2017	4	60400	Phantom Solar, LLC	IPP	Phantom Solar	TX	60774	GEN1	15.4	Solar Photovoltaic	SUN	PV
2017	4	16609	San Diego Gas & Electric Co	Electric Utility	Ramona Solar Energy	CA	60995	1	3.8	Solar Photovoltaic	SUN	PV
2017	4	60636	SolaireHolman 1, LLC	IPP	SolaireHolman Solar Project	TX	60989	PV1	50.0	Solar Photovoltaic	SUN	PV
2017	4	17650	Southern Power Co	IPP	East Pecos Solar	TX	60436	1	118.5	Solar Photovoltaic	SUN	PV
2017	4	17650	Southern Power Co	IPP	Lamesa Solar	TX	60372	LSPV1	100.0	Solar Photovoltaic	SUN	PV
2017	4	60848	Spencer Farm, LLC	IPP	Spencer Farm, LLC	NC	61220	1	5.0	Solar Photovoltaic	SUN	PV
2017	4	59338	Spring Valley Farm 2, LLC	IPP	Spring Valley Farm 2, LLC	NC	59593	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	4	60197	St. Pauls Solar 1, LLC	IPP	St. Pauls Solar 1, LLC	NC	60396	FLS1	4.9	Solar Photovoltaic	SUN	PV
2017	4	58375	Sterling Municipal Light Department	Electric Utility	Chocksett Rd Energy Storage Project	MA	60959	BA1	2.0	Batteries	MWH	BA
2017	4	58661	Sustainable Power Group, LLC	IPP	Hecate Energy Beacon Solar 1	CA	59315	BEAC1	56.0	Solar Photovoltaic	SUN	PV
2017	4	58661	Sustainable Power Group, LLC	IPP	Lancaster WAD B	CA	59739	LWADB	3.0	Solar Photovoltaic	SUN	PV
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG1	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG2	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	CTG3	211.0	Natural Gas Fired Combined Cycle	NG	CT
2017	4	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	STG1	467.0	Natural Gas Fired Combined Cycle	NG	CA
2017	4	24211	Tucson Electric Power Co	Electric Utility	UA5TP II	AZ	57717	UABA	10.0	Batteries	MWH	BA
2017	4	20447	Western Farmers Elec Coop, Inc	Electric Utility	Hinton	OK	61615	1	3.0	Solar Photovoltaic	SUN	PV
2017	4	20447	Western Farmers Elec Coop, Inc	Electric Utility	Marietta	OK	61616	1	3.0	Solar Photovoltaic	SUN	PV
2017	5	60019	96WI 8ME, LLC	IPP	Midway Solar Farm II	CA	60237	MSF2	30.0	Solar Photovoltaic	SUN	PV
2017	5	60571	AEP Onsite Partners	IPP	AEP Jacksonville Solar Project	FL	61388	PV1	7.1	Solar Photovoltaic	SUN	PV
2017	5	61012	AES Distributed Energy	IPP	Amazon - Patterson PV	CA	61377	PATT1	2.5	Solar Photovoltaic	SUN	PV
2017	5	60281	Altus Power America Management, LLC	IPP	Shirley Landfill	MA	60753	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	5	60515	Astra Wind LLC	IPP	Astra Wind Farm	TX	60856	ASTRA	163.0	Onshore Wind Turbine	WND	WT
2017	5	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	04	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	1307	Basin Electric Power Coop	Electric Utility	Lonesome Creek Station	ND	57943	05	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	60369	City of Worcester DPW	IPP	Worcester Landfill	MA	60621	WL	6.5	Solar Photovoltaic	SUN	PV
2017	5	58519	Clean Energy Collective LLC	IPP	Fairhaven C	MA	60423	FCPV	1.6	Solar Photovoltaic	SUN	PV
2017	5	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Front Royal	VA	61055	AMPFR	2.5	Solar Photovoltaic	SUN	PV
2017	5	5109	DTE Electric Company	Electric Utility	Demille Solar Farm	MI	60346	1	28.4	Solar Photovoltaic	SUN	PV
2017	5	5109	DTE Electric Company	Electric Utility	Turrill Solar Farm	MI	60347	1	19.8	Solar Photovoltaic	SUN	PV
2017	5	5701	El Paso Electric Co	Electric Utility	Montana Solar Facility	TX	60300	IMPV1	3.0	Solar Photovoltaic	SUN	PV
2017	5	61202	Flambeau Solar Partners, LLC	IPP	Flambeau Solar Partners	WI	61595	FLAMB	2.5	Solar Photovoltaic	SUN	PV
2017	5	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 5	NC	61278	WIL5	9.5	Solar Photovoltaic	SUN	PV
2017	5	60888	GCL New Energy, Inc.	IPP	Wilson Solar Farm 6	NC	61279	WIL6	9.7	Solar Photovoltaic	SUN	PV
2017	5	7049	General Electric Aircraft Engines	Industrial	General Electric Aircraft Engines	MA	10029	PV	2.1	Solar Photovoltaic	SUN	PV
2017	5	61077	IGS ORIX Solar I, LLC	IPP	City of Lexington	NE	61467	LXNE1	3.5	Solar Photovoltaic	SUN	PV
2017	5	59435	Innovative Solar 37, LLC	IPP	Innovative Solar 37	NC	59665	IS037	100.0	Solar Photovoltaic	SUN	PV
2017	5	12303	Merck & Co Inc-West Point	Industrial	West Point (PA)	PA	52149	GEN15		Natural Gas Internal Combustion Engine	NG	IC
2017	5	60879	NGI-Kayenta Solar Lessor I, LLC	IPP	Kayenta Solar Project	AZ	61268	PV1	27.3	Solar Photovoltaic	SUN	PV
2017	5	61061	Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANPV	1.3	Solar Photovoltaic	SUN	PV
2017	5	60962	Saluda Solar II, LLC	IPP	Saluda Solar II	SC	61323	PGRB5	3.4	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	Liberty Pole DPC Solar	WI	60891	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	T0588 Phoenix - AZ	AZ	61199	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	5	60520	SoCore Energy LLC	IPP	Warren DPC Solar	WI	60890	PV1	2.2	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Garrett County - DPU Treatment Plant	MD	60847	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV1	3.8	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Genentech Vacaville Meter #1	CA	60844	PV2	2.3	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	BA1	0.5	Batteries	MWH	BA
2017	5	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	PV1	1.7	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	BA1	11.0	Batteries	MWH	BA
2017	5	60947	Tesla Inc.	IPP	KIUC Kapaia PV and BA Storage Project	HI	60546	PV1	15.0	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Orange County Solar Farm (NY)	NY	60229	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Sullivan County - Adult Care Solar	NY	60817	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	5	60947	Tesla Inc.	IPP	Town of Lexington Solar	MA	60816	PV1	1.6	Solar Photovoltaic	SUN	PV
2017	5	57081	WGL Energy Systems, Inc	IPP	Gulfport Naval Base CSG PV System	MS	61208	PV1	3.5	Solar Photovoltaic	SUN	PV
2017	5	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED1	2.0	Landfill Gas	LFG	IC
2017	5	54842	WM Renewable Energy LLC	IPP	Waste Mangement Redwood LFGTE	CA	59299	RED2	2.0	Landfill Gas	LFG	IC
2017	5	20447	Western Farmers Elec Coop, Inc	Electric Utility	Cynil	OK	61614	1	5.0	Solar Photovoltaic	SUN	PV
2017	6	60571	AEP Onsite Partners	IPP	Letchworth Solar Project	NY	61389	PV1	1.2	Solar Photovoltaic	SUN	PV
2017	6	61012	AES Distributed Energy	IPP	Cedar Creek PV	NY	61376	CEDR1	1.8	Solar Photovoltaic	SUN	PV
2017	6	57369	Apple, Inc	Industrial	Apple Campus 2 Fuel Cell	CA	59557	AC2FC	4.0	Other Waste Biomass	OBG	FC
2017	6	57369	Apple, Inc	Industrial	Apple Campus 2 PV	CA	59473	AC2PV	14.4	Solar Photovoltaic	SUN	PV
2017	6	60966	Barnwell Solar, LLC	IPP	Barnwell Solar	SC	61327	PGRB1	5.4	Solar Photovoltaic	SUN	PV
2017	6	59365	Capital Power Corporation	IPP	CP Bloom Wind LLC	KS	59888	GEN	178.2	Onshore Wind Turbine	WND	WT
2017	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	10	43.1	Natural Gas Fired Combined Cycle	NG	CT
2017	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	11	43.1	Natural Gas Fired Combined Cycle	NG	CT

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

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	6	8723	City of Holland	Electric Utility	Holland Energy Park	MI	59093	12	40.9	Natural Gas Fired Combined Cycle	NG	CA
2017	6	58519	Clean Energy Collective LLC	IPP	West Bridgewater AB	MA	60424	WBAB	1.7	Solar Photovoltaic	SUN	PV
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM01	1.5	Landfill Gas	LFG	IC
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM02	1.5	Landfill Gas	LFG	IC
2017	6	55858	Energy Developments Inc	IPP	Brown County LFGTE Power Station	OH	61145	GM03	1.5	Landfill Gas	LFG	IC
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT7	313.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	CT8	313.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Colorado Bend II	TX	60122	STG9	461.4	Natural Gas Fired Combined Cycle	NG	CA
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CG14	307.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	CG15	307.2	Natural Gas Fired Combined Cycle	NG	CT
2017	6	6035	Exelon Power	IPP	Wolf Hollow II	TX	59812	STG6	454.9	Natural Gas Fired Combined Cycle	NG	CA
2017	6	60670	Floyd Road Solar Farm, LLC	IPP	Floyd Road Solar Farm	NC	61031	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	6	25438	Friant Power Authority	IPP	Friant Hydro Facility	CA	50393	RO2	7.3	Conventional Hydroelectric	WAT	HY
2017	6	59257	Giffen Solar Park, LLC	IPP	Giffen Solar Park	CA	59522	FRGSP	20.0	Solar Photovoltaic	SUN	PV
2017	6	60738	Gulf Coast Solar Center I (CA)	IPP	Gulf Coast Solar Center I	FL	59689	GCSC1	30.0	Solar Photovoltaic	SUN	PV
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP1	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP2	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP3	2.5	Other Waste Biomass	OBL	IC
2017	6	19547	Hawaiian Electric Co Inc	Electric Utility	HNL Emergency Power Facility	HI	58469	AP4	2.5	Other Waste Biomass	OBL	IC
2017	6	60479	Iron Horse Solar 4, LLC	IPP	Iron Horse Solar 4, LLC	MA	60799	PV1	4.5	Solar Photovoltaic	SUN	PV
2017	6	60695	Lemond Solar Center LLC	IPP	Lemond Solar	MN	61072	LEMND	5.0	Solar Photovoltaic	SUN	PV
2017	6	60098	MS Solar 2, LLC	IPP	Sumrall I Solar Farm	MS	60306	SUM1	52.0	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS1	0.9	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS2	0.9	Solar Photovoltaic	SUN	PV
2017	6	60591	Mapleton Community Solar	IPP	Mapleton Community Solar	MN	60941	DMCS3	0.9	Solar Photovoltaic	SUN	PV
2017	6	56990	NJR Clean Energy Ventures Corporation	IPP	Pemberton Road I	NJ	61073	PEMB1	9.9	Solar Photovoltaic	SUN	PV
2017	6	56990	NJR Clean Energy Ventures Corporation	IPP	Pemberton Road II	NJ	61074	PEMB2	9.9	Solar Photovoltaic	SUN	PV
2017	6	60365	NRG Renew Canal 1 LLC	IPP	NRG Renew Canal 1 CSG LLC	MA	60625	CANAL	1.2	Solar Photovoltaic	SUN	PV
2017	6	61227	Nautilus Solar Solutions	IPP	West Brookfield Solar - Gilbertsville Rd	MA	61629	WB	4.0	Solar Photovoltaic	SUN	PV
2017	6	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2017	6	60393	Ridgeland Solar Farm I, LLC	IPP	Ridgeland Solar Project	SC	60659	PV1	10.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Conrath DPC Solar	WI	60889	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Lafayette DPC Solar	WI	60888	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60520	SoCore Energy LLC	IPP	Whistling Winds DPC Solar	WI	60895	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	6	60246	Sunray Energy 2, LLC	IPP	Sunray 2	CA	10437	SUN2	20.0	Solar Photovoltaic	SUN	PV
2017	6	60247	Sunray Energy 3 LLC	IPP	Sunray 3	CA	10438	SUN3	13.8	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	CMEEC - Navy NE Trident	CT	60608	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	Hewlett-Packard (HP) - Andover, MA	MA	60099	PV1	1.7	Solar Photovoltaic	SUN	PV
2017	6	60947	Tesla Inc.	IPP	Town of Halfmoon	NY	60115	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	6	60723	VRF Battery Plant	Electric Utility	Vanadium Redox Flow Battery Plant	CA	61107	VRF	2.0	Batteries	MWH	BA
2017	6	19876	Virginia Electric & Power Co	Electric Utility	Merck	VA	59905	1	0.8	Solar Photovoltaic	SUN	PV
2017	7	60634	AEM Wind LLC	IPP	Sterling I Wind Farm	NM	60991	STER1	29.9	Onshore Wind Turbine	WND	WT
2017	7	195	Alabama Power Co	Electric Utility	ANAD Solar Array	AL	60680	1	7.4	Solar Photovoltaic	SUN	PV
2017	7	221	Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2B	0.5	Petroleum Liquids	DFO	IC
2017	7	60130	Albany Green Energy, LLC	Electric CHP	Albany Green Energy	GA	60340	1	50.0	Wood/Wood Waste Biomass	WDS	ST
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV1	0.5	Solar Photovoltaic	SUN	PV
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV2	1.0	Solar Photovoltaic	SUN	PV
2017	7	60281	Altus Power America Management, LLC	IPP	Cedarville	MA	60757	PV3	1.0	Solar Photovoltaic	SUN	PV
2017	7	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG1	25.3	Conventional Hydroelectric	WAT	HY
2017	7	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG2	25.3	Conventional Hydroelectric	WAT	HY
2017	7	60500	Bluesphere Corporate	IPP	Orbit Energy RI	RI	60831	1	3.2	Other Waste Biomass	OBG	IC
2017	7	60518	California PV Energy 2, LLC	IPP	Dept of General Services -FTB	CA	60861	PV1	2.7	Solar Photovoltaic	SUN	PV
2017	7	60965	Cameron Solar II, LLC	IPP	Cameron Solar II	SC	61326	PGRB2	4.1	Solar Photovoltaic	SUN	PV
2017	7	56769	Consolidated Edison Development Inc.	IPP	CED Chicopee Solar	MA	61602	CSMA	3.0	Solar Photovoltaic	SUN	PV
2017	7	57319	Constellation Solar Massachusetts LLC	IPP	Smith & Wesson at Springfield MA PV	MA	61367	PV1	1.9	Solar Photovoltaic	SUN	PV
2017	7	5109	DTE Electric Company	Electric Utility	O'Shea Solar Farm	MI	60348	1	2.0	Solar Photovoltaic	SUN	PV
2017	7	60543	Dermott Wind, LLC	IPP	Dermott Wind	TX	60902	DERM	253.0	Onshore Wind Turbine	WND	WT
2017	7	60485	Dodge Holdco LLC	IPP	Dodge Holdco Solar	MN	60833	DODGE	5.0	Solar Photovoltaic	SUN	PV
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT004	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Combined Cycle	NC	58697	CT005	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	60491	Forest Lake Holdco LLC	IPP	Forest Lake Solar	MN	60837	FORES	5.0	Solar Photovoltaic	SUN	PV
2017	7	6909	Gainesville Regional Utilities	Electric Utility	South Energy Center	FL	56518	REG1	7.4	Natural Gas Internal Combustion Engine	NG	IC
2017	7	61021	Hecate Energy Clarke County, LLC	Electric Utility	Clarke Solar Power Facility	VA	61374	PV1	10.0	Solar Photovoltaic	SUN	PV
2017	7	60488	Hwy 14 Holdco LLC	IPP	Hwy 14 Holdco Solar	MN	60834	HWY14	5.0	Solar Photovoltaic	SUN	PV
2017	7	60598	Jacumba Solar, LLC	IPP	Jacumba Solar Farm	CA	60947	Q644A	20.0	Solar Photovoltaic	SUN	PV
2017	7	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 400A	CA	61348	W5691	2.3	Solar Photovoltaic	SUN	PV
2017	7	11208	Los Angeles Department of Water & Power	Electric Utility	Westmont 400B	CA	61349	W5694	2.2	Solar Photovoltaic	SUN	PV

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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	7	58822	MC Power Companies Inc	IPP	Chillicothe Solar Farm	MO	61223	CHSF1	2.5	Solar Photovoltaic	SUN	PV
2017	7	56941	Meadow Lake Wind Farm V LLC	IPP	Meadow Lake Wind Farm V LLC	IN	57628	GEN1	100.0	Onshore Wind Turbine	WND	WT
2017	7	12258	Medical Area Total Egv Pll Inc	Commercial	Medical Area Total Energy Plant	MA	10883	CT3	12.8	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	61155	NRG DG Crystal Spring LLC	IPP	NRG DG Crystal Spring	MA	61555	SPRIN	4.2	Solar Photovoltaic	SUN	PV
2017	7	61234	NRG DG Dighton LLC	IPP	NRG DG Dighton LLC	MA	61634	DIGHT	3.1	Solar Photovoltaic	SUN	PV
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG11	256.5	Natural Gas Fired Combined Cycle	NG	CT
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	CTG12	256.5	Natural Gas Fired Combined Cycle	NG	CT
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	EDG13	1.5	Natural Gas Internal Combustion Engine	NG	IC
2017	7	59534	Oregon Clean Energy Center	IPP	Oregon Clean Energy Center	OH	59764	STG10	334.6	Natural Gas Fired Combined Cycle	NG	CA
2017	7	17470	PUD 1 of Snohomish County	Electric Utility	MESA 2	WA	60021	MESA2	2.4	Batteries	MWH	BA
2017	7	58245	Patua Acquisition Company, LLC	IPP	Patua Geothermal Project Phase 1A	NV	58319	PV-01	10.6	Solar Photovoltaic	SUN	PV
2017	7	60859	Redbed Plains Wind Farm LLC	IPP	Redbed Plains Wind Farm	OK	61221	WT1	99.1	Onshore Wind Turbine	WND	WT
2017	7	60520	SoCore Energy LLC	IPP	Westar Cities Solar	KS	60956	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	7	60947	Tesla Inc.	IPP	BJ's Wholesale Club, Inc- Uxbridge	MA	60116	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	7	60947	Tesla Inc.	IPP	Onondaga County- Clearwater	NY	60462	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	7	60950	USPS LA Solar FIT A & B	Electric Utility	USPS PV	CA	61250	USPS1	10.7	Solar Photovoltaic	SUN	PV
2017	7	19724	Vanderbilt University	Commercial	Vanderbilt University Power Plant	TN	52048	GT1B	5.8	Natural Gas Fired Combustion Turbine	NG	GT
2017	7	60486	Webster Holdco LLC	IPP	Webster Holdco Solar	MN	60830	WEBST	5.0	Solar Photovoltaic	SUN	PV
2017	8	60248	Agilon Energy LLC	IPP	Port Comfort Power LLC	TX	60459	PC1	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	60248	Agilon Energy LLC	IPP	Port Comfort Power LLC	TX	60459	PC2	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	40577	American Mun Power-Ohio, Inc	Electric Utility	Smithland Hydroelectric Plant	KY	57400	SG3	25.3	Conventional Hydroelectric	WAT	HY
2017	8	60513	Bird Machine Solar Farm, LLC	IPP	Bird Machine Solar Farm	MA	60854	BROMA	4.6	Solar Photovoltaic	SUN	PV
2017	8	60409	Blue Summit Storage, LLC	IPP	Blue Summit Storage, LLC	TX	60690	WBSS	30.0	Batteries	MWH	BA
2017	8	60650	Brook Street Solar 1, LLC	IPP	Brook Street Solar 1	MA	61008	BROOK	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	Bizzell Church Solar 2	NC	61158	BIZZE	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	St. Pauls Solar 2	NC	61156	STPAU	5.0	Solar Photovoltaic	SUN	PV
2017	8	60865	CD Global Solar Holdings, LLC	IPP	ZV Solar 2, LLC	NC	61257	ZV204	4.9	Solar Photovoltaic	SUN	PV
2017	8	9776	City of Johnson - (KS)	Electric Utility	Johnson	KS	6579	CAT8	3.0	Petroleum Liquids	DFO	IC
2017	8	9776	City of Johnson - (KS)	Electric Utility	Johnson	KS	6579	CAT9	3.0	Petroleum Liquids	DFO	IC
2017	8	11017	City of Lincoln Center - (KS)	Electric Utility	Lincoln	KS	1300	8	1.8	Petroleum Liquids	DFO	IC
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC1	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC2	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	11701	City of Marquette - (MI)	Electric Utility	Marquette Energy Center	MI	60559	MEC3	16.7	Natural Gas Internal Combustion Engine	NG	IC
2017	8	61062	Denver Braswell	IPP	Denver Braswell PV	GA	61441	GPDB1	1.4	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG1	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG2	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG3	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG4	1.0	Solar Photovoltaic	SUN	PV
2017	8	61000	Equuleus Community Solar Gardens, LLC	IPP	Equuleus Community Solar Gardens	MN	61363	CSG5	1.0	Solar Photovoltaic	SUN	PV
2017	8	60921	Farley Road Solar, LLC	IPP	Farley Road Solar	MA	61294	02419	1.9	Solar Photovoltaic	SUN	PV
2017	8	59745	First Solar Asset Management	IPP	Playa Solar 2	NV	60261	GEN1	100.0	Solar Photovoltaic	SUN	PV
2017	8	60964	Hampton Solar I, LLC	IPP	Hampton Solar I	SC	61325	PGRB3	6.8	Solar Photovoltaic	SUN	PV
2017	8	61077	IGS ORIX Solar I, LLC	IPP	IOS - ERW9	NJ	61466	ERW9	5.3	Solar Photovoltaic	SUN	PV
2017	8	61077	IGS ORIX Solar I, LLC	IPP	Valdosta Prison	GA	61468	GPVP1	1.0	Solar Photovoltaic	SUN	PV
2017	8	12869	Monterey Regional Waste Mgmt	Commercial	Marina Landfill Gas	CA	10748	U3J16	0.9	Landfill Gas	LFG	IC
2017	8	61189	NRG DG Foxborough Elm LLC	IPP	NRG DG Foxborough Elm	MA	61590	FOXEL	2.0	Solar Photovoltaic	SUN	PV
2017	8	61231	NRG DG Tufts Knoll LLC	IPP	NRG DG Tufts Knoll LLC	MA	61635	KNOLL	2.0	Solar Photovoltaic	SUN	PV
2017	8	13511	New York State Elec & Gas Corp	Electric Utility	Harris Lake	NY	2528	2	2.3	Petroleum Liquids	DFO	IC
2017	8	60963	Odyssey Solar, LLC	IPP	Odyssey Solar	SC	61324	PGRB4	8.2	Solar Photovoltaic	SUN	PV
2017	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	3A	122.0	Conventional Hydroelectric	WAT	HY
2017	8	61061	Panasonic Battery Project	Electric Utility	Panasonic Carport Solar	CO	61439	PANBS	1.0	Batteries	MWH	BA
2017	8	60823	Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS1	0.9	Solar Photovoltaic	SUN	PV
2017	8	60823	Pegasus Community Solar	IPP	Pegasus Community Solar	MN	61175	CPCS2	0.9	Solar Photovoltaic	SUN	PV
2017	8	60916	SR Kersey, LLC	IPP	SR Kersey	CO	61314	KERS	3.5	Solar Photovoltaic	SUN	PV
2017	8	61090	San Luis Solar Garden LLC	IPP	San Luis Solar Garden	CO	61472	ANTO2	1.2	Solar Photovoltaic	SUN	PV
2017	8	60163	Soltage LLC	IPP	231 Dixon 74 Solar I, LLC	NC	61195	DIXON	2.0	Solar Photovoltaic	SUN	PV
2017	8	60593	Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS1	0.9	Solar Photovoltaic	SUN	PV
2017	8	60593	Spica Community Solar	IPP	Spica Community Solar	MN	60943	MSCS2	0.9	Solar Photovoltaic	SUN	PV
2017	8	60073	St. Matthews Solar, LLC	IPP	St. Matthews Solar	SC	60293	PV1	4.9	Solar Photovoltaic	SUN	PV
2017	8	60947	Tesla Inc.	IPP	CMEEC - Polaris Park Solar	CT	60607	BA1	0.8	Batteries	MWH	BA
2017	8	60947	Tesla Inc.	IPP	CMEEC - Polaris Park Solar	CT	60607	PV1	3.5	Solar Photovoltaic	SUN	PV
2017	8	60947	Tesla Inc.	IPP	Pima Community College	AZ	61104	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	8	61190	Town of Foxborough - Landfill (SREC II)	IPP	Town of Foxborough - Landfill (SREC II)	MA	61591	FOXLA	1.2	Solar Photovoltaic	SUN	PV
2017	9	60863	ACE-Stanton A, LLC	IPP	ACE-Stanton A PV	FL	61247	ASA1	4.1	Solar Photovoltaic	SUN	PV
2017	9	60862	ACE-Stanton, LLC	IPP	ACE-Stanton PV	FL	61246	ASLF1	4.8	Solar Photovoltaic	SUN	PV
2017	9	60587	Antlia Community Solar	IPP	Antlia Community Solar	MN	60937	IACS1	0.9	Solar Photovoltaic	SUN	PV
2017	9	60587	Antlia Community Solar	IPP	Antlia Community Solar	MN	60937	IACS2	0.9	Solar Photovoltaic	SUN	PV

