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Electric Power Monthly
with Data for October 2018

December 2018

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Requests for additional information on other statistics available from the U.S. Energy Information Administration or questions concerning subscriptions and report distribution may be directed to the Office of Communications of the U.S. Energy Information Administration at infoctr@eia.gov.

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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Table ES1.A. Total Electric Power Industry Summary Statistics, 2018 and 2017

Net Generation and Consumption of Fuels for October														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	87,452	89,775	-2.6%	65,038	66,498	21,843	22,616	24	24	547	637	0	0
Petroleum Liquids	Utility Scale Facilities	989	956	3.5%	733	721	212	191	8	6	37	38	0	0
Petroleum Coke	Utility Scale Facilities	484	572	-15.4%	378	405	43	110	1	1	63	56	0	0
Natural Gas	Utility Scale Facilities	124,027	106,852	16.1%	59,485	50,140	56,164	48,686	672	661	7,706	7,366	0	0
Other Gas	Utility Scale Facilities	930	999	-6.9%	0	9	259	318	0	0	671	673	0	0
Nuclear	Utility Scale Facilities	59,397	65,995	-10.0%	31,364	35,038	28,033	30,957	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	18,779	18,284	2.7%	16,703	16,950	1,948	1,221	NM	29	115	84	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	32,788	36,379	-9.9%	3,877	4,834	26,309	28,968	267	264	2,335	2,313	0	0
... Wind	Utility Scale Facilities	21,154	25,306	-16.4%	2,962	4,099	18,167	21,183	16	15	NM	8	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	5,225	4,821	8.4%	461	291	4,706	4,480	51	47	8	4	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,291	3,306	-0.4%	255	252	795	831	4	5	2,237	2,217	0	0
... Other Biomass	Utility Scale Facilities	1,766	1,717	2.8%	113	114	1,375	1,322	197	197	80	85	0	0
... Geothermal	Utility Scale Facilities	1,352	1,229	10.0%	86	78	1,266	1,151	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-492	-463	6.3%	-405	-388	-87	-75	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,092	1,027	6.4%	46	44	564	518	84	94	398	370	0	0
All Energy Sources	Utility Scale Facilities	325,446	320,376	1.6%	177,218	174,251	135,288	133,509	1,070	1,079	11,871	11,537	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	2,400	1,990	20.6%	0	0	0	0	785	632	224	201	1,391	1,157
Estimated Total Solar Photovoltaic	All Facilities	7,350	6,497	13.1%	456	290	4,436	4,167	835	679	231	204	1,391	1,157
Estimated Total Solar	All Facilities	7,625	6,811	11.9%	461	291	4,706	4,480	835	679	231	204	1,391	1,157
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	48,488	50,015	-3.1%	35,607	36,190	12,682	13,591	7	7	191	227	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,732	1,674	3.4%	1,318	1,303	359	319	17	13	38	39	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	190	228	-17.0%	158	171	15	40	0	0	16	18	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	918,069	791,673	16.0%	460,333	385,327	408,429	358,763	4,287	4,105	45,020	43,478	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,009	1,223	-17.5%	164	223	67	94	35	35	743	871	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	169	142	18.7%	5	3	16	16	17	13	131	110	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	75	86	-12.9%	0	1	9	9	1	1	64	74	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	100,591	97,666	3.0%	3,209	3,046	26,951	25,407	8,236	8,647	62,195	60,566	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	49,497	51,238	-3.4%	35,772	36,413	12,749	13,686	42	42	934	1,098	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,900	1,816	4.6%	1,323	1,306	375	335	34	26	169	149	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	264	314	-15.9%	159	172	24	49	1	2	80	92	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,018,660	889,339	14.5%	463,542	388,373	435,379	384,170	12,523	12,752	107,216	104,044	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	105,827	142,796	-25.9%	87,594	114,939	17,599	26,524	66	148	568	1,185	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	25,711	32,238	-20.2%	16,502	20,336	7,803	9,891	343	501	1,062	1,510	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	953	1,067	-10.7%	519	683	168	179	4	2	261	202	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for October									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	October 2018	October 2017	Percentage Change	October 2018	October 2017	Percentage Change	October 2018	October 2017	Percentage Change
Residential	106,633	102,811	3.7%	13,719	13,164	4.2%	12.87	12.80	0.5%
Commercial	115,863	113,287	2.3%	12,448	12,208	2.0%	10.74	10.78	-0.4%
Industrial	81,020	82,815	-2.2%	5,594	5,725	-2.3%	6.91	6.91	0.0%
Transportation	635	626	1.4%	62	60	3.9%	9.81	9.57	2.5%
All Sectors	304,151	299,539	1.5%	31,823	31,157	2.1%	10.46	10.40	0.6%

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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 2018 and 2017

Net Generation and Consumption of Fuels for January through October															
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	956,562	1,008,304	-5.1%	719,148	751,786	230,809	249,844	270	265	6,334	6,408	0	0
Petroleum Liquids	Utility Scale Facilities	13,809	9,529	44.9%	8,493	6,981	4,747	2,114	125	73	445	361	0	0
Petroleum Coke	Utility Scale Facilities	7,331	7,483	-2.0%	5,739	5,572	945	1,248	5	7	642	657	0	0
Natural Gas	Utility Scale Facilities	1,256,192	1,090,158	15.2%	616,637	525,364	554,932	482,114	7,020	6,757	77,603	75,924	0	0
Other Gas	