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

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	9	796	Arizona Electric Pwr Coop Inc	Electric Utility	SunAnza	CA	60791	ANZA1	2.0	Solar Photovoltaic	SUN	PV
2017	9	60489	Big Lake Holdco LLC	IPP	Big Lake Holdco Solar	MN	60836	BLAKE	5.0	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Ayrshire	NC	58792	PV1	19.4	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Boaz Farm Solar	NC	61157	BOAZF	5.0	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Haywood Farm Solar, LLC	NC	61255	HAY02	4.9	Solar Photovoltaic	SUN	PV
2017	9	60865	CD Global Solar Holdings, LLC	IPP	Hood Farm Solar, LLC	NC	61256	HOF05	4.9	Solar Photovoltaic	SUN	PV
2017	9	60589	Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	9	60589	Centaurus Community Solar	IPP	Centaurus Community Solar	MN	60939	KCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	9	58519	Clean Energy Collective LLC	IPP	Arapahoe 3 Community Solar Array	CO	60724	ARAP3	1.8	Solar Photovoltaic	SUN	PV
2017	9	58519	Clean Energy Collective LLC	IPP	Xcel Adams 1 Community Solar Array	CO	60726	ADCO1	1.8	Solar Photovoltaic	SUN	PV
2017	9	60990	Cline Solar, LLC	IPP	Cline Solar Farm, LLC	NC	59929	NB007	4.9	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Ajax Solar	NC	60288	PV1	4.9	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Daystar Solar	NC	60179	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Long Henry Solar	NC	61347	GEN1	2.0	Solar Photovoltaic	SUN	PV
2017	9	61060	Cypress Creek Renewables	IPP	Scarlet Solar	NC	60921	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Black Eagle Solar, LLC	MT	61336	BESMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Great Divide Solar, LLC	MT	61335	GDSMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60496	Enerparc Inc.	IPP	Maggie Solar, LLC	MT	61337	MSMT	3.0	Solar Photovoltaic	SUN	PV
2017	9	60690	Foundation CA Fund VIII Manager, LLC	IPP	Foundation Scheid Vineyards	CA	61067	WTG1	1.9	Onshore Wind Turbine	WIND	WT
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGC51	0.9	Solar Photovoltaic	SUN	PV
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGC52	0.9	Solar Photovoltaic	SUN	PV
2017	9	60590	Gemini Community Solar	IPP	Gemini Community Solar	MN	60940	LGC53	0.9	Solar Photovoltaic	SUN	PV
2017	9	60917	Golden Hills Solar, LLC	IPP	Golden Hills Solar	MA	61315	02196	4.7	Solar Photovoltaic	SUN	PV
2017	9	60926	Hatfield Renewables, LLC	IPP	Hatfield Renewables	MA	61299	02599	1.9	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Decatur Co. Solar RES (IN)	IN	59988	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Jackson Co. Solar RES	IN	59989	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	9267	Hoosier Energy R E C, Inc	Electric Utility	Spring Mill Solar RES	IN	59987	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	9	60303	Innovative Solar 42, LLC	IPP	Innovative Solar 42	NC	60539	IS042	71.0	Solar Photovoltaic	SUN	PV
2017	9	9417	Interstate Power and Light Co	Electric Utility	West Dubuque Solar	IA	60951	PV1	3.8	Solar Photovoltaic	SUN	PV
2017	9	58822	MC Power Companies Inc	IPP	BPU Solar Farm	KS	61313	BPU1	1.0	Solar Photovoltaic	SUN	PV
2017	9	58822	MC Power Companies Inc	IPP	Lebanon Solar Farm (MO)	MO	61135	LSF1	2.5	Solar Photovoltaic	SUN	PV
2017	9	61040	Moorings Farm 2, LLC	IPP	Moorings Farm 2	NC	61405	1	5.0	Solar Photovoltaic	SUN	PV
2017	9	56990	NJR Clean Energy Ventures Corporation	IPP	Princeton Solar Project	NJ	61354	STONY	2.5	Solar Photovoltaic	SUN	PV
2017	9	61151	NRG DG Haverhill LLC	IPP	NRG DG Haverhill	MA	61550	HAYER	4.2	Solar Photovoltaic	SUN	PV
2017	9	60363	NRG Solar Mule, LLC	IPP	NRG Solar Mule, LLC	ME	60640	COLBY	1.5	Solar Photovoltaic	SUN	PV
2017	9	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT1	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	9	61058	One Ten Partner, LLC	IPP	One Ten Partners PV	CA	61419	OTP	2.0	Solar Photovoltaic	SUN	PV
2017	9	60925	Pleasantdale Road Solar, LLC	IPP	Pleasantdale Road Solar	MA	61298	02112	1.0	Solar Photovoltaic	SUN	PV
2017	9	56424	Quilt Block Wind Farm LLC	IPP	Quilt Block Wind Farm LLC	WI	57116	GEN 1	98.0	Onshore Wind Turbine	WIND	WT
2017	9	59999	Rocksprings Val Verde Wind, LLC	IPP	Rocksprings	TX	60217	RKSP	149.3	Onshore Wind Turbine	WIND	WT
2017	9	58661	Sustainable Power Group, LLC	IPP	Aspiration G	CA	59737	ASPRG	9.0	Solar Photovoltaic	SUN	PV
2017	9	58661	Sustainable Power Group, LLC	IPP	Central Antelope Dry Ranch B LLC	CA	60281	CADRB	3.0	Solar Photovoltaic	SUN	PV
2017	9	60924	Upton Solar, LLC	IPP	Upton Solar	MA	61297	02567	2.0	Solar Photovoltaic	SUN	PV
2017	9	60059	ZGlobal Inc	IPP	Valencia 1 Solar CA	CA	61418	VAL1	3.0	Solar Photovoltaic	SUN	PV
2017	10	60248	Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH1	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	60248	Agilon Energy LLC	IPP	Chamon Power LLC	TX	60460	CH2	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60828	Andromeda Community Solar	IPP	Andromeda Community Solar	MN	61181	OACS5	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60588	Aries Community Solar	IPP	Aries Community Solar	MN	60938	AACS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	796	Arizona Electric Pwr Coop Inc	Electric Utility	Apache Solar 1	AZ	80964	AEP51	20.0	Solar Photovoltaic	SUN	PV
2017	10	15399	Avangrid Renewables LLC	IPP	Gala Solar	OR	61048	PV1	56.0	Solar Photovoltaic	SUN	PV
2017	10	60829	Caelum Community Solar	IPP	Caelum Community Solar	MN	61180	PCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60829	Caelum Community Solar	IPP	Caelum Community Solar	MN	61180	PCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60826	Capella Community Solar	IPP	Capella Community Solar	MN	61178	HCCS5	0.9	Solar Photovoltaic	SUN	PV
2017	10	58998	Chapman Ranch Wind LLC	IPP	Chapman Ranch Wind I	TX	59193	CHA1	236.0	Onshore Wind Turbine	WIND	WT
2017	10	7294	City of Glendale - (CA)	Electric Utility	Glendale Battery Energy Storage System	CA	60974	2BESS	2.0	Batteries	MWH	BA
2017	10	58519	Clean Energy Collective LLC	IPP	Logan 1 Community Solar Array	CO	60722	LOGA1	1.7	Solar Photovoltaic	SUN	PV

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

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	10	58519	Clean Energy Collective LLC	IPP	Weld 1 Community Solar Array	CO	60720	WELD1	1.5	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Bear Creek Solar	NC	61361	GEN1	2.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Lillington Solar	NC	59921	5MWPV	5.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Ruskin Solar	NC	60922	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	10	61060	Cypress Creek Renewables	IPP	Viper Solar	NC	60920	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	10	58970	Ecoplexus, Inc	IPP	Fiat Meeks PV 1	NC	59514	FLAT1	5.0	Solar Photovoltaic	SUN	PV
2017	10	59745	First Solar Asset Management	IPP	Playa Solar	NV	58827	GEN01	79.0	Solar Photovoltaic	SUN	PV
2017	10	61237	Golden Renewable Energy, LLC	Electric CHP	Golden Renewable Energy, LLC	IA	61632	GREMC	4.3	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	60326	Hattiesburg Farm, LLC	IPP	Hattiesburg Solar Farm	MS	60552	HATTI	50.0	Solar Photovoltaic	SUN	PV
2017	10	19558	Homer Electric Assn Inc	Electric Utility	Selovia	AK	6283	7	1.0	Petroleum Liquids	DFO	IC
2017	10	58489	OCI Solar Power	IPP	Pearl Solar	TX	60682	PEARL	50.0	Solar Photovoltaic	SUN	PV
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W1	1.5	Onshore Wind Turbine	WND	WT
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W2	1.5	Onshore Wind Turbine	WND	WT
2017	10	60645	OEE XXIII LLC	Industrial	Whirlpool Corporation - Marion Wind Farm	OH	61005	W3	1.5	Onshore Wind Turbine	WND	WT
2017	10	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT2	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT3	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	10	15257	Poudre Valley REA, Inc	Electric Utility	Coyote Ridge Community Solar	CO	61425	COYCS	1.5	Solar Photovoltaic	SUN	PV
2017	10	60125	Providence Solar Center, LLC	IPP	Providence Solar	TN	60337	PROV	16.0	Solar Photovoltaic	SUN	PV
2017	10	60649	Redbrook Solar 1, LLC	IPP	Redbrook Community Solar 1	MA	61007	REDBR	4.0	Solar Photovoltaic	SUN	PV
2017	10	60648	SCDA Solar 1, LLC	IPP	SCDA Solar 1	CA	61006	SCAIR	7.0	Solar Photovoltaic	SUN	PV
2017	10	60163	Soltage LLC	IPP	Mill Pond Solar Farm, LLC	NC	61196	MILL	5.0	Solar Photovoltaic	SUN	PV
2017	10	60947	Tesla Inc.	IPP	Oneida County- DPW	NY	60114	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS1	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS2	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS3	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS4	0.9	Solar Photovoltaic	SUN	PV
2017	10	60594	Vega Community Solar	IPP	Vega Community Solar	MN	60944	NVCS5	0.9	Solar Photovoltaic	SUN	PV
2017	10	19876	Virginia Electric & Power Co	Electric Utility	Remington Solar Facility	VA	59685	01	20.0	Solar Photovoltaic	SUN	PV
2017	11	60571	AEP Onsite Partners	IPP	San Luis Valley Solar Array	CO	61605	1	2.7	Solar Photovoltaic	SUN	PV
2017	11	60281	Altus Power America Management, LLC	IPP	DDR Shoppers World	MA	60754	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	60692	Ameresco BWC Wading River LLC	IPP	BWC Wading River One, Two, Three	MA	61069	62381	3.0	Solar Photovoltaic	SUN	PV
2017	11	60541	Ameresco Glendale Road Solar PV LLC	IPP	Northampton Landfill Solar PV	MA	60908	62380	2.4	Solar Photovoltaic	SUN	PV
2017	11	60456	Apple Blossom Wind, LLC	IPP	Apple Blossom Wind Farm	MI	58690	APLB1	100.0	Onshore Wind Turbine	WND	WT
2017	11	58574	Canton Mountain Wind LLC	IPP	Canton Mountain Wind	ME	58620	1	22.8	Onshore Wind Turbine	WND	WT
2017	11	58519	Clean Energy Collective LLC	IPP	Conejos 1 Community Solar Array	CO	60723	CONEJ	1.5	Solar Photovoltaic	SUN	PV
2017	11	59007	Clipperton Holdings LLC	IPP	Clipperton Holdings	NC	59213	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	11	61032	Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Swainsboro	GA	61459	PV1	2.9	Solar Photovoltaic	SUN	PV
2017	11	61042	Cottonwood Wind Project	IPP	Cottonwood Wind Energy Center	NE	61407	CTNWD	89.7	Onshore Wind Turbine	WND	WT
2017	11	58468	Dominion Renewable Energy	IPP	Buckingham Solar LLC	VA	60917	PV1	19.8	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	Electric Utility	Cherrydale Solar Power Facility	VA	61375	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	IPP	Sappony Solar LLC	VA	60916	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	11	58468	Dominion Renewable Energy	IPP	Southampton Solar, LLC	VA	61422	PV1	100.0	Solar Photovoltaic	SUN	PV
2017	11	6455	Duke Energy Florida, LLC	Electric Utility	Suwannee Solar Facility	FL	60788	XXXXX	8.8	Solar Photovoltaic	SUN	PV
2017	11	5680	East Kentucky Power Coop, Inc	Electric Utility	Cooperative Solar One	KY	60863	PV1	8.6	Solar Photovoltaic	SUN	PV
2017	11	60734	Elizabeth Mines Solar 1, LLC	IPP	Elizabeth Mines Solar 1	VT	61124	EMS1	5.0	Solar Photovoltaic	SUN	PV
2017	11	59380	Enel Green Power NA, Inc.	IPP	Rock Creek Wind Project	MO	60655	WT1	300.0	Onshore Wind Turbine	WND	WT
2017	11	59745	First Solar Asset Management	IPP	CA Flats Solar 130, LLC	CA	60033	GEN01	130.0	Solar Photovoltaic	SUN	PV
2017	11	59745	First Solar Asset Management	IPP	Cuyama Solar, LLC	CA	60043	GEN01	40.0	Solar Photovoltaic	SUN	PV
2017	11	60042	Fluvanna Wind Energy LLC	IPP	Fluvanna	TX	59245	FLUV1	155.4	Onshore Wind Turbine	WND	WT
2017	11	58909	Fremont Farm LLC	IPP	Fremont Farm	NC	59103	1	5.0	Solar Photovoltaic	SUN	PV
2017	11	60811	Golden Hills Interconnection Wind, LLC	IPP	Golden Hills North Wind Energy Center	CA	61222	1	46.0	Onshore Wind Turbine	WND	WT
2017	11	60739	Gulf Coast Solar Center II (CA)	IPP	Gulf Coast Solar Center II	FL	59690	GCSC2	40.0	Solar Photovoltaic	SUN	PV
2017	11	60740	Gulf Coast Solar Center III (CA)	IPP	Gulf Coast Solar Center III	FL	59691	GCSC3	50.0	Solar Photovoltaic	SUN	PV
2017	11	11208	Los Angeles Department of Water & Power	Commercial	Westmont 301	CA	61593	W5791	1.2	Solar Photovoltaic	SUN	PV
2017	11	11208	Los Angeles Department of Water & Power	Commercial	Westmont 401	CA	61594	W5792	2.0	Solar Photovoltaic	SUN	PV
2017	11	58822	MC Power Companies Inc	IPP	Higginsville Solar Farm	MO	61316	HSP1	2.5	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42278	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42279	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42280	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42281	1.0	Solar Photovoltaic	SUN	PV
2017	11	61075	Minnesota Solar CSG 19, LLC	IPP	B.R. Corcoran	MN	61453	42282	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42286	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42287	1.0	Solar Photovoltaic	SUN	PV
2017	11	61074	Minnesota Solar CSG 21, LLC	IPP	B.R. Sartell	MN	61454	42288	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41620	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41621	1.0	Solar Photovoltaic	SUN	PV
2017	11	61076	Minnesota Solar CSG 4, LLC	IPP	Montgomery Winsted	MN	61456	41622	1.0	Solar Photovoltaic	SUN	PV

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

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	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42292	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42294	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42295	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42296	1.0	Solar Photovoltaic	SUN	PV
2017	11	61073	Minnesota Solar CSG 9, LLC	IPP	B.R. Sauk Rapids	MN	61455	42297	1.0	Solar Photovoltaic	SUN	PV
2017	11	54888	NRG Texas Power LLC	IPP	NRG Elbow Creek Energy Storage Project	TX	61362	ECBS	2.0	Batteries	MWH	BA
2017	11	60398	Nixa Solar, LLC	IPP	Nixa Solar, LLC	MO	60673	NIXA	7.9	Solar Photovoltaic	SUN	PV
2017	11	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT4	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	11	61039	Pikeville Farm, LLC	IPP	Pikeville Farm	NC	61404	1	5.0	Solar Photovoltaic	SUN	PV
2017	11	61081	SR Platte	IPP	SR Platte Solar Farm	CO	61462	PV1	16.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	GRE Marshan Solar	MN	60935	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	Sand Lake DPC Solar	WI	60957	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	Strawberry Point DPC Solar	IA	60955	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	60520	SoCore Energy LLC	IPP	VEC Magee Hill Solar	VT	60954	PV1	1.3	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP1	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP2	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP3	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP4	1.0	Solar Photovoltaic	SUN	PV
2017	11	61016	SunE Koppelman 1, LLC	IPP	Koppelman Sun	MN	61381	KOPP5	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG1	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG2	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG3	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG4	1.0	Solar Photovoltaic	SUN	PV
2017	11	61018	SunE Rengstorf 1, LLC	IPP	Rengstorf Solar	MN	61383	RENG5	1.0	Solar Photovoltaic	SUN	PV
2017	11	60947	Tesla Inc.	IPP	Montgomery County Correctional Facility	MD	60820	PV1	1.4	Solar Photovoltaic	SUN	PV
2017	11	60947	Tesla Inc.	IPP	Onondaga County - Oak Orchard WWTP	NY	60098	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	11	57341	Veolia Energy	Electric CHP	Univ Minnesota CHP Plant	MN	59197	CTG-1	17.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	11	61072	Waterford Holdco LLC	IPP	Waterford Holdco	MN	61452	WATER	2.7	Solar Photovoltaic	SUN	PV
2017	11	60542	Willow Springs Windfarm, LLC	IPP	Willow Springs Wind Farm	TX	60901	WSPWF	250.0	Onshore Wind Turbine	WIND	WT
2017	12	60277	54 KR 8me LLC	IPP	Redwood 4 Solar Farm	CA	60490	RW4SF	20.0	Solar Photovoltaic	SUN	PV
2017	12	60571	AEP Onsite Partners	IPP	Camden CSD Solar Array	NY	61604	1	1.8	Solar Photovoltaic	SUN	PV
2017	12	60571	AEP Onsite Partners	IPP	Vilas Solar Array	CO	61606	1	4.0	Solar Photovoltaic	SUN	PV
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509	MONA	1.7	Solar Photovoltaic	SUN	PV
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites A & B	NY	61509	MONB	1.7	Solar Photovoltaic	SUN	PV
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MONC	2.0	Solar Photovoltaic	SUN	PV
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MOND	2.0	Solar Photovoltaic	SUN	PV
2017	12	61012	AES Distributed Energy	IPP	Monroe County Sites C, D, & E	NY	61510	MONE	2.0	Solar Photovoltaic	SUN	PV
2017	12	60347	AL Solar A, LLC	IPP	LaFayette Solar Farm	AL	60583	PV1	79.2	Solar Photovoltaic	SUN	PV
2017	12	221	Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	1	0.8	Petroleum Liquids	DFO	IC
2017	12	15399	Avangrid Renewables LLC	IPP	Deerfield Wind LLC	VT	61039	WT1	30.0	Onshore Wind Turbine	WIND	WT
2017	12	15399	Avangrid Renewables LLC	IPP	El Cabo Wind	NM	58098	1	298.0	Onshore Wind Turbine	WIND	WT
2017	12	15399	Avangrid Renewables LLC	IPP	Tule Wind LLC	CA	57913	1	143.0	Onshore Wind Turbine	WIND	WT
2017	12	15399	Avangrid Renewables LLC	IPP	Twin Buttes II Wind	CO	61040	WT1	75.0	Onshore Wind Turbine	WIND	WT
2017	12	60730	Bakersfield Industrial PV 1, LLC	IPP	Bakersfield Industrial PV 1	CA	61118	BIND1	1.0	Solar Photovoltaic	SUN	PV
2017	12	60729	Bakersfield PV 1, LLC	IPP	Bakersfield PV 1	CA	61117	BAKE1	5.3	Solar Photovoltaic	SUN	PV
2017	12	60746	Bedford Solar, LLC	IPP	Bedford Solar	VA	61126	12346	3.0	Solar Photovoltaic	SUN	PV
2017	12	58190	Bluestem LLC	IPP	Seward Wind Farm	NE	61056	T1	1.7	Onshore Wind Turbine	WIND	WT
2017	12	60944	Bluff Point Wind, LLC	IPP	Bluff Point Wind Facility	IN	61303	BLUFF	119.7	Onshore Wind Turbine	WIND	WT
2017	12	60617	Buckthorn Wind Project, LLC	IPP	Buckthorn Wind Project	TX	60983	BWIND	100.5	Onshore Wind Turbine	WIND	WT
2017	12	60865	CD Global Solar Holdings, LLC	IPP	Beacon Solar Plant Site 2	CA	59309	BEAC2	45.0	Solar Photovoltaic	SUN	PV
2017	12	60865	CD Global Solar Holdings, LLC	IPP	Beacon Solar Plant Site 5	CA	59308	BEAC5	36.0	Solar Photovoltaic	SUN	PV
2017	12	61096	Cameron Solar, LLC	IPP	Cameron Solar	SC	61489	CAM	20.0	Solar Photovoltaic	SUN	PV
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT1	197.3	Natural Gas Fired Combined Cycle	NG	CT
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	CGT2	197.3	Natural Gas Fired Combined Cycle	NG	CT
2017	12	59541	Carroll County Energy LLC	Electric CHP	Carroll County Energy	OH	59773	SGT1	288.0	Natural Gas Fired Combined Cycle	NG	CA
2017	12	61127	Champion Solar, LLC	IPP	Champion Solar	SC	61522	PGRD3	10.8	Solar Photovoltaic	SUN	PV
2017	12	60609	Clean Focus Renewables, Inc.	IPP	Klamath Falls Solar 2	OR	61553	1	2.9	Solar Photovoltaic	SUN	PV
2017	12	60609	Clean Focus Renewables, Inc.	IPP	Xcel Adams 2 Community Solar Array	CO	60725	ADCO2	1.5	Solar Photovoltaic	SUN	PV
2017	12	60795	Columbus Solar Project	IPP	Columbus Solar Project	NM	61165	88029	1.9	Solar Photovoltaic	SUN	PV
2017	12	56769	Consolidated Edison Development Inc.	IPP	CED Foster	RI	61499	FOR1	2.0	Solar Photovoltaic	SUN	PV
2017	12	56769	Consolidated Edison Development Inc.	IPP	Upton County Solar	TX	60581	UCTX	150.0	Solar Photovoltaic	SUN	PV
2017	12	61032	Constellation Solar Georgia 2, LLC	IPP	Georgia Power at Jakin GA PV	GA	61397	PV1	1.5	Solar Photovoltaic	SUN	PV
2017	12	60380	Cork Oak Solar LLC	IPP	Cork Oak Solar	NC	60637	NC160	26.2	Solar Photovoltaic	SUN	PV
2017	12	58695	Coronal Development Services	IPP	Essex Solar Center	VA	61406	ESSEX	20.0	Solar Photovoltaic	SUN	PV
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS1	0.9	Solar Photovoltaic	SUN	PV
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS2	0.9	Solar Photovoltaic	SUN	PV
2017	12	60967	Crater Community Solar	IPP	Crater Community Solar	MN	61328	TCCS3	0.9	Solar Photovoltaic	SUN	PV

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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	61060	Cypress Creek Renewables	IPP	ABD Farms	NC	61525	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Auten Road Farm, LLC	NC	60634	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bakatsias Solar	NC	61527	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bayboro Solar Farm	NC	61528	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bladen Solar	NC	61561	GEN1	50.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bladen Solar Farm	NC	60296	PV1	4.9	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bondi Solar	NC	61352	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Bullock Solar, LLC	NC	61512	GEN1	50.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar CSG Gardens Eleven, LLC	MN	61549	GEN1	3.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar CSG Gardens Five, LLC	MN	61543	GEN1	3.4	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar CSG Gardens Seven, LLC	MN	61548	GEN1	3.3	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	CF Novel Solar CSG Gardens Two, LLC	MN	61546	GEN1	1.8	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	CGSun, LLC	MN	61545	GEN1	4.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Estill Solar II	SC	61529	GEN1	10.2	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Highway 56 Solar	TX	61409	GEN1	5.3	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Innovative Solar 55	NC	59676	IS044	6.5	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Leon Solar	TX	61532	GEN1	10.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Marlin Solar	TX	61513	GEN1	5.3	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Next Generation Solar Farm	VT	61340	NGSF1	2.2	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	North Gainesville Solar	TX	61514	GEN1	5.2	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Old Caroleen Solar Farm	NC	61534	GEN1	2.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	PopeSun CSG, LLC	MN	61542	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Shoe Creek Solar, LLC	NC	60380	SCSPV	5.2	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Statesville Solar	NC	61535	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Wakefield Solar	NC	61536	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Whitesboro Solar	TX	61410	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Whitesboro Solar II	TX	61411	GEN1	5.0	Solar Photovoltaic	SUN	PV
2017	12	61060	Cypress Creek Renewables	IPP	Whitewright Solar	TX	61524	GEN1	10.0	Solar Photovoltaic	SUN	PV
2017	12	61113	DG Camden, LLC	IPP	DG Camden LLC Holtec	NJ	61515	HOLTC	2.2	Solar Photovoltaic	SUN	PV
2017	12	60728	Delano Land 1, LLC	IPP	Delano Land 1	CA	61116	DEL1A	1.0	Solar Photovoltaic	SUN	PV
2017	12	61163	Denver Metro Solar LLC	IPP	Denver Metro Solar	CO	61563	53962	1.6	Solar Photovoltaic	SUN	PV
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG1	1.0	Solar Photovoltaic	SUN	PV
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG2	1.0	Solar Photovoltaic	SUN	PV
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG3	1.0	Solar Photovoltaic	SUN	PV
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG4	1.0	Solar Photovoltaic	SUN	PV
2017	12	61014	DodgeSun, LLC	IPP	DodgeSun	MN	61379	DODG5	1.0	Solar Photovoltaic	SUN	PV
2017	12	58468	Dominion Renewable Energy	IPP	Correctional Solar LLC	VA	60915	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	12	58468	Dominion Renewable Energy	IPP	Scott-II Solar LLC	VA	60968	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Crittenden Solar Facility	KY	61310	PV1	2.7	Solar Photovoltaic	SUN	PV
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Walton 1 Solar Facility	KY	61311	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	12	55729	Duke Energy Kentucky Inc	Electric Utility	Walton 2 Solar Facility	KY	61312	PV1	2.0	Solar Photovoltaic	SUN	PV
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Bruennings Breeze Wind Farm	TX	59066	MV11	228.0	Onshore Wind Turbine	WND	WT
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Inadale Wind Farm LLC	TX	58984	INABT	9.8	Batteries	MWH	BA
2017	12	56215	E ON Climate Renewables N America LLC	IPP	Radfords Run Wind Farm	IL	59061	WT1	278.0	Onshore Wind Turbine	WND	WT
2017	12	57170	EDF Renewable Asset Holdings, Inc.	IPP	Red Pine Wind Project	MN	61357	RP1	200.0	Onshore Wind Turbine	WND	WT
2017	12	57170	EDF Renewable Asset Holdings, Inc.	IPP	Rock Falls Wind Farm LLC	OK	61261	RF1	154.5	Onshore Wind Turbine	WND	WT
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 3, LLC	OR	61201	ORSR3	10.0	Solar Photovoltaic	SUN	PV
2017	12	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 6, LLC	OR	61430	PV6	10.0	Solar Photovoltaic	SUN	PV
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	0000B	3.3	Solar Photovoltaic	SUN	PV
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	KRAM2	1.0	Solar Photovoltaic	SUN	PV
2017	12	60901	ETCAP NES CS MN 12 LLC	IPP	Kramer Solar	MN	61058	KRAM3	1.0	Solar Photovoltaic	SUN	PV
2017	12	58970	Ecoplexus, Inc	IPP	American Legion PV 1	NC	59516	AMLEG	16.0	Solar Photovoltaic	SUN	PV
2017	12	58970	Ecoplexus, Inc	IPP	Vaughn Creek PV1	NC	60001	VNCRK	20.0	Solar Photovoltaic	SUN	PV
2017	12	61097	Estill Solar I, LLC	IPP	Estill Solar	SC	61490	EST1	20.0	Solar Photovoltaic	SUN	PV
2017	12	60348	FL Solar 1, LLC	IPP	CoTAL Solar Farm	FL	60582	PV1	20.0	Solar Photovoltaic	SUN	PV
2017	12	60690	Foundation CA Fund VIII Manager, LLC	IPP	Foundation CDCR LAC	CA	61066	WTG1	1.9	Onshore Wind Turbine	WND	WT
2017	12	61194	Generate Capital	IPP	MontiSun	MN	61586	1	1.0	Solar Photovoltaic	SUN	PV
2017	12	61194	Generate Capital	IPP	WaveSun	MN	61587	1	1.0	Solar Photovoltaic	SUN	PV
2017	12	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3CT	324.6	Natural Gas Fired Combined Cycle	NG	CT
2017	12	7490	Grand River Dam Authority	Electric Utility	GREC	OK	165	3ST	191.8	Natural Gas Fired Combined Cycle	NG	CA
2017	12	61124	Great Valley Solar Portfolio Holdings, LLC	IPP	Great Valley Solar Portfolio Holdings, LLC	CA	59940	GV52	60.0	Solar Photovoltaic	SUN	PV
2017	12	61124	Great Valley Solar Portfolio Holdings, LLC	IPP	Great Valley Solar Portfolio Holdings, LLC	CA	59940	GV53	20.0	Solar Photovoltaic	SUN	PV
2017	12	61124	Great Valley Solar Portfolio Holdings, LLC	IPP	Great Valley Solar Portfolio Holdings, LLC	CA	59940	GV54	20.0	Solar Photovoltaic	SUN	PV
2017	12	59978	HXNAir Solar One LLC	IPP	HXNAir Solar One	NC	60209	HXNAI	5.0	Solar Photovoltaic	SUN	PV
2017	12	61128	Haley Solar, LLC	IPP	Haley Solar	SC	61523	PGRD1	8.2	Solar Photovoltaic	SUN	PV
2017	12	61095	Hampton Solar II, LLC	IPP	Hampton Solar 2	SC	61498	HAM2	20.0	Solar Photovoltaic	SUN	PV
2017	12	59462	Heelstone Energy Holdings, LLC	IPP	Davis Lane Solar, LLC	NC	61581	DAVIS	5.0	Solar Photovoltaic	SUN	PV

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

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	59462	Heelstone Energy Holdings, LLC	IPP	Tumbleweed Solar, LLC	OR	61580	TUMBL	9.9	Solar Photovoltaic	SUN	PV
2017	12	60969	Hog Creek Wind Project LLC	IPP	Hog Creek Wind Project	OH	61330	WT1	66.0	Onshore Wind Turbine	WND	WT
2017	12	57389	IKEA Property Inc	IPP	IKEA Grand Prairie Rooftop PV System	TX	61309	PV1	1.1	Solar Photovoltaic	SUN	PV
2017	12	57389	IKEA Property Inc	Commercial	IKEA Joliet Rooftop PV System	IL	61192	PV	2.0	Solar Photovoltaic	SUN	PV
2017	12	9234	Indiana Municipal Power Agency	Electric Utility	Greenfield Solar Park	IN	61053	SGREE	2.8	Solar Photovoltaic	SUN	PV
2017	12	9234	Indiana Municipal Power Agency	Electric Utility	IMPA Anderson Solar Park 2	IN	61054	SAND2	8.1	Solar Photovoltaic	SUN	PV
2017	12	49893	Invernergy Services LLC	IPP	Santa Rita Wind Energy	TX	60987	GEN1	300.0	Onshore Wind Turbine	WND	WT
2017	12	60470	Jersey Holdings LLC	IPP	Jersey Holdings	NC	60784	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	12	60461	LSDP 11, LLC	IPP	Deerfield Solar	MA	60775	PV1	6.0	Solar Photovoltaic	SUN	PV
2017	12	61028	LSE Cassiopeia LLC	IPP	Ashby Duffy Solar Farm	MA	61399	DU183	1.8	Solar Photovoltaic	SUN	PV
2017	12	60099	MS Solar 3, LLC	IPP	Sumrall II Solar Farm	MS	60303	SUM2	52.0	Solar Photovoltaic	SUN	PV
2017	12	60727	Manteca Land PV, LLC	IPP	Manteca Land PV	CA	61115	MANT1	1.0	Solar Photovoltaic	SUN	PV
2017	12	61158	Martin Solar Center, LLC	IPP	Martin Solar Center	VA	61458	MARTN	5.0	Solar Photovoltaic	SUN	PV
2017	12	12341	MidAmerican Energy Co	Electric Utility	Beaver Creek Wind	IA	61079	1	170.0	Onshore Wind Turbine	WND	WT
2017	12	60392	Moffett Solar 1, LLC	IPP	Moffett Solar Project	SC	60658	PV1	69.5	Solar Photovoltaic	SUN	PV
2017	12	61156	NMRD Data Center, LLC	IPP	Facebook 1 Solar Energy Center	NM	61556	FB1	10.0	Solar Photovoltaic	SUN	PV
2017	12	61232	NRG DG Webster LLC	IPP	NRG DG Webster LLC	MA	61636	WEBST	1.3	Solar Photovoltaic	SUN	PV
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	1	1.0	Petroleum Liquids	DFO	IC
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	2	1.0	Petroleum Liquids	DFO	IC
2017	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	3	1.0	Petroleum Liquids	DFO	IC
2017	12	61071	Northfield Holdco LLC	IPP	Northfield Holdco	MN	61451	NORTH	5.0	Solar Photovoltaic	SUN	PV
2017	12	61161	Norwest Energy 7, LLC	IPP	Eagle Point Solar	OR	61560	PGRD4	9.9	Solar Photovoltaic	SUN	PV
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT5	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT6	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Mustang	OK	2953	GT7	57.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	12	61159	Palmer Solar Center, LLC	IPP	Palmer Solar Center	VA	61457	PALM	5.0	Solar Photovoltaic	SUN	PV
2017	12	58109	President & Trustees of Williams College	Commercial	Williams College - Campus CHP	MA	58160	GEN4	2.0	Petroleum Liquids	DFO	IC
2017	12	58109	President & Trustees of Williams College	Commercial	Williams College - Campus CHP	MA	58160	GEN5	2.0	Petroleum Liquids	DFO	IC
2017	12	61093	SL Babylon, LLC	IPP	SL Babylon	NY	61487	SLBAB	9.0	Solar Photovoltaic	SUN	PV
2017	12	60978	SP Solar 5, LLC	IPP	Mill Creek Solar (OR)	OR	61338	PGRC1	2.2	Solar Photovoltaic	SUN	PV
2017	12	60919	Sampson Road Solar, LLC	IPP	Sampson Road Solar	MA	61308	02696	2.0	Solar Photovoltaic	SUN	PV
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV1	1.0	Solar Photovoltaic	SUN	PV
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV2	1.0	Solar Photovoltaic	SUN	PV
2017	12	60520	SoCore Energy LLC	IPP	Michael Solar	MN	60971	PV3	1.0	Solar Photovoltaic	SUN	PV
2017	12	60520	SoCore Energy LLC	IPP	New Auburn DPC Solar	WI	60936	PV1	2.5	Solar Photovoltaic	SUN	PV
2017	12	60520	SoCore Energy LLC	IPP	Richmond CSG	MN	61427	PV1	5.0	Solar Photovoltaic	SUN	PV
2017	12	60163	Soltage LLC	IPP	Barker Solar, LLC	NC	61194	BARK	5.0	Solar Photovoltaic	SUN	PV
2017	12	60163	Soltage LLC	IPP	Broadridge Solar, LLC	NC	61218	BROAD	5.0	Solar Photovoltaic	SUN	PV
2017	12	60595	Spartan PV 1, LLC	IPP	Spartan PV 1, LLC	MI	60945	PV1	10.5	Solar Photovoltaic	SUN	PV
2017	12	60652	Stafford St Solar 1, LLC	IPP	Stafford St Solar 1	MA	61016	STAF1	2.0	Solar Photovoltaic	SUN	PV
2017	12	60654	Stafford St Solar 3, LLC	IPP	Stafford St Solar 3	MA	61018	STAF3	1.0	Solar Photovoltaic	SUN	PV
2017	12	60381	Sunflower Solar, LLC	IPP	Sunflower Solar	NC	60638	NC160	20.9	Solar Photovoltaic	SUN	PV
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar A, LLC	CA	60481	BSHRA	20.0	Solar Photovoltaic	SUN	PV
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar B, LLC	CA	60474	BSHRB	20.0	Solar Photovoltaic	SUN	PV
2017	12	58661	Sustainable Power Group, LLC	IPP	Bayshore Solar C, LLC	CA	60475	BSHRC	20.0	Solar Photovoltaic	SUN	PV
2017	12	58661	Sustainable Power Group, LLC	IPP	Marin Clean Energy Solar One	CA	61013	MCE51	10.5	Solar Photovoltaic	SUN	PV
2017	12	61126	Swamp Fox Solar, LLC	IPP	Swamp Fox Solar	SC	61521	PGRD2	10.8	Solar Photovoltaic	SUN	PV
2017	12	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	BA2	0.5	Batteries	MWH	BA
2017	12	60947	Tesla Inc.	IPP	Hampshire College	MA	60815	PV2	1.7	Solar Photovoltaic	SUN	PV
2017	12	60947	Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822	PV1	2.8	Solar Photovoltaic	SUN	PV
2017	12	60947	Tesla Inc.	IPP	Sacramento Regional County Sanitation PV	CA	61209	PV1	3.5	Solar Photovoltaic	SUN	PV
2017	12	60472	Tungsten Mountain	IPP	Tungsten Mountain	NV	60785	UNIT1	37.0	Geothermal	GEO	BT
2017	12	61082	Vandenberg Solar I, LLC	IPP	Vandenberg Solar Project	CA	61463	VBERG	20.6	Solar Photovoltaic	SUN	PV
2017	12	19876	Virginia Electric & Power Co	Electric Utility	Oceana Solar	VA	60584	01	17.6	Solar Photovoltaic	SUN	PV
2017	12	61216	WED Kingstown Solar I, LLC	IPP	WED Kingstown Solar I - East Array	RI	61622	KTNWA	3.0	Solar Photovoltaic	SUN	PV
2017	12	61216	WED Kingstown Solar I, LLC	IPP	WED Kingstown Solar I, LLC - West	RI	61612	KTNEA	1.5	Solar Photovoltaic	SUN	PV
2017	12	61217	WED Stilson Solar, LLC	IPP	WED Stilson Solar	RI	61613	STILS	2.0	Solar Photovoltaic	SUN	PV
2017	12	60749	Wadesboro Solar, LLC	IPP	Wadesboro Solar	NC	61129	12347	5.0	Solar Photovoltaic	SUN	PV
2017	12	61160	Woodline Solar, LLC	IPP	Woodline Solar	OR	61559	PGRD5	8.0	Solar Photovoltaic	SUN	PV
2017	12	60059	ZGlobal Inc	IPP	Madera 1 PV	CA	61421	MDRA1	1.5	Solar Photovoltaic	SUN	PV

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, Month, and Year

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
2017	1	9303	Bucksport Generation LLC	Electric CHP	Bucksport Generation LLC	ME	50243	GEN2	21.0	Wood/Wood Waste Biomass	WDS	ST
2017	1	19204	City of Trinidad - (CO)	Electric Utility	Trinidad (CO)	CO	511	1	3.8	Conventional Steam Coal	BIT	ST
2017	1	57249	EPP Renewable Energy	IPP	Moretown	VT	56891	GEN1	1.6	Landfill Gas	LFG	IC
2017	1	11241	Entergy Louisiana LLC	Electric Utility	R S Nelson	LA	1393	3	146.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	5	312.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	6	317.0	Natural Gas Steam Turbine	NG	ST
2017	1	12631	NRG Delta LLC	IPP	Pittsburg Power	CA	271	7	682.0	Natural Gas Steam Turbine	NG	ST
2017	1	57440	SABIC IP Mt. Vernon, LLC	Industrial	SABIC Innovative Plastics Mt. Vernon	IN	58063	1	3.0	Conventional Steam Coal	BIT	ST
2017	1	56773	Toyon Landfill Gas Conversion, LLC	IPP	Toyon Power Station	CA	54327	TOY3	1.7	Landfill Gas	LFG	IC
2017	1	19900	Viking Energy Corp	Electric CHP	Viking Energy of Northumberland	PA	50771	GEN1	16.2	Wood/Wood Waste Biomass	WDS	ST
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G102	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G103	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	G104	100.0	Natural Gas Fired Combined Cycle	NG	CT
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S101	50.3	Natural Gas Fired Combined Cycle	NG	CA
2017	2	3775	Clear Lake Cogeneration LP	Electric CHP	Clear Lake Cogeneration Ltd	TX	10741	S102	12.1	Natural Gas Fired Combined Cycle	NG	CA
2017	2	57249	EPP Renewable Energy	Electric CHP	Frey Farm Landfill	PA	56510	GEN1	1.6	Landfill Gas	LFG	IC
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT3	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT4	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT5	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	13193	Naniwa Energy LLC	IPP	Tri Center Naniwa Energy	NV	55494	CT6	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	E2	0.8	Other Waste Biomass	OBG	IC
2017	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	E5	1.8	Other Waste Biomass	OBG	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Reedy Creek	GA	54849	G1	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Reedy Creek	GA	54849	G2	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Sandersville	GA	54841	G1	1.1	Petroleum Liquids	DFO	IC
2017	2	18843	Thiele Kaolin Co	Industrial	Thiele Kaolin Sandersville	GA	54841	G2	1.1	Petroleum Liquids	DFO	IC
2017	2	55808	Westmoreland Partners	Electric CHP	Roanoke Valley Energy Facility I	NC	54035	GEN1	165.0	Conventional Steam Coal	BIT	ST
2017	2	55808	Westmoreland Partners	Electric CHP	Roanoke Valley Energy Facility II	NC	54755	GEN2	44.0	Conventional Steam Coal	BIT	ST
2017	3	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GT1	11.0	Petroleum Liquids	DFO	GT
2017	3	55932	Georgia-Pacific Brewton LLC	Industrial	Georgia-Pacific Brewton Mill	AL	54789	1TG	10.5	Wood/Wood Waste Biomass	BLQ	ST
2017	3	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	296	U10	30.0	Geothermal	GEO	ST
2017	3	7160	Geysers Power Co LLC	IPP	Geysers Unit 5-20	CA	296	U9	30.0	Geothermal	GEO	ST
2017	3	7570	Great River Energy	Electric Utility	Stanton	ND	2824	1	188.1	Conventional Steam Coal	SUB	ST
2017	3	7570	Great River Energy	Electric Utility	Stanton	ND	2824	2	1.0	Petroleum Liquids	DFO	IC
2017	3	13407	Nevada Power Co	Electric Utility	Reid Gardner	NV	2324	4	257.0	Conventional Steam Coal	BIT	ST
2017	3	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	GT7	7.3	Natural Gas Fired Combustion Turbine	NG	GT
2017	3	10023	TC Ravenswood LLC	IPP	Ravenswood	NY	2500	GT7	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2017	3	15686	Village of Rantoul - (IL)	Electric Utility	Rantoul	IL	958	7	4.7	Petroleum Liquids	DFO	IC
2017	3	15686	Village of Rantoul - (IL)	Electric Utility	Rantoul	IL	958	8	3.0	Petroleum Liquids	DFO	IC
2017	3	20863	Wisconsin River Power Company	Electric Utility	Juneau	WI	8050	31	12.6	Petroleum Liquids	DFO	GT
2017	4	50111	Lafayette Utilities System	Electric Utility	Louis Doc Bonin	LA	1443	1	40.0	Natural Gas Steam Turbine	NG	ST
2017	4	50111	Lafayette Utilities System	Electric Utility	Louis Doc Bonin	LA	1443	2	70.0	Natural Gas Steam Turbine	NG	ST
2017	4	50111	Lafayette Utilities System	Electric Utility	Louis Doc Bonin	LA	1443	3	146.0	Natural Gas Steam Turbine	NG	ST
2017	4	13860	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	ST1	106.0	Natural Gas Steam Turbine	NG	ST
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	5	1871	City of Blooming Prairie - (MN)	Electric Utility	Blooming Prairie	MN	1966	1	0.3	Petroleum Liquids	DFO	IC
2017	5	1871	City of Blooming Prairie - (MN)	Electric Utility	Blooming Prairie	MN	1966	2	0.7	Petroleum Liquids	DFO	IC
2017	5	11017	City of Lincoln Center - (KS)	Electric Utility	Lincoln	KS	1300	6	2.2	Natural Gas Internal Combustion Engine	NG	IC
2017	5	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT1	12.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	GT2	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	5	4716	Dairyland Power Coop	Electric Utility	Seven Mile Creek LFG	WI	56149	1	0.8	Landfill Gas	LFG	IC
2017	5	4716	Dairyland Power Coop	Electric Utility	Seven Mile Creek LFG	WI	56149	2	0.8	Landfill Gas	LFG	IC
2017	5	4716	Dairyland Power Coop	Electric Utility	Seven Mile Creek LFG	WI	56149	3	0.8	Landfill Gas	LFG	IC
2017	5	4716	Dairyland Power Coop	Electric Utility	Seven Mile Creek LFG	WI	56149	4	1.0	Landfill Gas	LFG	IC
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	3	31.1	Natural Gas Steam Turbine	NG	ST
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	4	37.5	Natural Gas Steam Turbine	NG	ST
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC1	2.0	Petroleum Liquids	DFO	IC
2017	5	9417	Interstate Power and Light Co	Electric Utility	Dubuque	IA	1046	IC2	1.4	Petroleum Liquids	DFO	IC
2017	5	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	1	27.9	Natural Gas Steam Turbine	NG	ST
2017	5	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	1	17.1	Natural Gas Steam Turbine	NG	ST
2017	5	54899	NAES Corporation - (DE)	IPP	McKee Run	DE	599	2	17.4	Natural Gas Steam Turbine	NG	ST
2017	5	29849	Wasatch Integrated Waste Management	Electric CHP	Wasatch Energy Systems Energy Recovery	UT	55302	1	1.6	Municipal Solid Waste	MSW	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

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

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
2017	6	3046	Duke Energy Progress - (NC)	Electric Utility	Darlington County	SC	3250	9	50.0	Petroleum Liquids	DFO	GT
2017	6	55838	Exelon Wind 1, LLC	IPP	EXC Wind 1	TX	56557	1	10.0	Onshore Wind Turbine	WND	WT
2017	6	55837	Exelon Wind 2, LLC	IPP	EXC Wind 2	TX	56558	JDW2	10.0	Onshore Wind Turbine	WND	WT
2017	6	55836	Exelon Wind 3, LLC	IPP	EXC Wind 3	TX	56559	JDW3	10.0	Onshore Wind Turbine	WND	WT
2017	6	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	1	27.9	Natural Gas Steam Turbine	NG	ST
2017	6	9417	Interstate Power and Light Co	Electric Utility	Sutherland	IA	1077	3	80.8	Natural Gas Steam Turbine	NG	ST
2017	6	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	1	42.2	Conventional Steam Coal	SUB	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Hudson Generating Station	NJ	2403	2	620.0	Natural Gas Steam Turbine	NG	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Mercer Generating Station	NJ	2408	1	316.0	Conventional Steam Coal	BIT	ST
2017	6	15147	PSEG Fossil LLC	IPP	PSEG Mercer Generating Station	NJ	2408	2	316.0	Conventional Steam Coal	BIT	ST
2017	6	56981	Town of Falmouth	Commercial	Town of Falmouth WWTP	MA	57654	WIND1	0.8	Onshore Wind Turbine	WND	WT
2017	6	56981	Town of Falmouth	Commercial	Town of Falmouth WWTP	MA	57654	WIND2	0.8	Onshore Wind Turbine	WND	WT
2017	6	20910	Wolverine Power Supply Coop	Electric Utility	Vestaburg	MI	1881	6	3.0	Petroleum Liquids	DFO	IC
2017	6	20910	Wolverine Power Supply Coop	Electric Utility	Vestaburg	MI	1881	7	3.0	Petroleum Liquids	DFO	IC
2017	7	221	Alaska Village Elec Coop, Inc	Electric Utility	Noorvik	AK	6330	2A	0.4	Petroleum Liquids	DFO	IC
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTA	23.0	Petroleum Liquids	DFO	GT
2017	7	3046	Duke Energy Progress - (NC)	Electric Utility	L V Sutton Steam	NC	2713	GTB	25.0	Petroleum Liquids	DFO	GT
2017	7	21352	Municipal Energy Agency of NE	Electric Utility	MEAN Wind Project	NE	56106	1	10.5	Onshore Wind Turbine	WND	WT
2017	8	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	1	3.0	Petroleum Liquids	DFO	IC
2017	8	12625	City of Minden - (LA)	Electric Utility	Minden	LA	1447	1	12.5	Natural Gas Steam Turbine	NG	ST
2017	8	12625	City of Minden - (LA)	Electric Utility	Minden	LA	1447	2	12.5	Natural Gas Steam Turbine	NG	ST
2017	8	12625	City of Minden - (LA)	Electric Utility	Minden	LA	1447	6	1.8	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN1	0.5	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN2	0.5	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN3	0.7	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN4	0.7	Petroleum Liquids	DFO	IC
2017	8	6636	Foss Manufacturing Company LLC	Industrial	Hampton Facility	NH	10108	GEN5	0.7	Petroleum Liquids	DFO	IC
2017	8	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	1	23.7	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	9417	Interstate Power and Light Co	Electric Utility	Grinnell	IA	7137	2	20.6	Natural Gas Fired Combustion Turbine	NG	GT
2017	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8	103.8	Conventional Hydroelectric	WAT	HY
2017	9	19558	Homer Electric Assn Inc	Electric Utility	Seldovia	AK	6283	6	1.2	Petroleum Liquids	DFO	IC
2017	9	15466	Public Service Co of Colorado	Electric Utility	Valmont	CO	477	5	184.0	Conventional Steam Coal	BIT	ST
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	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	1	577.0	Conventional Steam Coal	BIT	ST
2017	10	60662	WCAC Operating Company	Electric CHP	Corona Energy Partners, Ltd	CA	10635	GEN1	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2017	11	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	4	151.0	Conventional Steam Coal	RC	ST
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	1	2.1	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	2	1.8	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	3	1.9	Petroleum Liquids	DFO	IC
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT1	21.6	Petroleum Liquids	DFO	GT
2017	11	9417	Interstate Power and Light Co	Electric Utility	Centerville	IA	1105	GT2	25.7	Petroleum Liquids	DFO	GT
2017	11	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	1	13.2	Natural Gas Steam Turbine	NG	ST
2017	11	9417	Interstate Power and Light Co	Electric Utility	Fox Lake	MN	1888	3	85.2	Natural Gas Steam Turbine	NG	ST
2017	12	221	Alaska Village Elec Coop, Inc	Electric Utility	Kasigluk	AK	57066	UNIT1	0.4	Petroleum Liquids	DFO	IC
2017	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	1	200.0	Conventional Steam Coal	BIT	ST
2017	12	733	Appalachian Power Co	Electric Utility	Kanawha River	WV	3936	2	200.0	Conventional Steam Coal	BIT	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	1	21.0	Conventional Steam Coal	SUB	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	2	21.0	Conventional Steam Coal	SUB	ST
2017	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	3	41.0	Conventional Steam Coal	SUB	ST
2017	12	1148	City of Baldwin City - (KS)	Electric Utility	Baldwin City Plant No 1	KS	1262	3	0.7	Petroleum Liquids	DFO	IC
2017	12	56375	Graphic Packaging International Inc	Electric CHP	Graphic Packaging International	CA	54561	GT-G	23.0	Natural Gas Fired Combined Cycle	NG	CT
2017	12	56375	Graphic Packaging International Inc	Electric CHP	Graphic Packaging International	CA	54561	ST-G	3.0	Natural Gas Fired Combined Cycle	NG	CA
2017	12	49735	HGST a Western Digital Company	Industrial	HGST San Jose Standby Generator	CA	50024	50MW	42.0	Petroleum Liquids	DFO	GT
2017	12	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	2	2.0	Natural Gas Internal Combustion Engine	NG	IC
2017	12	9205	Illinois Electrical Gen Partn	IPP	Streator Energy Partners LLC	IL	55760	ST1	0.9	Landfill Gas	LFG	IC
2017	12	13960	NRG Cabrillo Power Ops Inc	IPP	Kearny	CA	303	KEA3	61.0	Natural Gas Fired Combustion Turbine	NG	GT
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	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	57183	Shasta Renewable Resources LLC	Electric CHP	Shasta Renewable Resources Plant	CA	57857	1	5.5	Wood/Wood Waste Biomass	WDS	ST
2017	12	56108	Targa Pipeline Mid-Continent WestTex LLC	Industrial	Benedum Plant	TX	54458	BG3A	1.0	Natural Gas Internal Combustion Engine	NG	IC
2017	12	56108	Targa Pipeline Mid-Continent WestTex LLC	Industrial	Benedum Plant	TX	54458	BG6	1.0	Natural Gas Internal Combustion Engine	NG	IC
2017	12	18642	Tennessee Valley Authority	Electric Utility	Johnsonville	TN	3406	1	107.0	Conventional Steam Coal	SUB	ST

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

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	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
2017	12	19365	United States Sugar Corp	Industrial	Clewiston Sugar House	FL	50482	TG5	11.0	Other Waste Biomass	AB	ST

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)
2021	12	49745	Cash Creek Generating LLC	IPP	Cash Creek	KY	56107	ST	123.6	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	136.0
2021	12	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	CPEC1	680.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	680.0
2021	12	60364	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	PVGEN	35.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	35.0
2021	12	59386	Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61900	PMRDO	3.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	RGHT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2021	12	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
2022	1	60835	NTE Carolina II, LLC	IPP	Reidville Energy Center	NC	61240	REC2	227.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	233.7
2022	4	55927	Power4Georgians LLC	Electric Utility	Plant Washington	GA	56675	MAAN	850.0	Conventional Steam Coal	SUB	ST	(T) Regulatory approvals received. Not under construction	850.0
2022	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS1	98.0	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 Energy Center	AZ	58413	CCGS2	98.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	116.0
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	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Landfill	NC	57492	GENP	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2022	12	56814	Black Creek Renewable Energy LLC	IPP	Sampson County Landfill	NC	57492	GENB	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2022	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	(OT) Other	40.0
2022	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	(OT) Other	40.0
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	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58887	I-A	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2022	12	56426	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	12	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
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	58887	I-B	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2025	1	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	1	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	1	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	2	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	1	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	3	156.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	170.0
2025	1	7189	Gila Bend Power Partners LLC	IPP	Gila Bend Power Generation Station	AZ	55507	4	390.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	390.0
2026	5	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM1	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	6	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM2	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	7	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM3	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	9	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM4	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	9	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM5	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	10	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM6	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	11	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM7	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2026	12	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM8	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	1	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM9	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	2	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM10	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	3	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM11	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	4	40575	Utah Associated Mun Power Sys	Electric Utility	UAMPS Carbon Free Power Plant	ID	61075	NPM12	47.5	Nuclear	NUC	ST	(P) Planned for installation, but regulatory approvals not initiated	50.0
2027	12	60223	Ketchikan Electric Company	Electric Utility	Maahoney Lake Hydroelectric	AK	59027	GEN 1	9.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.6

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
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3	0.5	Petroleum Liquids	DFO	IC
2018	1	9617	JEA	Electric Utility	St Johns River Power Park	FL	207	1	626.0	Conventional Steam Coal	BIT	ST
2018	1	9617	JEA	Electric Utility	St Johns River Power Park	FL	207	2	626.0	Conventional Steam Coal	BIT	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	1	535.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	2	535.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	3	795.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Sandow No 4	TX	6648	4	600.0	Conventional Steam Coal	LIG	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Sandow No 5	TX	52071	5	600.0	Conventional Steam Coal	LIG	ST
2018	1	58247	National Centers for Animal Health	Commercial	NCAH Central Utility Plant	IA	58265	S-7A	1.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT1	0.5	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT2	0.3	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT3	0.3	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT4	0.3	Landfill Gas	LFG	IC
2018	2	55983	Luminant Generation Company LLC	IPP	Big Brown	TX	3497	1	606.0	Conventional Steam Coal	SUB	ST
2018	2	55983	Luminant Generation Company LLC	IPP	Big Brown	TX	3497	2	602.0	Conventional Steam Coal	SUB	ST
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	03	130.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	1	215.0	Natural Gas Steam Turbine	NG	ST
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	2	215.0	Natural Gas Steam Turbine	NG	ST
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2018	2	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2018	2	57305	Wright Patterson AFB	Commercial	Heat Plant 770	OH	57926	HP	0.0	Natural Gas Steam Turbine	NG	ST
2018	2	57305	Wright Patterson AFB	Commercial	Heat Plant 770	OH	57926	LP	0.0	Natural Gas Steam Turbine	NG	ST
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	3A	0.3	Petroleum Liquids	DFO	IC
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Pilot Station	AK	57058	UNIT1	0.4	Petroleum Liquids	DFO	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	1	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	2	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	3	1.0	Petroleum Liquids	DFO	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	4	1.0	Petroleum Liquids	DFO	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	5	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	4	16873	City of Sebawaing - (MI)	Electric Utility	Pine Street	MI	7806	6	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	4	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1	324.0	Conventional Steam Coal	BIT	ST
2018	4	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2	442.0	Conventional Steam Coal	BIT	ST
2018	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	1	0.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2018	4	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2018	5	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2018	5	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	7	160.0	Conventional Steam Coal	BIT	ST
2018	5	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	8	320.0	Conventional Steam Coal	BIT	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	1	102.8	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	2	118.0	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	3	106.2	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	4	123.6	Natural Gas Steam Turbine	NG	ST
2018	6	11460	City of Macon - (MO)	Electric Utility	Macon	MO	2141	3	4.6	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	2	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	3	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	4	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D1	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D2	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D3	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D4	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	Killen Station	OH	6031	2	600.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	Killen Station	OH	6031	GT1	18.0	Petroleum Liquids	DFO	GT
2018	6	9397	International Turbine Res Inc	IPP	Dinosaur Point	CA	10005	WTGS	17.0	Onshore Wind Turbine	WND	WT
2018	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	15.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	13.4	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	16.1	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	7308	Hawkeye Energy Greenport LLC	IPP	Hawkeye Energy Greenport LLC	NY	55969	U-01	53.5	Petroleum Liquids	KER	GT
2018	7	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	1	0.8	Conventional Hydroelectric	WAT	HY
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C1	0.8	Petroleum Liquids	DFO	IC
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C2	0.8	Petroleum Liquids	DFO	IC

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
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C4	1.0	Petroleum Liquids	DFO	IC
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	1	76.0	Natural Gas Steam Turbine	NG	ST
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	10	55951	Exelon Nuclear	IPP	Oyster Creek	NJ	2388	1	607.7	Nuclear	NUC	ST
2018	10	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	2LOT7	0.5	Solar Photovoltaic	SUN	PV
2018	10	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2018	11	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	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG2		Natural Gas Fired Combined Cycle	NG	CT
2018	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG3		Natural Gas Fired Combined Cycle	NG	CT
2018	11	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	STG1		Natural Gas Fired Combined Cycle	NG	CA
2018	12	12647	ALLETE, Inc.	Electric Utility	Clay Boswell	MN	1893	1	67.3	Conventional Steam Coal	SUB	ST
2018	12	12647	ALLETE, Inc.	Electric Utility	Clay Boswell	MN	1893	2	67.4	Conventional Steam Coal	SUB	ST
2018	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	4	56.0	Natural Gas Steam Turbine	NG	ST
2018	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	5	97.0	Natural Gas Steam Turbine	NG	ST
2018	12	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2018	12	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
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	9417	Interstate Power and Light Co	Electric Utility	Red Cedar	IA	7595	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	2	42.1	Conventional Steam Coal	SUB	ST
2018	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	3	364.1	Conventional Steam Coal	SUB	ST
2018	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	2	164.0	Conventional Steam Coal	SUB	ST
2018	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	3	170.0	Conventional Steam Coal	SUB	ST
2018	12	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0	Natural Gas Steam Turbine	NG	ST
2018	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0	Natural Gas Steam Turbine	NG	ST
2018	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0	Natural Gas Steam Turbine	NG	ST
2018	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0	Natural Gas Steam Turbine	NG	ST
2018	12	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
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	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	4	0.8	Petroleum Liquids	DFO	IC
2018	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	5	0.8	Petroleum Liquids	DFO	IC
2018	12	20856	Wisconsin Power & Light Co	Electric Utility	Edgewater	WI	4050	4	294.4	Conventional Steam Coal	SUB	ST
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2019	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2019	2	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	SAC	0.3	Solar Photovoltaic	SUN	PV
2019	3	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2019	3	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
2019	3	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 1 Power Plant	CA	10350	GEN1	42.0	Natural Gas Fired Combined Cycle	NG	CT
2019	3	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 1 Power Plant	CA	10350	GEN2	8.0	Natural Gas Fired Combined Cycle	NG	CA
2019	4	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	GEN1	12.4	Wood/Wood Waste Biomass	BLQ	ST
2019	4	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	GEN2	12.4	Wood/Wood Waste Biomass	BLQ	ST
2019	4	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	LOT7	0.2	Solar Photovoltaic	SUN	PV
2019	4	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	LOT7B	0.2	Solar Photovoltaic	SUN	PV
2019	5	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	677.2	Nuclear	NUC	ST
2019	5	60771	Marcus Hook 50 LP	Electric CHP	Marcus Hook Refinery Cogen	PA	50074	GEN1	48.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	3	148.0	Petroleum Liquids	RFO	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST
2019	6	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0	Conventional Steam Coal	SUB	ST
2019	8	14824	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2019	9	55951	Exelon Nuclear	IPP	Three Mile Island	PA	8011	1	802.8	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 Alamitos LLC	IPP	AES Alamitos LLC	CA	315	1	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	2	175.0	Natural Gas Steam Turbine	NG	ST
2019	10	22148	AES Alamitos LLC	IPP	AES Alamitos 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	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG1	2.8	Natural Gas Internal Combustion Engine	NG	IC

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
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG2	2.8	Natural Gas Internal Combustion Engine	NG	IC
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG3	2.8	Natural Gas Internal Combustion Engine	NG	IC
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	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	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 2 Power Plant	CA	10349	GEN1	49.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	4	97.1	Conventional Steam Coal	SUB	ST
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	6	20.9	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV1	750.0	Conventional Steam Coal	BIT	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
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	4	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Pit	MA	54907	CTG1	19.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Avon Park	FL	624	P1	24.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Avon Park	FL	624	P2	24.0	Petroleum Liquids	DFO	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P1	20.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P2	25.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P3	31.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P4	31.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	1	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	2	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	3	180.0	Conventional Steam Coal	BIT	ST
2020	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	4	180.0	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	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	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 Alamitos LLC	IPP	AES Alamitos LLC	CA	315	3	332.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	4	335.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos 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
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	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	4	64.0	Conventional Steam Coal	SUB	ST
2020	12	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	5	63.1	Conventional Steam Coal	SUB	ST
2020	12	56155	Lansing Board of Water and Light	Electric Utility	Eckert Station	MI	1831	6	62.8	Conventional Steam Coal	SUB	ST
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	107.0	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

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
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	2	245.0	Conventional Steam Coal	BIT	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	GEN3	18.0	Natural Gas Steam Turbine	NG	ST
2024	11	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	1	1,122.0	Nuclear	NUC	ST
2024	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	894	4	510.0	Conventional Steam Coal	SUB	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	17633	Southern Indiana Gas & Elec Co	Electric Utility	F B Culley	IN	1012	2	90.0	Conventional Steam Coal	BIT	ST
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	8	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	2	1,118.0	Nuclear	NUC	ST
2025	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	1	113.0	Natural Gas Steam Turbine	NG	ST
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	56155	Lansing Board of Water and Light	Electric Utility	Erickson Station	MI	1832	1	154.5	Conventional Steam Coal	SUB	ST
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	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	2	335.0	Conventional Steam Coal	SUB	ST
2025	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	2	65.0	Natural Gas Fired Combustion Turbine	NG	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	RC	ST
2026	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	1	420.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	4	83.0	Natural Gas Fired Combined Cycle	NG	CA
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT1	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT2	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	2	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2029	10	56667	Lorraine Windpower Project	IPP	Lorraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2042	7	796	Arizona Electric Pwr Coop Inc	Electric Utility	SunAnza	CA	60791	ANZA1	2.0	Solar Photovoltaic	SUN	PV
2047	1	60304	Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0	Solar Photovoltaic	SUN	PV
2047	2	56031	CPV Maryland LLC	IPP	CPV St Charles Energy Center	MD	56846	GTG1	205.0	Natural Gas Fired Combined Cycle	NG	CT
2047	7	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2047	9	60734	Elizabeth Mines Solar 1, LLC	IPP	Elizabeth Mines Solar 1	VT	61124	EMS1	5.0	Solar Photovoltaic	SUN	PV

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-December 2017

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	59.8%	48.2%	4.9%	10.6%	6.1%	12.1%	0.8%	2.2%		
2014	61.1%	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%		
2016	53.3%	55.5%	8.3%	12.4%	9.6%	11.5%	1.1%	2.6%		
2017	53.5%	54.8%	9.4%	11.3%	NA	13.0%	2.0%	NA		
Year 2015										
January	61.4%	52.6%	4.4%	7.6%	5.2%	12.4%	0.6%	2.5%		
February	65.0%	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	49.9%	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	44.0%	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	56.4%	56.4%	5.0%	7.1%	9.5%	10.1%	0.6%	3.1%		
February	49.1%	53.6%	5.0%	7.4%	8.6%	10.6%	0.7%	2.8%		
March	36.0%	50.2%	7.1%	10.2%	8.9%	8.9%	1.1%	2.2%		
April	37.8%	47.6%	8.3%	11.7%	9.2%	9.7%	0.8%	2.1%		
May	41.6%	52.5%	7.6%	12.3%	9.3%	11.4%	1.1%	2.5%		
June	61.2%	63.9%	9.9%	17.5%	10.3%	13.3%	1.3%	2.1%		
July	69.8%	68.2%	13.7%	23.1%	11.7%	16.9%	2.1%	2.1%		
August	69.3%	70.8%	13.8%	21.1%	12.7%	15.1%	2.6%	2.3%		
Sept	60.4%	60.7%	9.5%	14.6%	10.3%	12.9%	1.2%	2.3%		
October	50.8%	47.8%	7.8%	11.4%	8.0%	8.8%	0.9%	2.4%		
November	46.2%	46.3%	6.8%	6.5%	7.9%	9.9%	0.7%	2.8%		
December	61.2%	47.5%	5.1%	5.4%	8.3%	10.1%	0.5%	4.0%		
Year 2017										
January	59.5%	50.4%	6.6%	4.3%	NA	10.7%	1.6%	NA		
February	49.4%	48.2%	6.9%	3.9%	NA	9.5%	2.0%	NA		
March	46.1%	48.1%	9.8%	7.8%	NA	12.9%	2.1%	NA		
April	43.7%	45.8%	8.3%	8.6%	NA	9.5%	1.2%	NA		
May	48.3%	49.4%	9.0%	9.9%	NA	15.4%	1.9%	NA		
June	58.4%	60.1%	9.9%	15.4%	NA	15.3%	1.8%	NA		
July	67.1%	70.2%	12.8%	21.4%	NA	18.1%	2.1%	NA		
August	62.9%	69.3%	11.0%	18.5%	NA	14.3%	2.2%	NA		
Sept	53.4%	58.9%	11.7%	15.4%	NA	13.5%	3.0%	NA		
October	47.5%	51.2%	10.0%	14.3%	NA	11.1%	2.6%	NA		
November	49.3%	48.6%	8.2%	6.8%	NA	12.7%	1.5%	NA		
December	56.1%	55.3%	8.1%	8.8%	NA	13.5%	1.5%	NA		

Values for 2016 and prior years are final. Values for 2017 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-December 2017

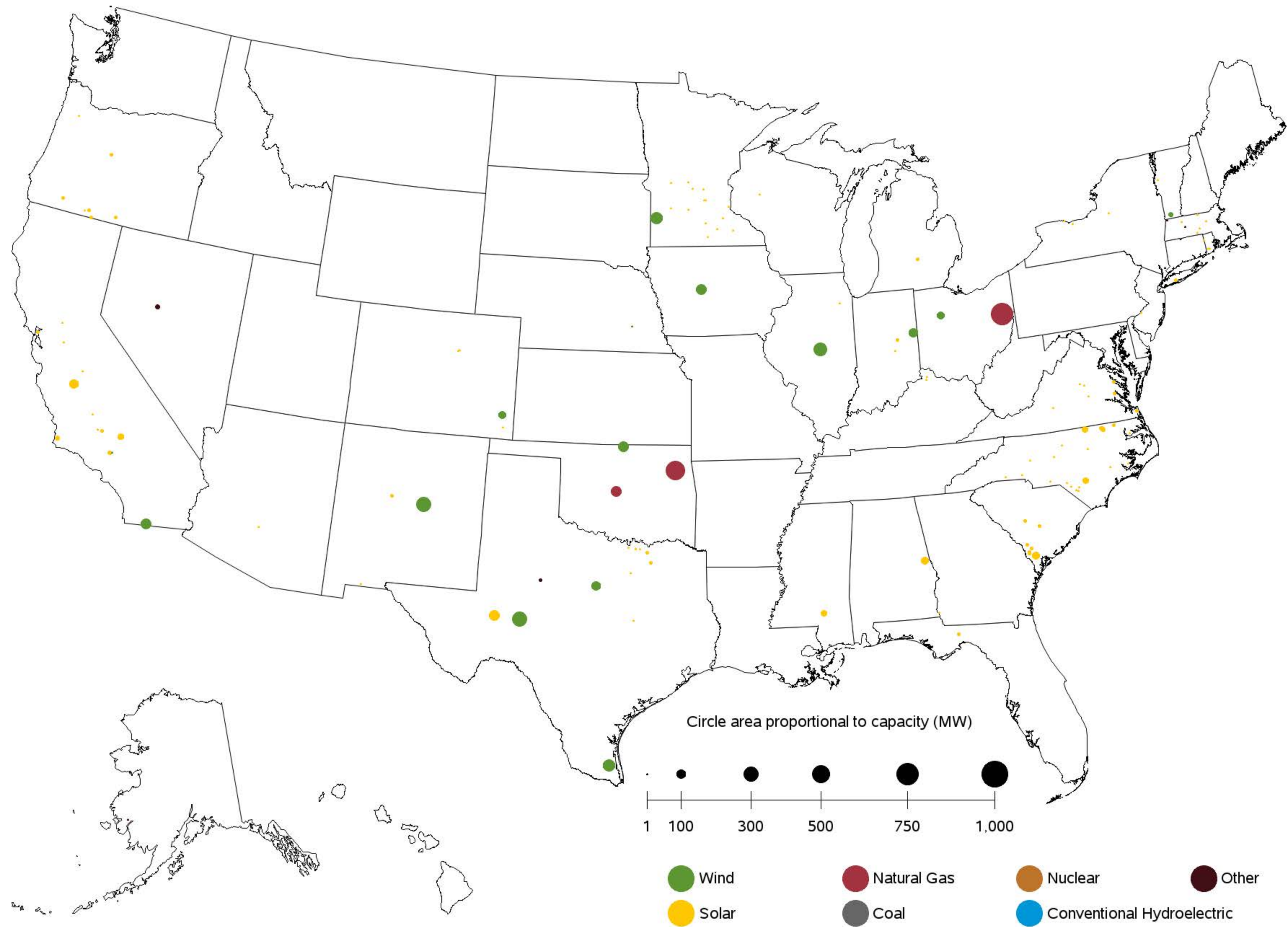
Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Municipal Solid Waste	Other Biomass Including Wood	Geothermal
Annual Factors								
2013	89.9%	38.9%	32.4%	NA	NA	68.9%	56.7%	73.6%
2014	91.7%	37.3%	34.0%	25.9%	19.8%	68.9%	58.9%	74.0%
2015	92.3%	35.8%	32.2%	25.8%	22.1%	68.7%	55.3%	74.3%
2016	92.3%	38.2%	34.5%	25.1%	22.2%	69.7%	55.6%	73.9%
2017	92.2%	45.2%	36.7%	27.0%	21.8%	70.9%	50.7%	76.4%
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	98.5%	43.6%	33.9%	15.2%	6.8%	68.3%	58.5%	73.4%
February	95.3%	43.8%	39.6%	22.9%	19.5%	67.6%	61.2%	73.2%
March	89.9%	45.9%	40.2%	24.9%	19.6%	67.2%	55.8%	72.5%
April	88.1%	44.6%	39.3%	27.2%	20.9%	69.3%	45.8%	68.8%
May	90.5%	42.8%	34.2%	30.2%	28.9%	72.9%	47.0%	73.9%
June	94.2%	40.6%	30.5%	30.3%	33.5%	72.0%	54.7%	71.2%
July	94.5%	36.1%	31.9%	31.7%	36.9%	70.9%	59.3%	72.2%
August	96.1%	33.0%	24.5%	31.7%	29.2%	70.3%	63.5%	73.0%
Sept	90.9%	28.6%	30.4%	28.5%	30.2%	67.9%	58.5%	75.5%
October	81.7%	29.3%	36.4%	24.0%	19.1%	63.8%	48.9%	74.6%
November	90.9%	32.8%	35.3%	20.4%	14.4%	72.6%	54.9%	77.7%
December	96.7%	37.9%	38.8%	16.2%	7.0%	73.4%	59.6%	80.1%
Year 2017								
January	98.7%	48.4%	36.6%	16.8%	7.3%	75.4%	49.3%	79.7%
February	94.9%	47.8%	42.5%	19.8%	11.7%	71.6%	55.5%	77.9%
March	87.8%	54.1%	44.6%	27.8%	22.9%	67.7%	51.8%	74.9%
April	79.1%	53.9%	44.9%	31.0%	24.9%	67.9%	51.2%	78.6%
May	82.7%	56.8%	38.7%	34.1%	31.0%	70.6%	47.0%	74.0%
June	93.4%	57.1%	34.5%	35.7%	37.9%	72.6%	49.1%	75.2%
July	96.2%	46.2%	27.5%	33.7%	25.4%	71.3%	51.0%	78.0%
August	97.6%	37.9%	22.3%	31.2%	27.6%	72.7%	49.0%	77.4%
Sept	94.9%	34.7%	31.5%	29.6%	29.2%	69.3%	48.2%	77.8%
October	89.0%	30.2%	41.6%	26.6%	24.1%	67.0%	52.4%	69.3%
November	92.9%	35.3%	39.4%	20.1%	10.3%	71.1%	51.5%	76.6%
December	99.4%	40.0%	37.2%	17.4%	9.0%	73.3%	52.7%	77.4%

Values for 2016 and prior years are final. Values for 2017 are preliminary. NA = Not Available

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

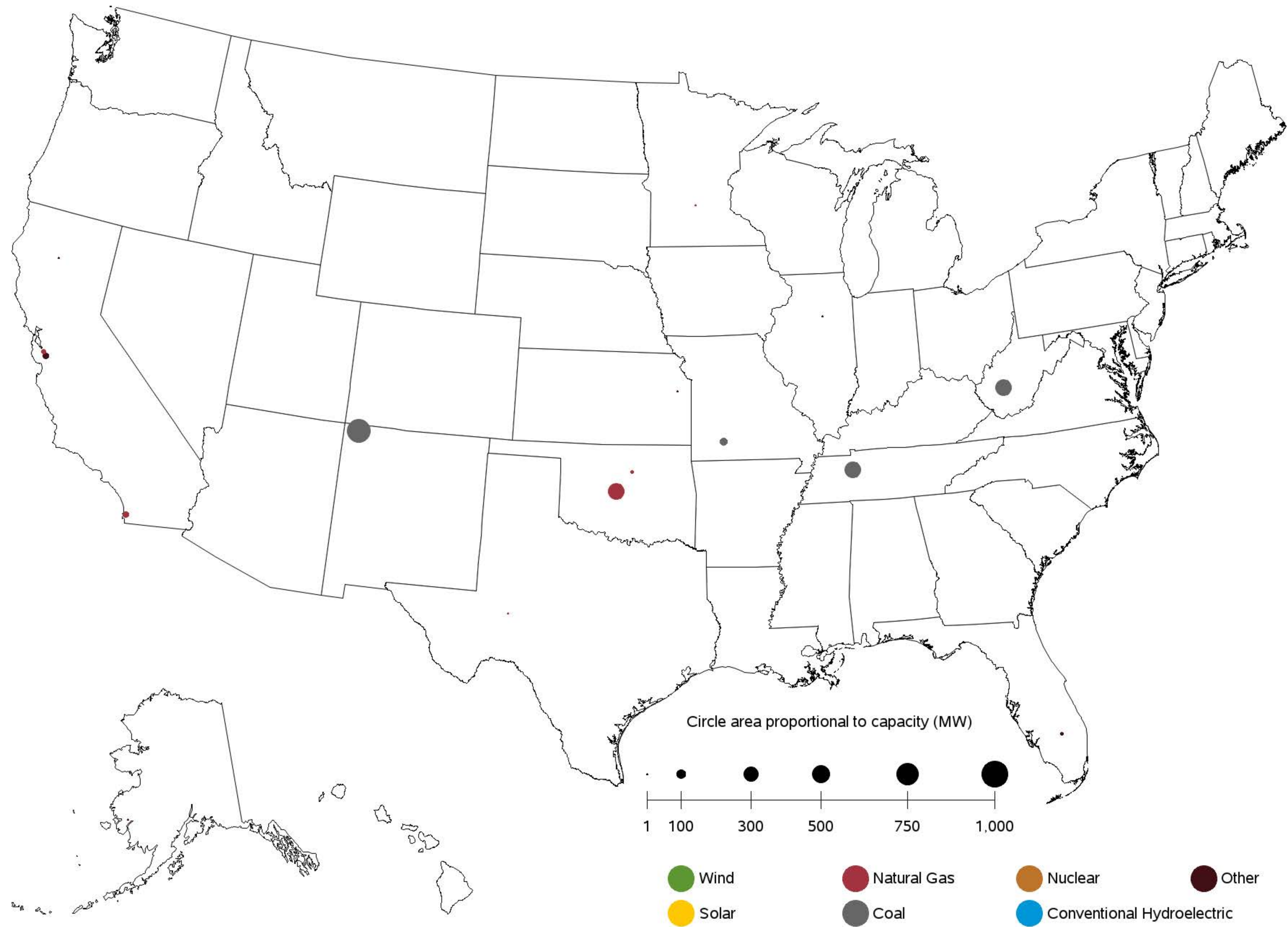
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.A. Utility-Scale Generating Units Added in December 2017



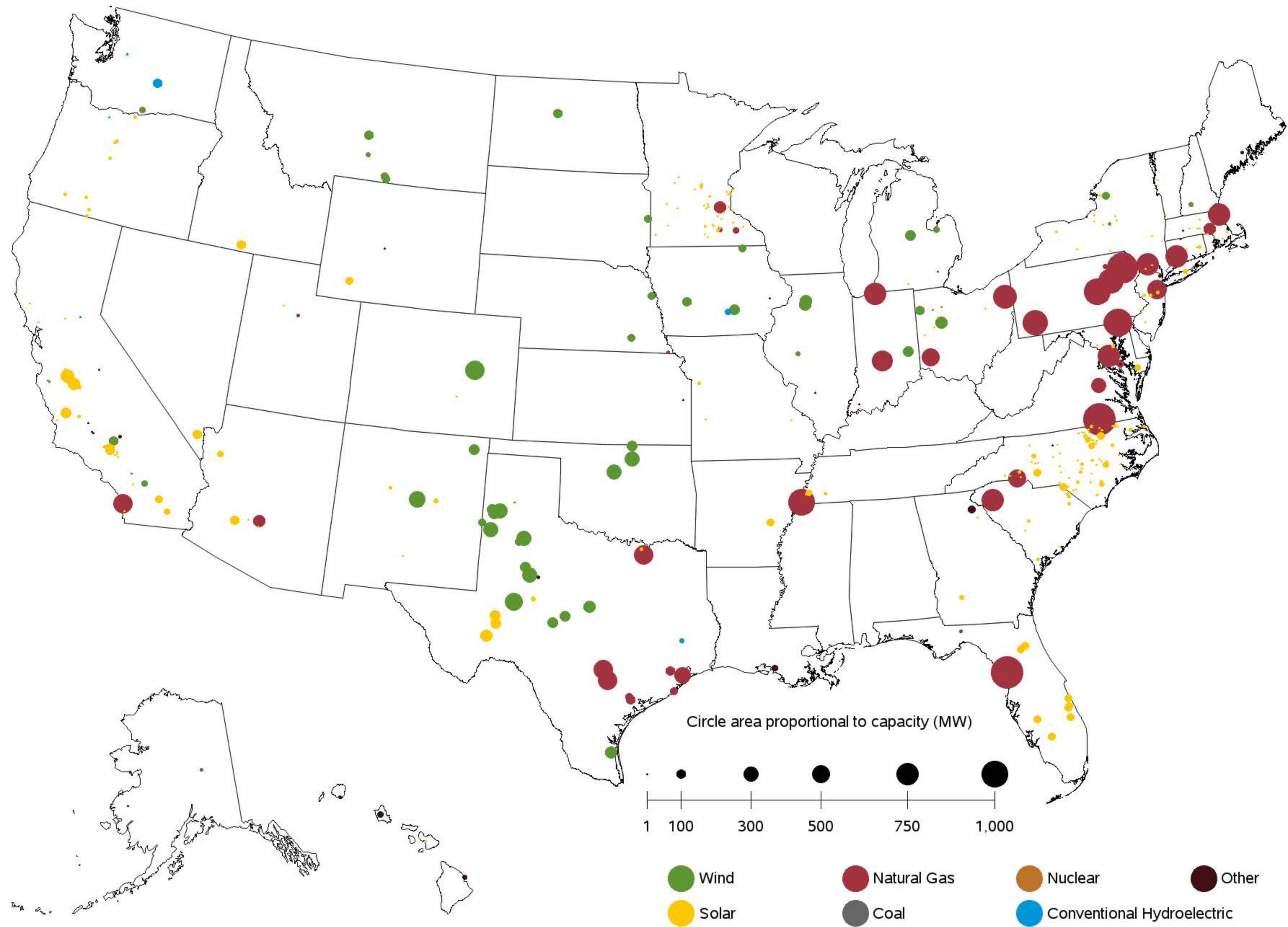
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in December 2017



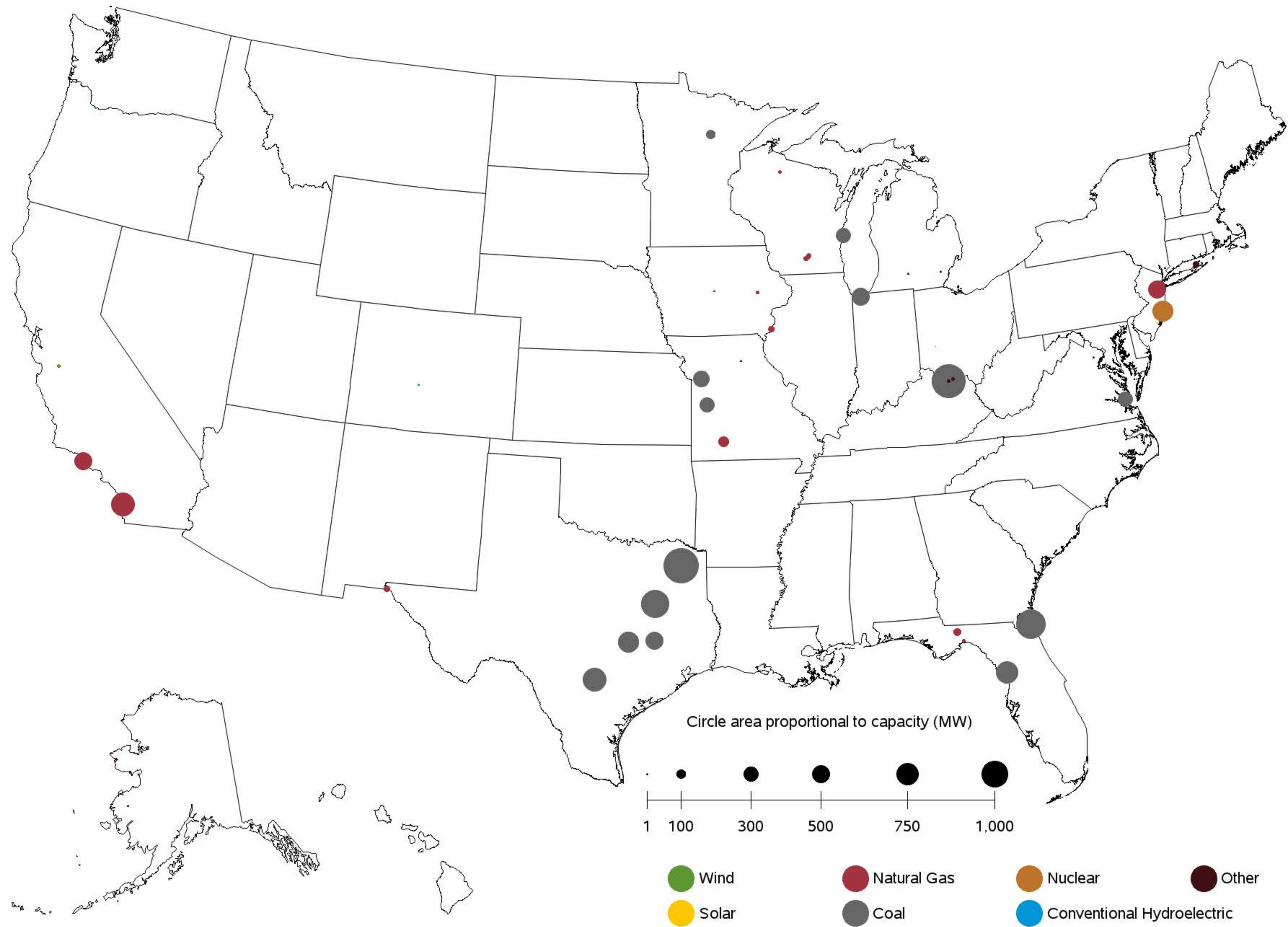
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from January 2018 to December 2018



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 January 2018 to December 2018



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 7.1. Electric Power Industry - U.S. Electricity Imports from and Electricity Exports to Canada and Mexico (Megawatthours)

Period	Canada		Mexico		U.S. Total		
	Imports from	Exports to	Imports from	Exports to	Imports	Exports	Net Imports
Annual Totals							
2016	65,173,818	2,682,381	4,426,999	6,647,082	69,600,817	9,329,463	60,271,354
Year 2016							
January	5,886,417	227,589	405,984	391,636	6,292,401	619,225	5,673,176
February	4,927,541	384,301	354,896	318,144	5,282,437	702,445	4,579,992
March	5,210,412	410,645	417,364	441,056	5,627,776	851,701	4,776,075
April	4,092,342	358,746	389,947	311,760	4,482,289	670,506	3,811,783
May	4,977,621	142,398	378,826	431,533	5,356,447	573,931	4,782,516
June	6,162,812	94,538	363,393	738,211	6,526,205	832,749	5,693,456
July	6,969,110	78,459	362,863	838,475	7,331,973	916,934	6,415,039
August	6,577,610	149,565	383,363	825,076	6,960,973	974,641	5,986,332
Sept	4,631,320	161,183	286,640	805,125	4,917,960	966,308	3,951,652
October	4,989,801	320,694	436,941	436,044	5,426,742	756,738	4,670,004
November	5,809,773	109,219	359,166	559,837	6,168,939	669,056	5,499,883
December	4,939,059	245,044	287,616	550,185	5,226,675	795,229	4,431,446
Year 2017							
January	5,277,771	172,909	325,772	658,237	5,603,543	831,146	4,772,397
February	4,131,760	359,401	282,486	600,378	4,414,246	959,779	3,454,467
March	4,598,818	663,648	223,689	521,388	4,822,507	1,185,036	3,637,471
April	5,262,194	619,414	207,404	579,407	5,469,598	1,198,821	4,270,777
May	4,912,110	341,657	129,523	532,294	5,041,633	873,951	4,167,682
June	5,637,814	242,997	104,319	819,173	5,742,133	1,062,170	4,679,963
July	5,328,084	65,828	253,399	974,208	5,581,483	1,040,036	4,541,447
August	5,874,172	63,435	276,687	1,067,167	6,150,859	1,130,602	5,020,257
Sept	4,715,752	139,000	159,646	905,932	4,875,398	1,044,932	3,830,466

Source: U.S. Energy Information Administration, Form EIA-111, "Quarterly Electricity Imports and Exports Report."

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

Total (All Sectors) by Census Division and State, December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	1	5	0	3	0	0	7
Connecticut	0	12	0	1	0	0	34
Maine	30	4	0	35	0	0	9
Massachusetts	0	7	0	5	0	0	20
New Hampshire	0	3	0	0	0	0	15
Rhode Island	0	41	0	23	0	0	0
Vermont	0	11	0	0	0	0	15
Middle Atlantic	1	8	67	2	17	0	2
New Jersey	0	20	0	6	0	0	414
New York	0	9	0	3	0	0	1
Pennsylvania	1	19	141	3	26	0	11
East North Central	1	9	13	1	5	0	10
Illinois	0	41	0	7	0	0	30
Indiana	1	14	0	2	9	0	22
Michigan	3	10	0	2	0	0	20
Ohio	1	14	31	1	19	0	20
Wisconsin	0	166	0	5	0	0	15
West North Central	1	16	0	7	0	0	8
Iowa	1	19	0	8	0	0	26
Kansas	2	19	0	13	0	0	0
Minnesota	3	129	0	10	0	0	21
Missouri	0	5	0	28	0	0	14
Nebraska	4	121	0	34	0	0	20
North Dakota	0	10	0	25	0	0	18
South Dakota	0	286	0	35	0	0	13
South Atlantic	0	15	13	1	23	0	6
Delaware	0	214	0	16	26	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	27	0	2	0	0	35
Georgia	0	26	149	3	0	0	10
Maryland	0	26	0	5	0	0	3
North Carolina	0	10	0	2	0	0	8
South Carolina	0	62	0	6	0	0	15
Virginia	4	23	0	3	0	0	16
West Virginia	1	0	0	22	0	0	16
East South Central	0	5	0	2	16	0	4
Alabama	0	24	0	3	18	0	6
Kentucky	0	3	0	9	0	0	11
Mississippi	0	33	0	4	0	0	0
Tennessee	0	0	0	3	0	0	6
West South Central	0	36	1	2	4	0	6
Arkansas	0	96	0	9	0	0	9
Louisiana	0	90	0	3	6	0	13
Oklahoma	0	2	0	4	0	0	9
Texas	0	39	58	2	4	0	16
Mountain	1	7	0	1	0	0	5
Arizona	0	4	0	1	0	0	5
Colorado	0	45	0	1	0	0	19
Idaho	125	0	0	15	0	0	9
Montana	5	50	0	16	0	0	8
Nevada	0	0	0	0	0	0	2
New Mexico	0	33	0	2	0	0	74
Utah	0	2	0	3	0	0	29
Wyoming	4	1	0	6	0	0	26
Pacific Contiguous	0	19	0	1	1	0	2
California	0	28	0	1	2	0	7
Oregon	0	0	0	3	0	0	3
Washington	0	39	0	5	0	0	1
Pacific Noncontiguous	17	1	0	15	0	0	19
Alaska	55	5	0	15	0	0	20
Hawaii	0	1	0	0	0	0	36
U.S. Total	0	3	5	1	3	0	2

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, December 2017 (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	13	6	0	1	2
Connecticut	0	0	0	52	14	0	0	1
Maine	0	0	0	119	8	0	0	7
Massachusetts	0	0	0	14	8	0	2	3
New Hampshire	0	0	0	0	18	0	0	2
Rhode Island	0	0	0	76	11	0	0	19
Vermont	0	0	0	39	17	0	0	11
Middle Atlantic	0	0	0	13	5	0	1	1
New Jersey	0	0	0	15	7	0	0	3
New York	0	0	0	26	7	0	2	1
Pennsylvania	0	0	0	57	8	0	0	1
East North Central	0	0	0	17	4	0	3	0
Illinois	0	0	0	41	5	0	0	1
Indiana	0	0	0	25	7	0	0	1
Michigan	0	0	0	36	7	0	11	1
Ohio	0	0	0	43	6	0	0	1
Wisconsin	0	0	0	63	10	0	42	1
West North Central	0	0	0	12	4	0	6	1
Iowa	0	0	0	101	6	0	0	2
Kansas	0	0	0	138	3	0	0	1
Minnesota	0	0	0	13	7	0	4	2
Missouri	0	0	0	40	8	0	0	1
Nebraska	0	0	0	85	8	0	0	3
North Dakota	0	0	0	0	6	0	48	2
South Dakota	0	0	0	281	13	0	0	7
South Atlantic	0	0	0	4	2	0	1	1
Delaware	0	0	0	66	33	0	0	13
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	4	3	0	1	1
Georgia	0	0	0	9	3	0	15	1
Maryland	0	0	0	23	13	0	0	1
North Carolina	0	0	0	6	3	0	0	1
South Carolina	0	0	0	19	5	0	0	1
Virginia	0	0	0	14	8	0	0	1
West Virginia	0	0	0	0	14	0	0	1
East South Central	0	0	0	11	2	0	9	1
Alabama	0	0	0	19	3	0	0	1
Kentucky	0	0	0	49	12	0	0	2
Mississippi	0	0	0	6	3	0	0	3
Tennessee	0	0	0	35	6	0	90	1
West South Central	0	0	0	5	2	0	3	1
Arkansas	0	0	0	31	4	0	124	2
Louisiana	0	0	0	0	4	0	3	2
Oklahoma	0	0	0	60	3	0	0	2
Texas	0	0	0	5	2	0	5	1
Mountain	0	13	0	3	3	0	0	1
Arizona	0	0	0	5	6	0	0	0
Colorado	0	0	0	14	3	0	0	1
Idaho	0	58	0	18	12	0	0	6
Montana	0	0	0	68	16	0	0	4
Nevada	0	14	0	4	8	0	0	2
New Mexico	0	0	0	13	4	0	0	1
Utah	0	25	0	9	9	0	0	1
Wyoming	0	0	0	0	12	0	0	3
Pacific Contiguous	0	5	0	3	3	0	2	1
California	0	5	0	3	3	0	2	1
Oregon	0	35	0	19	10	0	0	2
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	0	33	0	18	13	0	0	4
Alaska	0	0	0	0	43	0	0	10
Hawaii	0	33	0	18	13	0	0	2
U.S. Total	0	7	0	3	2	0	1	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 December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	1	5	0	3	0	0	7
Connecticut	0	12	0	1	0	0	34
Maine	30	4	0	35	0	0	9
Massachusetts	0	7	0	5	0	0	20
New Hampshire	0	3	0	0	0	0	15
Rhode Island	0	41	0	23	0	0	0
Vermont	0	11	0	0	0	0	15
Middle Atlantic	1	8	67	2	17	0	2
New Jersey	0	20	0	6	0	0	414
New York	0	9	0	3	0	0	1
Pennsylvania	1	19	141	3	26	0	11
East North Central	1	9	13	1	5	0	10
Illinois	0	41	0	7	0	0	30
Indiana	1	14	0	2	9	0	22
Michigan	3	10	0	2	0	0	20
Ohio	1	14	31	1	19	0	20
Wisconsin	0	166	0	5	0	0	15
West North Central	1	16	0	7	0	0	8
Iowa	1	19	0	8	0	0	26
Kansas	2	19	0	13	0	0	0
Minnesota	3	129	0	10	0	0	21
Missouri	0	5	0	28	0	0	14
Nebraska	4	121	0	34	0	0	20
North Dakota	0	10	0	25	0	0	18
South Dakota	0	286	0	35	0	0	13
South Atlantic	0	15	13	1	23	0	6
Delaware	0	214	0	16	26	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	27	0	2	0	0	35
Georgia	0	26	149	3	0	0	10
Maryland	0	26	0	5	0	0	3
North Carolina	0	10	0	2	0	0	8
South Carolina	0	62	0	6	0	0	15
Virginia	4	23	0	3	0	0	16
West Virginia	1	0	0	22	0	0	16
East South Central	0	5	0	2	16	0	4
Alabama	0	24	0	3	18	0	6
Kentucky	0	3	0	9	0	0	11
Mississippi	0	33	0	4	0	0	0
Tennessee	0	0	0	3	0	0	6
West South Central	0	36	1	2	4	0	6
Arkansas	0	96	0	9	0	0	9
Louisiana	0	90	0	3	6	0	13
Oklahoma	0	2	0	4	0	0	9
Texas	0	39	58	2	4	0	16
Mountain	1	7	0	1	0	0	5
Arizona	0	4	0	1	0	0	5
Colorado	0	45	0	1	0	0	19
Idaho	125	0	0	15	0	0	9
Montana	5	50	0	16	0	0	8
Nevada	0	0	0	0	0	0	2
New Mexico	0	33	0	2	0	0	74
Utah	0	2	0	3	0	0	29
Wyoming	4	1	0	6	0	0	26
Pacific Contiguous	0	19	0	1	1	0	2
California	0	28	0	1	2	0	7
Oregon	0	0	0	3	0	0	3
Washington	0	39	0	5	0	0	1
Pacific Noncontiguous	17	1	0	15	0	0	19
Alaska	55	5	0	15	0	0	20
Hawaii	0	1	0	0	0	0	36
U.S. Total	0	3	5	1	3	0	2

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 December 2017 (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	13	6	0	1	2
Connecticut	0	0	0	52	14	0	0	1
Maine	0	0	0	119	8	0	0	7
Massachusetts	0	0	0	14	8	0	2	3
New Hampshire	0	0	0	0	18	0	0	2
Rhode Island	0	0	0	76	11	0	0	19
Vermont	0	0	0	39	17	0	0	11
Middle Atlantic	0	0	0	13	5	0	1	1
New Jersey	0	0	0	15	7	0	0	3
New York	0	0	0	26	7	0	2	1
Pennsylvania	0	0	0	57	8	0	0	1
East North Central	0	0	0	17	4	0	3	0
Illinois	0	0	0	41	5	0	0	1
Indiana	0	0	0	25	7	0	0	1
Michigan	0	0	0	36	7	0	11	1
Ohio	0	0	0	43	6	0	0	1
Wisconsin	0	0	0	63	10	0	42	1
West North Central	0	0	0	12	4	0	6	1
Iowa	0	0	0	101	6	0	0	2
Kansas	0	0	0	138	3	0	0	1
Minnesota	0	0	0	13	7	0	4	2
Missouri	0	0	0	40	8	0	0	1
Nebraska	0	0	0	85	8	0	0	3
North Dakota	0	0	0	0	6	0	48	2
South Dakota	0	0	0	281	13	0	0	7
South Atlantic	0	0	0	4	2	0	1	1
Delaware	0	0	0	66	33	0	0	13
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	4	3	0	1	1
Georgia	0	0	0	9	3	0	15	1
Maryland	0	0	0	23	13	0	0	1
North Carolina	0	0	0	6	3	0	0	1
South Carolina	0	0	0	19	5	0	0	1
Virginia	0	0	0	14	8	0	0	1
West Virginia	0	0	0	0	14	0	0	1
East South Central	0	0	0	11	2	0	9	1
Alabama	0	0	0	19	3	0	0	1
Kentucky	0	0	0	49	12	0	0	2
Mississippi	0	0	0	6	3	0	0	3
Tennessee	0	0	0	35	6	0	90	1
West South Central	0	0	0	5	2	0	3	1
Arkansas	0	0	0	31	4	0	124	2
Louisiana	0	0	0	0	4	0	3	2
Oklahoma	0	0	0	60	3	0	0	2
Texas	0	0	0	5	2	0	5	1
Mountain	0	13	0	3	3	0	0	1
Arizona	0	0	0	5	6	0	0	0
Colorado	0	0	0	14	3	0	0	1
Idaho	0	58	0	18	12	0	0	6
Montana	0	0	0	68	16	0	0	4
Nevada	0	14	0	4	8	0	0	2
New Mexico	0	0	0	13	4	0	0	1
Utah	0	25	0	9	9	0	0	1
Wyoming	0	0	0	0	12	0	0	3
Pacific Contiguous	0	5	0	3	3	0	2	1
California	0	5	0	3	3	0	2	1
Oregon	0	35	0	19	10	0	0	2
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	0	33	0	18	13	0	0	4
Alaska	0	0	0	0	43	0	0	10
Hawaii	0	33	0	18	13	0	0	2
U.S. Total	0	7	0	3	2	0	1	0

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Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, December 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	1	0	2	.	0
Connecticut	0	1	0	.	0
Maine	3	3	0	.	2
Massachusetts	1	0	2	.	0
New Hampshire	1	0	0	.	1
Rhode Island	1	0	0	.	1
Vermont	4	5	119	.	4
Middle Atlantic	0	0	2	.	0
New Jersey	0	0	4	.	0
New York	0	0	1	.	0
Pennsylvania	2	2	0	.	1
East North Central	2	3	29	.	2
Illinois	5	14	0	.	8
Indiana	6	4	0	.	3
Michigan	3	19	458	.	13
Ohio	4	3	64	.	4
Wisconsin	6	12	10	.	6
West North Central	2	1	7	.	1
Iowa	5	3	36	.	3
Kansas	8	10	0	.	6
Minnesota	5	5	6	.	3
Missouri	2	1	0	.	1
Nebraska	13	36	50	.	14
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	1	2	3	.	1
Delaware	3	3	23	.	2
District of Columbia	0	0	0	.	0
Florida	4	8	5	.	3
Georgia	72	149	0	.	70
Maryland	1	2	4	.	1
North Carolina	7	1	0	.	4
South Carolina	2	6	0	.	2
Virginia	9	9	17	.	6
West Virginia	0	0	0	.	0
East South Central	6	11	0	.	5
Alabama	0	0	0	.	0
Kentucky	8	11	0	.	6
Mississippi	10	31	0	.	18
Tennessee	0	0	0	.	0
West South Central	3	4	0	.	3
Arkansas	20	6	0	.	14
Louisiana	3	3	0	.	2
Oklahoma	19	3	0	.	15
Texas	7	5	0	.	5
Mountain	0	0	0	.	0
Arizona	0	0	0	.	0
Colorado	2	1	13	.	1
Idaho	3	2	0	.	2
Montana	11	4	0	.	8
Nevada	0	0	0	.	0
New Mexico	3	1	0	.	2
Utah	1	1	0	.	1
Wyoming	33	13	0	.	21
Pacific Contiguous	0	0	0	.	0
California	0	0	0	.	0
Oregon	1	2	9	.	1
Washington	2	7	64	.	2
Pacific Noncontiguous	0	0	0	.	0
Alaska	2	4	0	.	2
Hawaii	0	0	0	.	0
U.S. Total	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.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:
Electric Utilities by Census Division and State, December 2017**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	11	0	96	0	0	17
Connecticut	0	39	0	0	0	0	46
Maine	0	0	0	0	0	0	0
Massachusetts	0	18	0	358	0	0	49
New Hampshire	0	3	0	0	0	0	27
Rhode Island	0	0	0	0	0	0	0
Vermont	0	11	0	0	0	0	23
Middle Atlantic	0	15	0	6	0	0	1
New Jersey	0	232	0	110	0	0	0
New York	0	15	0	6	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	1	11	0	2	4	0	11
Illinois	0	52	0	63	0	0	33
Indiana	1	21	0	3	129	0	22
Michigan	3	10	0	7	0	0	21
Ohio	4	12	0	2	0	0	25
Wisconsin	0	177	0	5	0	0	16
West North Central	1	12	0	8	0	0	8
Iowa	1	19	0	8	0	0	26
Kansas	2	19	0	14	0	0	0
Minnesota	3	83	0	12	0	0	27
Missouri	0	5	0	35	0	0	14
Nebraska	4	121	0	35	0	0	20
North Dakota	0	10	0	25	0	0	18
South Dakota	0	287	0	35	0	0	13
South Atlantic	0	14	0	1	0	0	6
Delaware	0	0	0	0	0	0	0
Florida	0	28	0	2	0	0	35
Georgia	0	25	0	4	0	0	10
Maryland	0	30	0	0	0	0	0
North Carolina	0	8	0	2	0	0	8
South Carolina	0	70	0	7	0	0	15
Virginia	5	35	0	4	0	0	17
West Virginia	0	0	0	0	0	0	29
East South Central	0	3	0	3	0	0	4
Alabama	0	14	0	7	0	0	6
Kentucky	0	3	0	10	0	0	11
Mississippi	0	36	0	4	0	0	0
Tennessee	0	0	0	4	0	0	6
West South Central	0	38	0	5	0	0	6
Arkansas	0	98	0	35	0	0	9
Louisiana	0	90	0	5	0	0	0
Oklahoma	0	2	0	10	0	0	9
Texas	0	38	0	10	0	0	17
Mountain	1	7	0	1	0	0	5
Arizona	0	4	0	1	0	0	5
Colorado	0	45	0	1	0	0	20
Idaho	0	0	0	20	0	0	9
Montana	0	1,157	0	23	0	0	8
Nevada	0	0	0	0	0	0	0
New Mexico	0	33	0	3	0	0	74
Utah	0	2	0	3	0	0	29
Wyoming	4	1	0	10	0	0	26
Pacific Contiguous	0	25	0	2	0	0	1
California	0	32	0	1	0	0	6
Oregon	0	0	0	7	0	0	3
Washington	0	335	0	5	0	0	1
Pacific Noncontiguous	104	1	0	15	0	0	21
Alaska	104	6	0	15	0	0	21
Hawaii	0	1	0	0	0	0	0
U.S. Total	0	3	0	1	4	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, December 2017 (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	51	12	0	0	5
Connecticut	0	0	0	0	0	0	0	12
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	115	84	0	0	26
New Hampshire	0	0	0	0	0	0	0	4
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	59	18	0	0	14
Middle Atlantic	0	0	0	54	54	0	0	2
New Jersey	0	0	0	54	54	0	0	30
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	0	0	0	26	12	0	2	1
Illinois	0	0	0	0	43	0	0	9
Indiana	0	0	0	36	18	0	0	1
Michigan	0	0	0	39	16	0	0	2
Ohio	0	0	0	171	125	0	0	3
Wisconsin	0	0	0	0	20	0	24	1
West North Central	0	0	0	84	5	0	10	1
Iowa	0	0	0	111	6	0	0	2
Kansas	0	0	0	0	8	0	0	1
Minnesota	0	0	0	185	12	0	0	2
Missouri	0	0	0	0	46	0	0	1
Nebraska	0	0	0	0	39	0	0	3
North Dakota	0	0	0	0	10	0	48	2
South Dakota	0	0	0	0	21	0	0	7
South Atlantic	0	0	0	5	9	0	0	1
Delaware	0	0	0	181	181	0	0	36
Florida	0	0	0	3	3	0	0	1
Georgia	0	0	0	21	21	0	0	1
Maryland	0	0	0	165	165	0	0	1
North Carolina	0	0	0	21	21	0	0	1
South Carolina	0	0	0	0	8	0	0	1
Virginia	0	0	0	25	17	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	0	0	0	40	27	0	0	1
Alabama	0	0	0	66	66	0	0	1
Kentucky	0	0	0	49	30	0	0	2
Mississippi	0	0	0	0	0	0	0	4
Tennessee	0	0	0	0	0	0	0	1
West South Central	0	0	0	55	10	0	0	2
Arkansas	0	0	0	281	281	0	0	3
Louisiana	0	0	0	0	0	0	0	2
Oklahoma	0	0	0	60	10	0	0	4
Texas	0	0	0	162	35	0	0	3
Mountain	0	34	0	13	11	0	0	1
Arizona	0	0	0	16	16	0	0	0
Colorado	0	0	0	168	44	0	0	1
Idaho	0	0	0	0	98	0	0	8
Montana	0	0	0	0	45	0	0	8
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	29	29	0	0	1
Utah	0	34	0	0	34	0	0	1
Wyoming	0	0	0	0	16	0	0	4
Pacific Contiguous	0	0	0	20	8	0	0	1
California	0	0	0	20	6	0	0	2
Oregon	0	0	0	202	14	0	0	3
Washington	0	0	0	0	11	0	0	1
Pacific Noncontiguous	0	0	0	0	36	0	0	6
Alaska	0	0	0	0	69	0	0	11
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	0	10	0	5	4	0	3	0

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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 December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	11	0	96	0	0	17
Connecticut	0	39	0	0	0	0	46
Maine	0	0	0	0	0	0	0
Massachusetts	0	18	0	358	0	0	49
New Hampshire	0	3	0	0	0	0	27
Rhode Island	0	0	0	0	0	0	0
Vermont	0	11	0	0	0	0	23
Middle Atlantic	0	15	0	6	0	0	1
New Jersey	0	232	0	110	0	0	0
New York	0	15	0	6	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	1	11	0	2	4	0	11
Illinois	0	52	0	63	0	0	33
Indiana	1	21	0	3	129	0	22
Michigan	3	10	0	7	0	0	21
Ohio	4	12	0	2	0	0	25
Wisconsin	0	177	0	5	0	0	16
West North Central	1	12	0	8	0	0	8
Iowa	1	19	0	8	0	0	26
Kansas	2	19	0	14	0	0	0
Minnesota	3	83	0	12	0	0	27
Missouri	0	5	0	35	0	0	14
Nebraska	4	121	0	35	0	0	20
North Dakota	0	10	0	25	0	0	18
South Dakota	0	287	0	35	0	0	13
South Atlantic	0	14	0	1	0	0	6
Delaware	0	0	0	0	0	0	0
Florida	0	28	0	2	0	0	35
Georgia	0	25	0	4	0	0	10
Maryland	0	30	0	0	0	0	0
North Carolina	0	8	0	2	0	0	8
South Carolina	0	70	0	7	0	0	15
Virginia	5	35	0	4	0	0	17
West Virginia	0	0	0	0	0	0	29
East South Central	0	3	0	3	0	0	4
Alabama	0	14	0	7	0	0	6
Kentucky	0	3	0	10	0	0	11
Mississippi	0	36	0	4	0	0	0
Tennessee	0	0	0	4	0	0	6
West South Central	0	38	0	5	0	0	6
Arkansas	0	98	0	35	0	0	9
Louisiana	0	90	0	5	0	0	0
Oklahoma	0	2	0	10	0	0	9
Texas	0	38	0	10	0	0	17
Mountain	1	7	0	1	0	0	5
Arizona	0	4	0	1	0	0	5
Colorado	0	45	0	1	0	0	20
Idaho	0	0	0	20	0	0	9
Montana	0	1,157	0	23	0	0	8
Nevada	0	0	0	0	0	0	0
New Mexico	0	33	0	3	0	0	74
Utah	0	2	0	3	0	0	29
Wyoming	4	1	0	10	0	0	26
Pacific Contiguous	0	25	0	2	0	0	1
California	0	32	0	1	0	0	6
Oregon	0	0	0	7	0	0	3
Washington	0	335	0	5	0	0	1
Pacific Noncontiguous	104	1	0	15	0	0	21
Alaska	104	6	0	15	0	0	21
Hawaii	0	1	0	0	0	0	0
U.S. Total	0	3	0	1	4	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 December 2017 (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	51	12	0	0	5
Connecticut	0	0	0	0	0	0	0	12
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	115	84	0	0	26
New Hampshire	0	0	0	0	0	0	0	4
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	59	18	0	0	14
Middle Atlantic	0	0	0	54	54	0	0	2
New Jersey	0	0	0	54	54	0	0	30
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	0	0	0	26	12	0	2	1
Illinois	0	0	0	0	43	0	0	9
Indiana	0	0	0	36	18	0	0	1
Michigan	0	0	0	39	16	0	0	2
Ohio	0	0	0	171	125	0	0	3
Wisconsin	0	0	0	0	20	0	24	1
West North Central	0	0	0	84	5	0	10	1
Iowa	0	0	0	111	6	0	0	2
Kansas	0	0	0	0	8	0	0	1
Minnesota	0	0	0	185	12	0	0	2
Missouri	0	0	0	0	46	0	0	1
Nebraska	0	0	0	0	39	0	0	3
North Dakota	0	0	0	0	10	0	48	2
South Dakota	0	0	0	0	21	0	0	7
South Atlantic	0	0	0	5	9	0	0	1
Delaware	0	0	0	181	181	0	0	36
Florida	0	0	0	3	3	0	0	1
Georgia	0	0	0	21	21	0	0	1
Maryland	0	0	0	165	165	0	0	1
North Carolina	0	0	0	21	21	0	0	1
South Carolina	0	0	0	0	8	0	0	1
Virginia	0	0	0	25	17	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	0	0	0	40	27	0	0	1
Alabama	0	0	0	66	66	0	0	1
Kentucky	0	0	0	49	30	0	0	2
Mississippi	0	0	0	0	0	0	0	4
Tennessee	0	0	0	0	0	0	0	1
West South Central	0	0	0	55	10	0	0	2
Arkansas	0	0	0	281	281	0	0	3
Louisiana	0	0	0	0	0	0	0	2
Oklahoma	0	0	0	60	10	0	0	4
Texas	0	0	0	162	35	0	0	3
Mountain	0	34	0	13	11	0	0	1
Arizona	0	0	0	16	16	0	0	0
Colorado	0	0	0	168	44	0	0	1
Idaho	0	0	0	0	98	0	0	8
Montana	0	0	0	0	45	0	0	8
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	29	29	0	0	1
Utah	0	34	0	0	34	0	0	1
Wyoming	0	0	0	0	16	0	0	4
Pacific Contiguous	0	0	0	20	8	0	0	1
California	0	0	0	20	6	0	0	2
Oregon	0	0	0	202	14	0	0	3
Washington	0	0	0	0	11	0	0	1
Pacific Noncontiguous	0	0	0	0	36	0	0	6
Alaska	0	0	0	0	69	0	0	11
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	0	10	0	5	4	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.3.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	5	0	3	0	0	8
Connecticut	0	12	0	1	0	0	37
Maine	0	0	0	42	0	0	9
Massachusetts	0	6	0	5	0	0	22
New Hampshire	0	4	0	0	0	0	18
Rhode Island	0	42	0	24	0	0	0
Vermont	0	0	0	0	0	0	19
Middle Atlantic	1	8	0	3	0	0	8
New Jersey	0	20	0	6	0	0	414
New York	0	10	0	3	0	0	8
Pennsylvania	1	18	0	3	0	0	11
East North Central	0	17	32	1	6	0	29
Illinois	0	14	0	7	0	0	46
Indiana	0	0	0	3	0	0	0
Michigan	0	0	0	1	0	0	77
Ohio	0	23	32	1	23	0	34
Wisconsin	0	0	0	0	0	0	71
West North Central	0	281	0	28	0	0	46
Iowa	0	205	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	285	0	25	0	0	53
Missouri	0	0	0	51	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	3	52	0	4	0	0	8
Delaware	0	251	0	19	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	99	0	22	0	0	0
Georgia	0	184	0	8	0	0	64
Maryland	0	28	0	6	0	0	3
North Carolina	0	142	0	11	0	0	66
South Carolina	0	0	0	18	0	0	66
Virginia	0	8	0	2	0	0	47
West Virginia	5	0	0	104	0	0	26
East South Central	0	27	0	3	0	0	144
Alabama	0	29	0	4	0	0	0
Kentucky	0	0	0	0	0	0	144
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	0	166	0	2	4	0	13
Arkansas	0	0	0	2	0	0	72
Louisiana	0	0	0	0	0	0	13
Oklahoma	0	0	0	0	0	0	0
Texas	0	166	0	2	4	0	0
Mountain	4	9	0	2	0	0	23
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	63
Idaho	0	0	0	27	0	0	28
Montana	5	13	0	9	0	0	67
Nevada	0	0	0	0	0	0	65
New Mexico	0	0	0	3	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	0	19	0	1	0	0	26
California	0	0	0	1	0	0	38
Oregon	0	0	0	0	0	0	48
Washington	0	28	0	14	0	0	37
Pacific Noncontiguous	5	0	0	0	0	0	0
Alaska	46	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	0	5	18	1	3	0	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.3.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, December 2017 (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	13	8	0	1	2
Connecticut	0	0	0	55	14	0	0	1
Maine	0	0	0	119	11	0	0	9
Massachusetts	0	0	0	14	8	0	2	3
New Hampshire	0	0	0	0	22	0	0	2
Rhode Island	0	0	0	76	11	0	0	20
Vermont	0	0	0	51	33	0	0	17
Middle Atlantic	0	0	0	14	6	0	0	1
New Jersey	0	0	0	17	7	0	0	3
New York	0	0	0	27	8	0	0	1
Pennsylvania	0	0	0	63	9	0	0	1
East North Central	0	0	0	22	4	0	16	0
Illinois	0	0	0	43	5	0	0	1
Indiana	0	0	0	33	7	0	0	4
Michigan	0	0	0	87	9	0	23	2
Ohio	0	0	0	45	6	0	0	0
Wisconsin	0	0	0	63	12	0	0	2
West North Central	0	0	0	12	4	0	0	4
Iowa	0	0	0	247	9	0	0	6
Kansas	0	0	0	138	3	0	0	3
Minnesota	0	0	0	13	7	0	0	7
Missouri	0	0	0	42	8	0	0	14
Nebraska	0	0	0	85	8	0	0	8
North Dakota	0	0	0	0	7	0	0	7
South Dakota	0	0	0	281	15	0	0	15
South Atlantic	0	0	0	5	3	0	1	2
Delaware	0	0	0	71	40	0	0	16
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	14	4	0	1	13
Georgia	0	0	0	9	6	0	0	7
Maryland	0	0	0	23	15	0	0	1
North Carolina	0	0	0	6	4	0	0	5
South Carolina	0	0	0	19	22	0	0	14
Virginia	0	0	0	17	13	0	0	2
West Virginia	0	0	0	0	14	0	0	5
East South Central	0	0	0	12	9	0	0	3
Alabama	0	0	0	19	12	0	0	4
Kentucky	0	0	0	0	0	0	0	1
Mississippi	0	0	0	6	8	0	0	0
Tennessee	0	0	0	35	26	0	0	24
West South Central	0	0	0	5	2	0	0	1
Arkansas	0	0	0	0	25	0	0	2
Louisiana	0	0	0	0	38	0	0	2
Oklahoma	0	0	0	0	3	0	0	2
Texas	0	0	0	5	2	0	0	1
Mountain	0	13	0	3	3	0	0	2
Arizona	0	0	0	5	7	0	0	2
Colorado	0	0	0	14	3	0	0	3
Idaho	0	58	0	18	14	0	0	11
Montana	0	0	0	68	17	0	0	4
Nevada	0	14	0	4	9	0	0	6
New Mexico	0	0	0	15	4	0	0	3
Utah	0	34	0	9	9	0	0	7
Wyoming	0	0	0	0	16	0	0	12
Pacific Contiguous	0	5	0	3	3	0	0	1
California	0	5	0	3	3	0	0	1
Oregon	0	35	0	19	12	0	0	3
Washington	0	0	0	0	13	0	0	4
Pacific Noncontiguous	0	33	0	23	17	0	0	5
Alaska	0	0	0	0	91	0	0	42
Hawaii	0	33	0	23	17	0	0	5
U.S. Total	0	7	0	3	2	0	1	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 December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	5	0	3	0	0	8
Connecticut	0	12	0	1	0	0	37
Maine	0	0	0	42	0	0	9
Massachusetts	0	6	0	5	0	0	22
New Hampshire	0	4	0	0	0	0	18
Rhode Island	0	42	0	24	0	0	0
Vermont	0	0	0	0	0	0	19
Middle Atlantic	1	8	0	3	0	0	8
New Jersey	0	20	0	6	0	0	414
New York	0	10	0	3	0	0	8
Pennsylvania	1	18	0	3	0	0	11
East North Central	0	17	32	1	6	0	29
Illinois	0	14	0	7	0	0	46
Indiana	0	0	0	3	0	0	0
Michigan	0	0	0	1	0	0	77
Ohio	0	23	32	1	23	0	34
Wisconsin	0	0	0	0	0	0	71
West North Central	0	281	0	28	0	0	46
Iowa	0	205	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	285	0	25	0	0	53
Missouri	0	0	0	51	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	3	52	0	4	0	0	8
Delaware	0	251	0	19	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	99	0	22	0	0	0
Georgia	0	184	0	8	0	0	64
Maryland	0	28	0	6	0	0	3
North Carolina	0	142	0	11	0	0	66
South Carolina	0	0	0	18	0	0	66
Virginia	0	8	0	2	0	0	47
West Virginia	5	0	0	104	0	0	26
East South Central	0	27	0	3	0	0	144
Alabama	0	29	0	4	0	0	0
Kentucky	0	0	0	0	0	0	144
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	0	166	0	2	4	0	13
Arkansas	0	0	0	2	0	0	72
Louisiana	0	0	0	0	0	0	13
Oklahoma	0	0	0	0	0	0	0
Texas	0	166	0	2	4	0	0
Mountain	4	9	0	2	0	0	23
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	63
Idaho	0	0	0	27	0	0	28
Montana	5	13	0	9	0	0	67
Nevada	0	0	0	0	0	0	65
New Mexico	0	0	0	3	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	0	19	0	1	0	0	26
California	0	0	0	1	0	0	38
Oregon	0	0	0	0	0	0	48
Washington	0	28	0	14	0	0	37
Pacific Noncontiguous	5	0	0	0	0	0	0
Alaska	46	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	0	5	18	1	3	0	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.3.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, Year-to-Date through December 2017 (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	13	8	0	1	2
Connecticut	0	0	0	55	14	0	0	1
Maine	0	0	0	119	11	0	0	9
Massachusetts	0	0	0	14	8	0	2	3
New Hampshire	0	0	0	0	22	0	0	2
Rhode Island	0	0	0	76	11	0	0	20
Vermont	0	0	0	51	33	0	0	17
Middle Atlantic	0	0	0	14	6	0	0	1
New Jersey	0	0	0	17	7	0	0	3
New York	0	0	0	27	8	0	0	1
Pennsylvania	0	0	0	63	9	0	0	1
East North Central	0	0	0	22	4	0	16	0
Illinois	0	0	0	43	5	0	0	1
Indiana	0	0	0	33	7	0	0	4
Michigan	0	0	0	87	9	0	23	2
Ohio	0	0	0	45	6	0	0	0
Wisconsin	0	0	0	63	12	0	0	2
West North Central	0	0	0	12	4	0	0	4
Iowa	0	0	0	247	9	0	0	6
Kansas	0	0	0	138	3	0	0	3
Minnesota	0	0	0	13	7	0	0	7
Missouri	0	0	0	42	8	0	0	14
Nebraska	0	0	0	85	8	0	0	8
North Dakota	0	0	0	0	7	0	0	7
South Dakota	0	0	0	281	15	0	0	15
South Atlantic	0	0	0	5	3	0	1	2
Delaware	0	0	0	71	40	0	0	16
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	14	4	0	1	13
Georgia	0	0	0	9	6	0	0	7
Maryland	0	0	0	23	15	0	0	1
North Carolina	0	0	0	6	4	0	0	5
South Carolina	0	0	0	19	22	0	0	14
Virginia	0	0	0	17	13	0	0	2
West Virginia	0	0	0	0	14	0	0	5
East South Central	0	0	0	12	9	0	0	3
Alabama	0	0	0	19	12	0	0	4
Kentucky	0	0	0	0	0	0	0	1
Mississippi	0	0	0	6	8	0	0	0
Tennessee	0	0	0	35	26	0	0	24
West South Central	0	0	0	5	2	0	0	1
Arkansas	0	0	0	0	25	0	0	2
Louisiana	0	0	0	0	38	0	0	2
Oklahoma	0	0	0	0	3	0	0	2
Texas	0	0	0	5	2	0	0	1
Mountain	0	13	0	3	3	0	0	2
Arizona	0	0	0	5	7	0	0	2
Colorado	0	0	0	14	3	0	0	3
Idaho	0	58	0	18	14	0	0	11
Montana	0	0	0	68	17	0	0	4
Nevada	0	14	0	4	9	0	0	6
New Mexico	0	0	0	15	4	0	0	3
Utah	0	34	0	9	9	0	0	7
Wyoming	0	0	0	0	16	0	0	12
Pacific Contiguous	0	5	0	3	3	0	0	1
California	0	5	0	3	3	0	0	1
Oregon	0	35	0	19	12	0	0	3
Washington	0	0	0	0	13	0	0	4
Pacific Noncontiguous	0	33	0	23	17	0	0	5
Alaska	0	0	0	0	91	0	0	42
Hawaii	0	33	0	23	17	0	0	5
U.S. Total	0	7	0	3	2	0	1	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, December 2017**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	64	0	19	0	0	0
Connecticut	0	59	0	27	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	177	0	30	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	0	510	0	15	0	0	0
New Jersey	0	0	0	19	0	0	0
New York	0	639	0	23	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	55	203	0	9	0	0	0
Illinois	84	633	0	34	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	8	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	33	0	0	0
West North Central	0	29	0	0	0	0	0
Iowa	0	0	0	0	0	0	0
Minnesota	0	35	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	1,189	0	0	0	0	0
South Atlantic	0	1	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	10	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	0	0	0	25	0	0	0
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	28	0	0	0
West South Central	0	35	0	31	0	0	570
Arkansas	0	0	0	0	0	0	0
Louisiana	0	0	0	40	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	35	0	40	0	0	570
Mountain	0	0	0	9	0	0	0
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	35	0	0	0
Utah	0	0	0	6	0	0	0
Pacific Contiguous	0	28	0	3	0	0	0
California	0	42	0	3	0	0	0
Oregon	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	47	5	0	0	0	0	59
Alaska	47	7	0	0	0	0	59
Hawaii	0	0	0	0	0	0	0
U.S. Total	17	69	0	4	0	0	54

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, December 2017 (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	167	2	0	0	14
Connecticut	0	0	0	0	0	0	0	25
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	167	10	0	0	28
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	39	6	0	4	9
New Jersey	0	0	0	41	14	0	0	9
New York	0	0	0	180	6	0	9	16
Pennsylvania	0	0	0	213	8	0	0	3
East North Central	0	0	0	177	7	0	0	7
Illinois	0	0	0	199	228	0	0	31
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	5
Ohio	0	0	0	334	36	0	0	3
Wisconsin	0	0	0	0	15	0	0	17
West North Central	0	0	0	0	27	0	50	9
Iowa	0	0	0	0	29	0	0	5
Kansas	0	0	0	0	237	0	0	237
Minnesota	0	0	0	0	67	0	50	24
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	1,189
South Atlantic	0	0	0	40	9	0	0	3
Delaware	0	0	0	437	71	0	0	71
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	206	28	0	0	21
Georgia	0	0	0	293	293	0	0	96
Maryland	0	0	0	179	36	0	0	2
North Carolina	0	0	0	42	37	0	0	14
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	3	0	0	2
East South Central	0	0	0	201	201	0	0	25
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	201	201	0	0	27
West South Central	0	0	0	0	0	0	0	27
Arkansas	0	0	0	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0	40
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	0	0	0	33
Mountain	0	0	0	48	36	0	0	9
Arizona	0	0	0	95	95	0	0	9
Colorado	0	0	0	124	124	0	0	39
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	62	62	0	0	22
New Mexico	0	0	0	0	398	0	0	35
Utah	0	0	0	0	0	0	0	6
Pacific Contiguous	0	0	0	40	7	0	0	3
California	0	0	0	40	7	0	0	3
Oregon	0	0	0	0	35	0	0	14
Washington	0	0	0	0	57	0	0	22
Pacific Noncontiguous	0	0	0	0	0	0	0	16
Alaska	0	0	0	0	0	0	0	33
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	0	0	0	20	4	0	2	3

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

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

Commercial Sector by Census Division and State, Year-to-Date through December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	0	64	0	19	0	0	0
Connecticut	0	59	0	27	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	177	0	30	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	0	510	0	15	0	0	0
New Jersey	0	0	0	19	0	0	0
New York	0	639	0	23	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	55	203	0	9	0	0	0
Illinois	84	633	0	34	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	8	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	33	0	0	0
West North Central	0	29	0	0	0	0	0
Iowa	0	0	0	0	0	0	0
Minnesota	0	35	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	1,189	0	0	0	0	0
South Atlantic	0	1	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	10	0	0	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	0	0	0	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	0	0	0	25	0	0	0
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	28	0	0	0
West South Central	0	35	0	31	0	0	570
Arkansas	0	0	0	0	0	0	0
Louisiana	0	0	0	40	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	35	0	40	0	0	570
Mountain	0	0	0	9	0	0	0
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	0	0	0	0
Idaho	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	35	0	0	0
Utah	0	0	0	6	0	0	0
Pacific Contiguous	0	28	0	3	0	0	0
California	0	42	0	3	0	0	0
Oregon	0	0	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	47	5	0	0	0	0	59
Alaska	47	7	0	0	0	0	59
Hawaii	0	0	0	0	0	0	0
U.S. Total	17	69	0	4	0	0	54

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 December 2017 (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	167	2	0	0	14
Connecticut	0	0	0	0	0	0	0	25
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	167	10	0	0	28
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	39	6	0	4	9
New Jersey	0	0	0	41	14	0	0	9
New York	0	0	0	180	6	0	9	16
Pennsylvania	0	0	0	213	8	0	0	3
East North Central	0	0	0	177	7	0	0	7
Illinois	0	0	0	199	228	0	0	31
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	5
Ohio	0	0	0	334	36	0	0	3
Wisconsin	0	0	0	0	15	0	0	17
West North Central	0	0	0	0	27	0	50	9
Iowa	0	0	0	0	29	0	0	5
Kansas	0	0	0	0	237	0	0	237
Minnesota	0	0	0	0	67	0	50	24
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	1,189
South Atlantic	0	0	0	40	9	0	0	3
Delaware	0	0	0	437	71	0	0	71
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	206	28	0	0	21
Georgia	0	0	0	293	293	0	0	96
Maryland	0	0	0	179	36	0	0	2
North Carolina	0	0	0	42	37	0	0	14
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	0	3	0	0	2
East South Central	0	0	0	201	201	0	0	25
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	201	201	0	0	27
West South Central	0	0	0	0	0	0	0	27
Arkansas	0	0	0	0	0	0	0	0
Louisiana	0	0	0	0	0	0	0	40
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	0	0	0	33
Mountain	0	0	0	48	36	0	0	9
Arizona	0	0	0	95	95	0	0	9
Colorado	0	0	0	124	124	0	0	39
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	62	62	0	0	22
New Mexico	0	0	0	0	398	0	0	35
Utah	0	0	0	0	0	0	0	6
Pacific Contiguous	0	0	0	40	7	0	0	3
California	0	0	0	40	7	0	0	3
Oregon	0	0	0	0	35	0	0	14
Washington	0	0	0	0	57	0	0	22
Pacific Noncontiguous	0	0	0	0	0	0	0	16
Alaska	0	0	0	0	0	0	0	33
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	0	0	0	20	4	0	2	3

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

**Table A.5.A. Relative Standard Error for Net Generation by Fuel Type:
Industrial Sector by Census Division and State, December 2017**

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	169	93	0	15	0	0	23
Connecticut	0	0	0	16	0	0	0
Maine	169	112	0	43	0	0	23
Massachusetts	0	0	0	9	0	0	0
New Hampshire	0	0	0	0	0	0	0
Middle Atlantic	24	61	67	10	17	0	18
New Jersey	0	0	0	10	0	0	0
New York	0	0	0	12	0	0	18
Pennsylvania	33	341	141	16	26	0	0
East North Central	7	4	0	6	8	0	33
Illinois	6	0	0	18	0	0	0
Indiana	0	0	0	8	9	0	0
Michigan	89	210	0	15	0	0	70
Ohio	87	0	0	21	0	0	0
Wisconsin	20	155	0	16	0	0	36
West North Central	4	0	0	4	0	0	33
Iowa	5	0	0	0	0	0	0
Kansas	0	0	0	34	0	0	0
Minnesota	10	0	0	0	0	0	33
Missouri	0	0	0	0	0	0	0
Nebraska	7	0	0	0	0	0	0
North Dakota	62	0	0	0	0	0	0
South Atlantic	16	27	149	7	23	0	21
Delaware	0	0	0	20	26	0	0
Florida	26	89	0	16	0	0	0
Georgia	66	37	149	20	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	12	68	0	23	0	0	514
South Carolina	0	0	0	5	0	0	0
Virginia	24	167	0	5	0	0	0
West Virginia	0	0	0	0	0	0	20
East South Central	6	86	0	11	16	0	0
Alabama	70	119	0	19	18	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	26	0	0	0
Tennessee	0	0	0	7	0	0	0
West South Central	0	0	40	2	5	0	0
Arkansas	0	0	0	19	0	0	0
Louisiana	0	0	0	2	6	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	58	3	8	0	0
Mountain	20	0	0	5	0	0	0
Colorado	0	0	0	0	0	0	0
Idaho	125	0	0	43	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	21	0	0	8	0	0	0
Pacific Contiguous	0	56	0	1	2	0	0
California	0	64	0	1	2	0	0
Oregon	0	0	0	38	0	0	0
Washington	0	61	0	23	0	0	0
Pacific Noncontiguous	0	3	0	0	0	0	73
Alaska	0	23	0	0	0	0	0
Hawaii	0	0	0	0	0	0	73
U.S. Total	3	13	37	2	4	0	12

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, December 2017 (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	5	0	0	7
Connecticut	0	0	0	0	0	0	0	16
Maine	0	0	0	0	5	0	0	9
Massachusetts	0	0	0	0	0	0	0	9
New Hampshire	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	117	6	0	0	7
New Jersey	0	0	0	160	160	0	0	5
New York	0	0	0	0	11	0	0	7
Pennsylvania	0	0	0	172	7	0	0	10
East North Central	0	0	0	0	5	0	3	3
Illinois	0	0	0	0	0	0	0	6
Indiana	0	0	0	0	27	0	0	6
Michigan	0	0	0	0	7	0	0	7
Ohio	0	0	0	0	22	0	0	12
Wisconsin	0	0	0	0	7	0	58	8
West North Central	0	0	0	0	1	0	0	3
Iowa	0	0	0	0	0	0	0	4
Kansas	0	0	0	0	0	0	0	32
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	7
North Dakota	0	0	0	0	64	0	0	34
South Atlantic	0	0	0	0	2	0	1	2
Delaware	0	0	0	0	64	0	0	16
Florida	0	0	0	0	4	0	1	5
Georgia	0	0	0	0	3	0	15	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	4	0	0	4
South Carolina	0	0	0	0	2	0	0	2
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	10
East South Central	0	0	0	0	2	0	90	3
Alabama	0	0	0	0	3	0	0	5
Kentucky	0	0	0	0	13	0	0	9
Mississippi	0	0	0	0	3	0	0	7
Tennessee	0	0	0	0	5	0	90	3
West South Central	0	0	0	0	3	0	3	2
Arkansas	0	0	0	0	4	0	124	5
Louisiana	0	0	0	0	4	0	3	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	8	0	6	2
Mountain	0	0	0	0	2	0	0	4
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	11
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	0	0	0	60	4	0	3	1
California	0	0	0	60	8	0	3	1
Oregon	0	0	0	0	10	0	0	10
Washington	0	0	0	0	6	0	0	6
Pacific Noncontiguous	0	0	0	0	268	0	0	7
Alaska	0	0	0	0	268	0	0	7
Hawaii	0	0	0	0	0	0	0	9
U.S. Total	0	0	0	51	1	0	1	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 December 2017

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	169	93	0	15	0	0	23
Connecticut	0	0	0	16	0	0	0
Maine	169	112	0	43	0	0	23
Massachusetts	0	0	0	9	0	0	0
New Hampshire	0	0	0	0	0	0	0
Middle Atlantic	24	61	67	10	17	0	18
New Jersey	0	0	0	10	0	0	0
New York	0	0	0	12	0	0	18
Pennsylvania	33	341	141	16	26	0	0
East North Central	7	4	0	6	8	0	33
Illinois	6	0	0	18	0	0	0
Indiana	0	0	0	8	9	0	0
Michigan	89	210	0	15	0	0	70
Ohio	87	0	0	21	0	0	0
Wisconsin	20	155	0	16	0	0	36
West North Central	4	0	0	4	0	0	33
Iowa	5	0	0	0	0	0	0
Kansas	0	0	0	34	0	0	0
Minnesota	10	0	0	0	0	0	33
Missouri	0	0	0	0	0	0	0
Nebraska	7	0	0	0	0	0	0
North Dakota	62	0	0	0	0	0	0
South Atlantic	16	27	149	7	23	0	21
Delaware	0	0	0	20	26	0	0
Florida	26	89	0	16	0	0	0
Georgia	66	37	149	20	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	12	68	0	23	0	0	514
South Carolina	0	0	0	5	0	0	0
Virginia	24	167	0	5	0	0	0
West Virginia	0	0	0	0	0	0	20
East South Central	6	86	0	11	16	0	0
Alabama	70	119	0	19	18	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	26	0	0	0
Tennessee	0	0	0	7	0	0	0
West South Central	0	0	40	2	5	0	0
Arkansas	0	0	0	19	0	0	0
Louisiana	0	0	0	2	6	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	58	3	8	0	0
Mountain	20	0	0	5	0	0	0
Colorado	0	0	0	0	0	0	0
Idaho	125	0	0	43	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	21	0	0	8	0	0	0
Pacific Contiguous	0	56	0	1	2	0	0
California	0	64	0	1	2	0	0
Oregon	0	0	0	38	0	0	0
Washington	0	61	0	23	0	0	0
Pacific Noncontiguous	0	3	0	0	0	0	73
Alaska	0	23	0	0	0	0	0
Hawaii	0	0	0	0	0	0	73
U.S. Total	3	13	37	2	4	0	12

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 December 2017 (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	5	0	0	7
Connecticut	0	0	0	0	0	0	0	16
Maine	0	0	0	0	5	0	0	9
Massachusetts	0	0	0	0	0	0	0	9
New Hampshire	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	0	117	6	0	0	7
New Jersey	0	0	0	160	160	0	0	5
New York	0	0	0	0	11	0	0	7
Pennsylvania	0	0	0	172	7	0	0	10
East North Central	0	0	0	0	5	0	3	3
Illinois	0	0	0	0	0	0	0	6
Indiana	0	0	0	0	27	0	0	6
Michigan	0	0	0	0	7	0	0	7
Ohio	0	0	0	0	22	0	0	12
Wisconsin	0	0	0	0	7	0	58	8
West North Central	0	0	0	0	1	0	0	3
Iowa	0	0	0	0	0	0	0	4
Kansas	0	0	0	0	0	0	0	32
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	7
North Dakota	0	0	0	0	64	0	0	34
South Atlantic	0	0	0	0	2	0	1	2
Delaware	0	0	0	0	64	0	0	16
Florida	0	0	0	0	4	0	1	5
Georgia	0	0	0	0	3	0	15	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	4	0	0	4
South Carolina	0	0	0	0	2	0	0	2
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	10
East South Central	0	0	0	0	2	0	90	3
Alabama	0	0	0	0	3	0	0	5
Kentucky	0	0	0	0	13	0	0	9
Mississippi	0	0	0	0	3	0	0	7
Tennessee	0	0	0	0	5	0	90	3
West South Central	0	0	0	0	3	0	3	2
Arkansas	0	0	0	0	4	0	124	5
Louisiana	0	0	0	0	4	0	3	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	8	0	6	2
Mountain	0	0	0	0	2	0	0	4
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	11
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	0	0	0	60	4	0	3	1
California	0	0	0	60	8	0	3	1
Oregon	0	0	0	0	10	0	0	10
Washington	0	0	0	0	6	0	0	6
Pacific Noncontiguous	0	0	0	0	268	0	0	7
Alaska	0	0	0	0	268	0	0	7
Hawaii	0	0	0	0	0	0	0	9
U.S. Total	0	0	0	51	1	0	1	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, December 2017**

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

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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 December 2017

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	1	1	6	0	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	2	2	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	1	1	2	0	1
Michigan	0	1	2	0	1
Ohio	0	1	1	0	1
Wisconsin	0	3	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	1	1	5	0	1
Nebraska	1	5	5	0	3
North Dakota	1	3	6	0	3
South Dakota	1	7	8	0	3
South Atlantic	0	0	1	0	0
Delaware	1	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	1
Alabama	1	1	1	0	1
Kentucky	1	1	3	0	1
Mississippi	1	1	3	0	1
Tennessee	1	1	3	0	1
West South Central	1	0	1	0	0
Arkansas	1	1	2	0	1
Louisiana	1	1	1	0	0
Oklahoma	1	1	3	0	1
Texas	1	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	3
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	0	3	6	0	2
Washington	0	3	5	0	2
Pacific Noncontiguous	0	3	3	0	2
Alaska	1	7	9	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	0	0	0

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Table A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, December 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	1	2	4	0
Connecticut	0	1	2	0	0
Maine	1	1	2	0	1
Massachusetts	1	1	4	6	1
New Hampshire	1	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	3	3	5	0	2
Middle Atlantic	0	0	1	2	0
New Jersey	0	0	3	0	0
New York	0	0	2	0	0
Pennsylvania	0	0	1	0	0
East North Central	1	1	2	0	0
Illinois	1	1	3	0	1
Indiana	2	2	2	0	1
Michigan	1	2	4	0	1
Ohio	1	1	3	0	1
Wisconsin	1	3	6	0	2
West North Central	1	2	4	0	1
Iowa	2	6	8	0	3
Kansas	2	2	7	0	2
Minnesota	2	4	8	0	2
Missouri	2	2	6	0	1
Nebraska	2	6	11	0	4
North Dakota	2	4	8	0	3
South Dakota	3	7	13	0	3
South Atlantic	1	0	2	0	0
Delaware	2	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	1	1	4	0	0
North Carolina	1	1	4	0	1
South Carolina	2	1	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	1	3	0	1
Kentucky	2	2	4	0	2
Mississippi	3	2	5	0	2
Tennessee	2	2	5	0	1
West South Central	1	1	2	0	1
Arkansas	3	2	4	0	2
Louisiana	2	1	2	0	1
Oklahoma	3	2	5	0	2
Texas	2	1	2	0	1
Mountain	1	2	3	0	1
Arizona	1	3	5	0	1
Colorado	2	5	7	0	3
Idaho	1	4	6	0	2
Montana	2	5	18	0	3
Nevada	1	4	2	0	1
New Mexico	4	9	11	0	4
Utah	3	6	4	0	3
Wyoming	2	6	5	0	3
Pacific Contiguous	0	1	3	0	1
California	0	1	2	0	1
Oregon	1	3	11	0	2
Washington	1	3	9	0	2
Pacific Noncontiguous	1	3	3	0	1
Alaska	3	6	12	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	1	0

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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 December 2017

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	1	1	3	1	0
New Hampshire	0	1	3	0	0
Rhode Island	0	0	0	0	0
Vermont	2	2	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	1	1	2	0	0
Wisconsin	1	2	4	0	1
West North Central	0	1	2	0	1
Iowa	1	4	5	0	2
Kansas	1	1	4	0	1
Minnesota	1	2	5	0	2
Missouri	1	1	4	0	1
Nebraska	1	5	7	0	3
North Dakota	1	3	6	0	2
South Dakota	1	5	9	0	3
South Atlantic	0	0	1	0	0
Delaware	1	2	8	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	3	0	0
Georgia	1	1	3	0	1
Maryland	0	0	3	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	3	0	0
West Virginia	0	0	0	0	0
East South Central	1	1	2	0	0
Alabama	1	1	2	0	1
Kentucky	1	2	3	0	1
Mississippi	1	2	4	0	1
Tennessee	1	1	4	0	1
West South Central	1	0	1	0	0
Arkansas	1	2	3	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	4	0	1
Texas	1	1	1	0	1
Mountain	0	1	2	0	1
Arizona	0	2	3	0	1
Colorado	1	4	5	0	2
Idaho	1	3	3	0	1
Montana	1	4	12	0	2
Nevada	0	3	1	0	1
New Mexico	2	6	8	0	3
Utah	1	4	3	0	2
Wyoming	1	4	3	0	2
Pacific Contiguous	0	1	2	0	0
California	0	1	1	0	0
Oregon	1	2	7	0	1
Washington	0	2	6	0	1
Pacific Noncontiguous	1	2	2	0	1
Alaska	2	5	9	0	3
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, December 2017

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	0	0	1	4	0
Connecticut	0	0	3	0	0
Maine	0	0	1	0	0
Massachusetts	0	0	3	6	1
New Hampshire	0	0	2	0	0
Rhode Island	0	0	0	0	0
Vermont	2	1	2	0	1
Middle Atlantic	0	0	1	2	0
New Jersey	0	0	1	0	0
New York	0	0	1	2	0
Pennsylvania	0	0	1	0	0
East North Central	0	0	1	0	0
Illinois	1	0	1	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	2	2	4	0	1
Kansas	1	2	3	0	1
Minnesota	1	1	3	0	1
Missouri	1	1	2	0	1
Nebraska	2	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	1	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	1	0	1
Virginia	0	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	1	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	2	0	1
Texas	1	1	1	0	0
Mountain	0	1	1	0	0
Arizona	1	1	2	0	1
Colorado	1	1	3	0	1
Idaho	1	1	2	0	1
Montana	2	3	11	0	1
Nevada	0	1	1	0	1
New Mexico	2	2	6	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	4	0	1
Washington	1	2	3	0	1
Pacific Noncontiguous	1	3	2	0	1
Alaska	2	5	5	0	2
Hawaii	0	0	0	0	0
U.S. Total	0	0	0	1	0

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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 December 2017

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	1	1	6	1	1
New Hampshire	0	1	4	0	1
Rhode Island	0	0	0	0	0
Vermont	2	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	1
Indiana	1	2	2	0	1
Michigan	0	2	3	0	1
Ohio	0	1	2	0	1
Wisconsin	0	3	5	0	2
West North Central	0	2	3	0	1
Iowa	1	6	5	0	3
Kansas	1	1	5	0	1
Minnesota	1	4	6	0	2
Missouri	1	1	6	0	1
Nebraska	1	7	8	0	3
North Dakota	1	4	8	0	3
South Dakota	1	8	11	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	3	0	1
South Carolina	1	1	3	0	1
Virginia	0	1	3	0	1
West Virginia	0	1	0	0	0
East South Central	1	1	2	0	1
Alabama	1	1	2	0	1
Kentucky	1	2	4	0	1
Mississippi	1	2	5	0	2
Tennessee	1	2	5	0	1
West South Central	1	1	1	0	0
Arkansas	1	2	4	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	1	4	0	1
Texas	1	1	2	0	1
Mountain	0	2	2	0	1
Arizona	0	2	4	0	1
Colorado	1	5	6	0	2
Idaho	0	4	3	0	2
Montana	1	6	12	0	3
Nevada	0	3	1	0	1
New Mexico	1	8	9	0	4
Utah	1	5	3	0	2
Wyoming	1	7	4	0	3
Pacific Contiguous	0	1	2	0	1
California	0	1	2	0	1
Oregon	0	4	9	0	2
Washington	0	3	7	0	2
Pacific Noncontiguous	1	4	3	0	2
Alaska	2	8	12	0	4
Hawaii	0	0	0	0	0
U.S. Total	0	0	1	0	0

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Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2017

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
2017	1	01/08/2017 9:07 AM	01/13/2017 2:30 PM	125 Hours, 23 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	106000
2017	1	01/08/2017 11:59 PM	ongoing	ongoing	California Department of Water Resources	WECC	California:	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2017	1	01/10/2017 7:30 PM	01/13/2017 2:30 PM	67 Hours, 0 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	87000
2017	1	01/15/2017 6:35 AM	01/15/2017 7:44 AM	1 Hours, 9 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Transmission Disruption	176	126000
2017	1	01/15/2017 9:27 AM	01/17/2017 1:58 AM	40 Hours, 31 Minutes	Oklahoma Municipal Power Authority	SPP	Oklahoma: Harper 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-Severe Weather	1	788
2017	1	01/18/2017 6:05 PM	01/19/2017 12:05 AM	6 Hours, 0 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	75000
2017	1	01/22/2017 4:15 AM	01/24/2017 2:00 PM	57 Hours, 45 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	97	64000
2017	1	01/22/2017 6:00 AM	ongoing	ongoing	California Department of Water Resources	WECC	California:	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2017	1	01/22/2017 4:00 PM	01/23/2017 3:26 AM	11 Hours, 26 Minutes	Southern Company	SERC	Alabama: Georgia: Mississippi: Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	100	29965
2017	2	02/02/2017 1:04 AM	02/02/2017 5:00 AM	3 Hours, 56 Minutes	Public Service Company of New Mexico	WECC	New Mexico: Bernalillo County, Santa Fe County:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	396	149223
2017	2	02/02/2017 1:11 AM	ongoing	ongoing	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-Transmission Interruption	400	Unknown
2017	2	02/13/2017 1:00 PM	02/15/2017 1:35 PM	48 Hours, 35 Minutes	North Carolina Mun Power Agny #1	SERC	North Carolina: Union County:	Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems-Vandalism	0	0
2017	2	02/17/2017 8:09 AM	02/22/2017 7:30 PM	131 Hours, 21 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	254	169250
2017	2	02/17/2017 1:00 PM	02/17/2017 1:15 PM	0 Hours, 15 Minutes	Nevada Power Company d/b/a NV Energy	WECC	Nevada: Clark County:	Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems-Vandalism	0	0
2017	2	02/17/2017 3:00 PM	02/20/2017 11:00 AM	68 Hours, 0 Minutes	LADWP	WECC	California: Los Angeles County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	111591
2017	3	03/01/2017 8:30 AM	03/01/2017 2:00 PM	5 Hours, 30 Minutes	Tennessee Valley Authority	SERC	Tennessee: Kentucky:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	58000
2017	3	03/01/2017 11:49 AM	03/02/2017 9:30 PM	33 Hours, 41 Minutes	American Electric Power	RFC	Kentucky: West Virginia: 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	98575
2017	3	03/02/2017 12:20 PM	03/02/2017 11:45 PM	11 Hours, 25 Minutes	ISO New England	NPCC	Missouri: Jackson County, Platte County, Cass County, Lafayette County, Chariton County, Carroll County, Clay County, Johnson County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	54316
2017	3	03/06/2017 8:00 PM	03/07/2017 1:00 AM	5 Hours, 0 Minutes	Kansas City Power & Light Co	SERC	Michigan: Jackson County, Calhoun County, Ingham County, Hillsdale County, Washtenaw County, Kent County, Ottawa County, Midland County, Saginaw County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	97734
2017	3	03/08/2017 9:30 AM	03/11/2017 5:00 AM	67 Hours, 30 Minutes	Consumers Energy Co	RFC	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	343000
2017	3	03/08/2017 11:30 AM	03/08/2017 7:52 PM	8 Hours, 22 Minutes	Cleveland Electric Illum Co	RFC	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	71012
2017	3	03/08/2017 12:00 PM	03/11/2017 11:31 AM	71 Hours, 31 Minutes	Detroit Edison Co	RFC	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	800000
2017	3	03/08/2017 1:30 PM	03/08/2017 4:30 PM	3 Hours, 0 Minutes	Niagara Mohawk Power Corporation (dba National Grid)	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather/Transmission Interruption	Unknown	106869
2017	3	03/08/2017 3:33 PM	ongoing	ongoing	Rochester Gas & Electric Corp	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	50000
2017	3	03/14/2017 12:32 PM	ongoing	ongoing	ISO New England	NPCC	Connecticut: Massachusetts: Rhode Island: New Hampshire: Maine: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	69647
2017	3	03/21/2017 8:00 PM	03/22/2017 9:15 AM	13 Hours, 15 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	857	257000
2017	3	03/29/2017 3:30 AM	03/31/2017 6:00 AM	50 Hours, 30 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	175000

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2017

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
2017	4	04/03/2017 11:00 AM	04/03/2017 8:00 PM	9 Hours, 0 Minutes	Southern Company	SERC	Alabama, Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	290	86330
2017	4	04/06/2017 7:00 PM	ongoing	ongoing	Pacific Gas & Electric Co	WECC	California	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	100000
2017	4	04/07/2017 4:33 AM	04/07/2017 8:20 AM	3 Hours, 47 Minutes	Pacificorp	WECC	Oregon	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	100	64852
2017	4	04/07/2017 8:15 AM	04/08/2017 12:14 AM	15 Hours, 59 Minutes	Portland General Electric Co	WECC	Oregon: Multnomah County, Washington County, Marion County, Clackamas County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	153867
2017	4	04/24/2017 5:32 AM	04/24/2017 6:33 AM	1 Hours, 1 Minutes	Duke Energy Carolinas	SERC	North Carolina: Mecklenburg County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	240	74698
2017	4	04/30/2017 1:00 AM	04/30/2017 5:45 PM	16 Hours, 45 Minutes	Entergy Corp	SERC	Arkansas, Louisiana, Mississippi	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	145174
2017	5	05/01/2017 11:14 PM	05/01/2017 11:34 PM	0 Hours, 20 Minutes	Pennsylvania Electric Co	RFC	Ohio	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	92390
2017	5	05/03/2017 6:58 PM	05/03/2017 9:15 PM	2 Hours, 17 Minutes	Southern California Edison Co	WECC	California	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	572	0
2017	5	05/03/2017 7:05 PM	05/03/2017 9:00 PM	1 Hours, 55 Minutes	California ISO	WECC	California	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	878	Unknown
2017	5	05/04/2017 5:00 AM	05/04/2017 10:00 PM	17 Hours, 0 Minutes	Southern Company	SERC	Alabama: Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	200	60377
2017	5	05/07/2017 5:15 AM	ongoing	ongoing	California Department of Water Resources	WECC	California: Fresno County	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2017	5	05/07/2017 11:30 PM	05/08/2017 5:00 AM	5 Hours, 30 Minutes	Owensboro Municipal Utilities	SERC	Kentucky: Davess County	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	80	0
2017	5	05/19/2017 5:30 AM	ongoing	ongoing	Ameren Missouri	SERC	Missouri: St. Louis County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	70696
2017	5	05/27/2017 11:00 PM	ongoing	ongoing	Tennessee Valley Authority	SERC	Tennessee: Shelby County, Putnam County, Knox County, Davidson County, Hamilton County; Alabama: Madison County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	116000
2017	5	05/27/2017 11:10 PM	ongoing	ongoing	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	391	188000
2017	5	05/28/2017 7:30 PM	05/29/2017 10:00 PM	26 Hours, 30 Minutes	American Electric Power - (SPP Reliability Region)	TRE	Texas: Louisiana	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
2017	5	05/28/2017 7:30 PM	05/29/2017 10:00 PM	26 Hours, 30 Minutes	Southwest Power Pool, Inc.	SERC	Louisiana: Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
2017	6	06/11/2017 2:39 PM	06/11/2017 5:55 PM	3 Hours, 16 Minutes	MISO	RFC	Michigan	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	63	Unknown
2017	7	07/07/2017 3:30 AM	07/08/2017 7:30 PM	40 Hours, 0 Minutes	Consumers Energy Co	RFC	Michigan: Kent County, Ottawa County, Muskegon County, Barry County, Oshtemo County, Eaton County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	160000
2017	7	07/08/2017 6:52 PM	07/09/2017 8:00 AM	13 Hours, 8 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	645	176867
2017	7	07/18/2017 4:23 PM	07/18/2017 6:39 PM	2 Hours, 16 Minutes	Western Area Power Administration - Western Area Lower Colorado	WECC	Nevada	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Severe Weather	0	0
2017	7	07/22/2017 10:00 PM	ongoing	ongoing	Southwest Power Pool, Inc.	SERC	Missouri	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	131000
2017	7	07/22/2017 10:00 PM	ongoing	ongoing	KCP&L Greater Missouri Operations Company	SERC	Missouri	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	115000
2017	7	07/22/2017 10:00 PM	07/23/2017 12:00 PM	14 Hours, 0 Minutes	Kansas City Power & Light Co	SERC	Missouri: Clay County, Jackson County, Lafayette County, Platte County, Kansas: Johnson County, Miami County, Wyandotte County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	112540
2017	7	07/23/2017 4:00 AM	ongoing	ongoing	Ameren Missouri	SERC	Missouri: Illinois	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	82000
2017	7	07/27/2017 6:00 AM	07/27/2017 11:29 AM	5 Hours, 29 Minutes	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

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2017

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
2017	8	08/21/2017 11:41 PM	08/22/2017 12:21 AM	0 Hours, 40 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-System Operations	1	2
2017	8	08/25/2017 6:17 PM	09/02/2017 5:00 PM	190 Hours, 43 Minutes	American Electric Power - Texas	TRE	Texas: Matagorda County, Nueces County, Aransas County, Refugio County, San Patricio County, Calhoun County, Victoria County, Jackson County, Live Oak County, Jim Wells County, Bee County, Lavaca County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	220400
2017	8	08/25/2017 6:30 PM	09/05/2017 5:00 PM	262 Hours, 30 Minutes	ERCOT	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	330000
2017	8	08/26/2017 12:39 AM	08/26/2017 12:52 AM	0 Hours, 13 Minutes	ERCOT	TRE	Texas	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-Severe Weather	Unknown	Unknown
2017	8	08/26/2017 6:26 AM	09/08/2017 12:00 AM	305 Hours, 34 Minutes	CenterPoint Energy	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	1076868
2017	8	08/27/2017 5:10 AM	09/08/2017 12:00 AM	282 Hours, 50 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	1076868
2017	8	08/30/2017 2:15 AM	ongoing	ongoing	Entergy Corp	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	78500
2017	8	08/31/2017 2:49 PM	08/31/2017 5:14 PM	2 Hours, 25 Minutes	Southern California Edison Co	WECC	California: Los Angeles County	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Severe Weather	100	0
2017	9	09/01/2017 3:41 PM	09/01/2017 8:30 PM	4 Hours, 49 Minutes	Southern California Edison Co	WECC	California:	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Severe Weather	337	0
2017	9	09/09/2017 12:00 AM	ongoing	ongoing	Tampa Electric Company	FRCC	Florida: Hillsborough County, Pasco County, Polk County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	1275	425000
2017	9	09/09/2017 12:30 PM	ongoing	ongoing	Florida Power & Light	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	3500000
2017	9	09/10/2017 6:35 PM	09/13/2017 5:00 PM	70 Hours, 25 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Brevard County, Citrus County, Columbia County, Dixie County, Flagler County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Leon County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Polk County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	4500	1000000
2017	9	09/10/2017 8:37 PM			Seminole Electric Cooperative Inc	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	452555
2017	9	09/11/2017 12:30 AM	ongoing	ongoing	Lakeland Electric	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	200	20000
2017	9	09/11/2017 2:27 AM	09/15/2017 8:44 PM	114 Hours, 17 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	132	39659
2017	9	09/11/2017 12:55 PM	09/12/2017 8:00 AM	19 Hours, 5 Minutes	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	687	154832
2017	9	09/11/2017 5:30 PM	09/13/2017 9:30 AM	40 Hours, 0 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	365	265729
2017	10	10/08/2017 3:00 AM	ongoing	ongoing	Southern Company	SERC	Alabama: Florida: Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	306	91945
2017	10	10/09/2017 2:03 AM	10/17/2017 1:30 PM	203 Hours, 27 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather/Transmission Interruption	177	117900
2017	10	10/09/2017 6:44 AM	ongoing	ongoing	Pacific Gas & Electric Co	WECC	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-Severe Weather	100	Unknown
2017	10	10/12/2017 9:09 AM	ongoing	ongoing	Clarksdale Public Utilities	SERC	Mississippi: Coahoma County:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2017	10	10/16/2017 3:45 PM	10/16/2017 4:09 PM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Washington: Montana:	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

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2017

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
2017	10	10/16/2017 3:55 PM	10/16/2017 4:10 PM	0 Hours, 15 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-Transmission Interruption	0	0
2017	10	10/20/2017 3:44 AM	10/20/2017 3:45 AM	0 Hours, 1 Minutes	Peak Reliability	WECC	Washington:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident- Severe Weather	900	Unknown
2017	10	10/22/2017 8:45 AM	10/22/2017 2:00 PM	5 Hours, 15 Minutes	Entergy Corp	SERC	Louisiana; Mississippi; Arkansas; Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	Unknown
2017	10	10/23/2017 5:50 PM	10/24/2017 6:17 PM	24 Hours, 27 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	440	115144
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 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-Transmission Interruption	0	0
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Washington; Whatcom County; Montana:	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
2017	10	10/29/2017 11:40 PM	11/01/2017 6:08 PM	66 Hours, 28 Minutes	ISO New England	NPCC	Connecticut; Massachusetts; New Hampshire; Maine; Rhode Island; Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	310453
2017	11	11/01/2017 3:40 PM	11/01/2017 10:00 PM	6 Hours, 20 Minutes	Owensboro Municipal Utilities	SERC	Kentucky; Daviess County:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	0	0
2017	11	11/05/2017 7:35 PM	11/05/2017 11:09 PM	3 Hours, 34 Minutes	Ohio Edison Co	RF	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	89216
2017	11	11/13/2017 2:00 AM	11/15/2017 8:17 AM	54 Hours, 17 Minutes	Puget Sound Energy	WECC	Washington; Island County; King County; Kitsap County; Thurston County; Skagit County; Whatcom County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	236100
2017	11	11/13/2017 4:33 PM	11/16/2017 6:00 AM	61 Hours, 27 Minutes	Seattle City Light, Sytem Control Center	WECC	Washington; King County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	85	68430
2017	12	12/04/2017 9:53 PM	ongoing	ongoing	Southern California Edison Co	WECC	California:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident- Severe Weather/Transmission Interruption	540	263000
2017	12	12/05/2017 6:30 AM	12/06/2017 10:00 AM	27 Hours, 30 Minutes	Consumers Energy Co	RF	Michigan; Oscoda County; Isabella County, Roscommon County, Ogemaw County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	117500
2017	12	12/07/2017 8:00 PM	12/08/2017 5:00 PM	21 Hours, 0 Minutes	CPS Energy	TRE	Texas; Bexar County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	88000
2017	12	12/08/2017 9:30 AM	12/08/2017 10:30 PM	13 Hours, 0 Minutes	Entergy Corp	SERC	Louisiana; Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	79000
2017	12	12/08/2017 10:00 AM	12/10/2017 8:50 PM	58 Hours, 50 Minutes	Southern Company	SERC	Alabama; Georgia; Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	865	301872
2017	12	12/10/2017 1:25 AM	12/10/2017 2:30 AM	1 Hours, 5 Minutes	Southern California Edison Co	WECC	California; Ventura County, Santa Barbara County:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather/Transmission Interruption	110	51323
2017	12	12/13/2017 9:55 AM	12/13/2017 2:45 PM	4 Hours, 50 Minutes	Long Island Power Authority	NPCC	New York; Suffolk County:	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	0	0
2017	12	12/29/2017 7:00 AM	ongoing	ongoing	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

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, 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 remains 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		Hours, . 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	03/01/2016 3:00 PM		Hours, . Minutes	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 of 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		Hours, . Minutes	Peak Reliability	WECC	Washington: Clark County;	Electrical System Separation (Islanding) where part or parts of a power grid remains 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 of 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		Hours, . Minutes	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		Hours, . Minutes	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.2 Major Disturbances and Unusual Occurrences, 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	.	. Hours, . Minutes	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	NPPC	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	NPPC	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	.	. Hours, . Minutes	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	.	. Hours, . 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	0	0
2016	9	09/01/2016 10:00 PM	.	. Hours, . Minutes	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.2 Major Disturbances and Unusual Occurrences, 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 of 100 Megawatts or more 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 of 100 Megawatts or more 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, Gichrist 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	.	. Hours, . Minutes	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	.	. Hours, . Minutes	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
2016	11	11/09/2016 11:59 AM	11/09/2016 6:15 PM	6 Hours, 16 Minutes	Modesto Irrigation District	WECC	California: Stanislaus County, San Joaquin County, Alameda County, Tuolumne County;	Cyber event that could potentially impact electric power system adequacy or reliability- Cyber Attack	0	0

Table B.2 Major Disturbances and Unusual Occurrences, 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	12	12/15/2016 6:30 AM		Hours, Minutes	California Department of Water Resources	WECC	California: Merced County	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	Unknown	Unknown
2016	12	12/28/2016 4:03 AM	12/31/2016 6:00 AM	73 Hours, 57 Minutes	California Department of Water Resources	WECC	California	Fuel supply emergencies that could impact electric power system adequacy or reliability- Fuel Supply Deficiency	0	0
2016	12	12/30/2016 2:30 AM	12/30/2016 7:00 PM	16 Hours, 30 Minutes	ISO New England	NPCC	Maine	Loss of electric service to more than 50,000 customers for 1 hour or more-Weather or Natural Disaster	Unknown	85263

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 nth digit if the (n+1) digit is 5 or larger and keep the nth digit unchanged if the (n+1) digit is less than 5. The symbol for a number rounded to zero is (*).

Percent 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" (45 Federal 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" (45 Federal 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

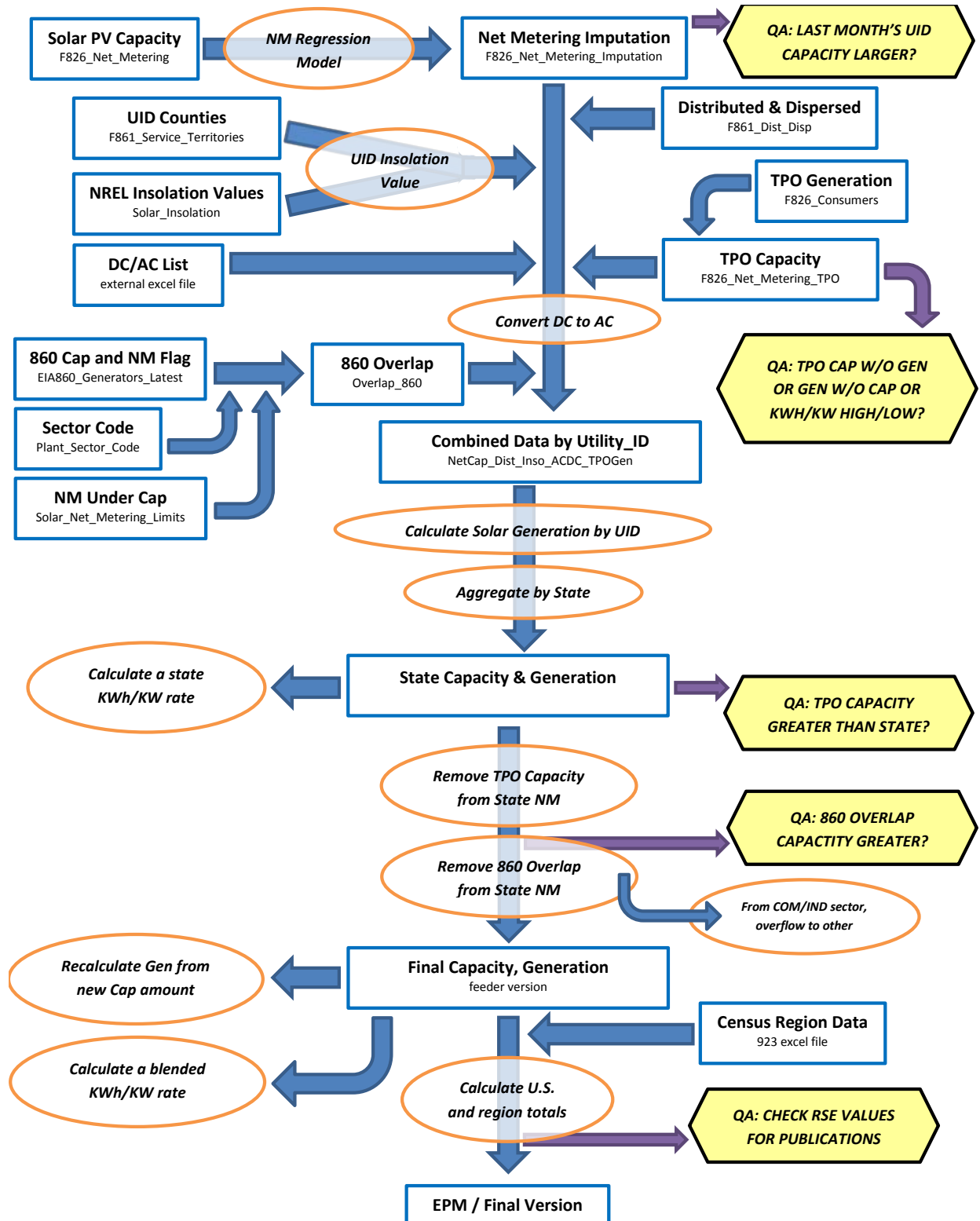
TMY3 (1991-2005) Weather Stations by MSA

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, December 2017

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	25.40	5.80	--	1.03
Connecticut	--	5.80	--	1.03
Maine	25.40	6.25	--	1.04
Massachusetts	--	5.80	--	1.03
New Hampshire	--	5.79	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	23.59	6.17	--	1.04
New Jersey	26.32	5.74	--	1.04
New York	24.03	6.20	--	1.03
Pennsylvania	23.47	5.87	--	1.04
East North Central	20.17	5.79	27.04	1.04
Illinois	17.71	5.78	--	1.01
Indiana	22.30	5.75	--	1.05
Michigan	18.70	5.81	27.02	1.04
Ohio	24.57	5.79	--	1.06
Wisconsin	17.69	5.82	27.32	1.03
West North Central	16.58	5.78	--	1.05
Iowa	17.72	5.73	--	1.06
Kansas	17.26	5.79	--	1.03
Minnesota	17.62	5.73	--	1.02
Missouri	17.56	5.78	--	1.01
Nebraska	16.96	5.75	--	1.06
North Dakota	13.00	5.85	--	1.00
South Dakota	16.57	--	--	--
South Atlantic	23.61	5.88	28.29	1.03
Delaware	--	5.67	--	1.05
District of Columbia	--	--	--	--
Florida	24.27	5.83	28.29	1.02
Georgia	19.93	6.03	--	1.03
Maryland	24.51	5.80	--	1.02
North Carolina	24.97	5.85	--	1.03
South Carolina	24.83	5.86	--	1.03
Virginia	20.89	5.80	--	1.06
West Virginia	24.67	5.79	--	1.09
East South Central	20.81	5.75	--	1.02
Alabama	19.24	5.63	--	1.03
Kentucky	22.23	5.81	--	1.02
Mississippi	12.18	5.80	--	1.03
Tennessee	23.13	5.76	--	1.01
West South Central	15.88	5.86	28.51	1.03
Arkansas	17.45	5.88	--	1.02
Louisiana	16.46	5.90	28.51	1.03
Oklahoma	17.23	5.80	--	1.04
Texas	15.33	5.85	--	1.03
Mountain	18.65	5.76	--	1.05
Arizona	19.62	5.73	--	1.04
Colorado	18.46	5.88	--	1.10
Idaho	--	--	--	--
Montana	17.00	5.92	--	1.04
Nevada	18.01	5.78	--	1.04
New Mexico	18.97	5.66	--	1.04
Utah	21.41	5.77	--	1.04
Wyoming	17.50	5.83	--	1.05
Pacific Contiguous	17.76	6.00	--	1.04
California	22.84	--	--	1.03
Oregon	17.28	--	--	1.05
Washington	16.89	6.00	--	1.09
Pacific Noncontiguous	18.88	6.17	--	1.00
Alaska	14.42	5.60	--	1.00
Hawaii	19.49	6.17	--	--
U.S. Total	19.00	6.07	28.14	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, 2014 through 2016

Item	Mean Absolute Value of Percent Change Total (All Sectors)		
	2014	2015	2016
Net Generation			
Coal	0.25%	0.33%	0.09%
Petroleum Liquids	2.32%	1.00%	3.08%
Petroleum Coke	2.96%	1.60%	1.46%
Natural Gas	0.42%	0.18%	0.30%
Other Gases	4.12%	3.90%	3.76%
Hydroelectric	0.49%	1.08%	0.76%
Nuclear	0.01%	0.01%	0.05%
Other	0.43%	0.80%	0.76%
Total	0.08%	0.23%	0.08%
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.13%	0.24%	0.11%
Petroleum Liquids	2.17%	2.28%	5.81%
Petroleum Coke	3.19%	1.50%	0.87%
Natural Gas	0.48%	0.32%	2.26%
Fuel Stocks for Electric Power Sector			
Coal	0.38%	0.40%	0.72%
Petroleum Liquids	4.25%	2.92%	1.37%
Petroleum Coke	0.61%	0.04%	0.27%
Retail Sales			
Residential	0.30%	0.30%	0.26%
Commercial	0.38%	0.18%	0.55%
Industrial	4.39%	2.92%	4.31%
Transportation	0.44%	0.37%	0.06%
Total	1.10%	0.93%	1.40%
Revenue			
Residential	0.43%	0.15%	0.28%
Commercial	0.47%	0.62%	1.21%
Industrial	5.66%	3.15%	4.54%
Transportation	1.92%	1.09%	1.53%
Total	1.01%	0.83%	1.34%
Average Retail Price			
Residential	0.12%	0.15%	0.05%
Commercial	0.20%	0.44%	0.65%
Industrial	1.20%	0.31%	0.24%
Transportation	2.18%	0.83%	1.57%
Total	0.16%	0.11%	0.10%
Receipt of Fossil Fuels			
Coal	2.20%	1.70%	1.92%
Petroleum Liquids	0.49%	1.86%	1.16%
Petroleum Coke	2.03%	2.47%	0.01%
Natural Gas	0.26%	0.25%	0.21%
Cost of Fossil Fuels			
Coal	0.18%	0.04%	0.12%
Petroleum Liquids	0.04%	0.25%	0.26%
Petroleum Coke	1.03%	1.42%	0.12%
Natural Gas	0.06%	0.14%	0.12%

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, 2014 through 2016

Item	2014			2015			2016		
	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	1,585,697	1,581,710	-0.25%	1,356,057	1,352,398	-0.27%	1,240,108	1,239,149	-0.08%
Petroleum Liquids	18,708	18,276	-2.31%	17,456	17,372	-0.48%	12,675	13,008	2.63%
Petroleum Coke	11,781	11,955	1.48%	10,987	10,877	-1.00%	11,232	11,197	-0.31%
Natural Gas	1,121,928	1,126,609	0.42%	1,335,068	1,333,482	-0.12%	1,380,295	1,378,307	-0.14%
Other Gases	11,578	12,022	3.83%	12,963	13,117	1.18%	13,000	12,807	-1.48%
Hydroelectric	252,540	253,193	0.26%	246,075	243,989	-0.85%	259,143	261,126	0.77%
Nuclear	797,067	797,166	0.01%	797,178	797,178	0.00%	805,327	805,694	0.05%
Other	293,636	292,674	-0.33%	311,597	309,189	-0.77%	357,299	355,387	-0.54%
Total	4,092,935	4,093,606	0.02%	4,087,381	4,077,601	-0.24%	4,079,079	4,076,675	-0.06%
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	854,416	853,634	-0.09%	740,855	739,594	-0.17%	678,005	677,371	-0.09%
Petroleum Liquids (1,000 barrels)	32,084	31,531	-1.72%	29,545	28,925	-2.10%	21,225	22,405	5.56%
Petroleum Coke (1,000 tons)	4,325	4,412	2.02%	4,088	4,044	-1.07%	4,275	4,253	-0.52%
Natural Gas (1,000 Mcf)	8,502,964	8,544,387	0.49%	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	151,362	151,548	0.12%	197,128	195,548	-0.80%	163,946	162,009	-1.18%
Petroleum Liquids (1,000 barrels)	32,139	33,505	4.25%	32,223	32,884	2.05%	30,880	31,702	2.66%
Petroleum Coke (1,000 tons)	847	827	-2.29%	1,342	1,340	-0.15%	872	845	-3.10%
Retail Sales (Million kWh)									
Residential	1,402,911	1,407,208	0.31%	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%
Commercial	1,357,505	1,352,158	-0.39%	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%
Industrial	955,488	997,576	4.40%	958,563	986,508	2.92%	936,269	976,715	4.32%
Transportation	7,776	7,758	-0.24%	7,659	7,637	-0.29%	7,499	7,497	-0.03%
Total	3,723,681	3,764,700	1.10%	3,724,525	3,758,992	0.93%	3,710,779	3,762,462	1.39%
Revenue (Million Dollars)									
Residential	175,404	176,178	0.44%	177,367	177,624	0.14%	176,585	177,077	0.28%
Commercial	145,889	145,253	-0.44%	143,893	144,781	0.62%	140,937	142,643	1.21%
Industrial	67,019	70,855	5.72%	66,088	68,166	3.14%	63,201	66,068	4.54%
Transportation	798	810	1.51%	779	771	-1.12%	711	722	1.53%
Total	389,111	393,096	1.02%	388,127	391,341	0.83%	381,435	386,509	1.33%
Average Retail Price (Cents/kWh)									
Residential	12.50	12.52	0.13%	12.67	12.65	-0.16%	12.55	12.55	0.02%
Commercial	10.75	10.74	-0.04%	10.59	10.64	0.44%	10.37	10.43	0.65%
Industrial	7.01	7.10	1.26%	6.89	6.91	0.22%	6.75	6.76	0.21%
Transportation	10.27	10.45	1.75%	10.17	10.09	-0.83%	9.48	9.63	1.55%
Total	10.45	10.44	-0.08%	10.42	10.41	-0.10%	10.28	10.27	-0.06%
Receipt of Fossil Fuels									
Coal (1,000 tons)	836,196	854,560	2.20%	769,866	782,929	1.70%	638,564	650,770	1.91%
Petroleum Liquids (1,000 barrels)	28,355	28,514	0.56%	24,512	24,320	-0.78%	16,610	16,807	1.18%
Petroleum Coke (1,000 tons)	5,091	5,195	2.03%	4,779	4,897	2.46%	4,166	4,166	0.01%
Natural Gas (1,000 Mcf)	8,423,883	8,431,423	0.09%	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.37	2.37	0.02%	2.22	2.22	-0.03%	2.12	2.11	-0.15%
Petroleum Liquids (1,000 barrels)	19.89	19.89	-0.03%	11.48	11.49	0.10%	9.36	9.39	0.28%
Petroleum Coke (1,000 tons)	1.96	1.98	0.97%	1.87	1.84	-1.37%	1.65	1.65	0.15%
Natural Gas (1,000 Mcf)	4.99	4.99	0.01%	3.22	3.23	0.18%	2.88	2.87	-0.06%

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 2016 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.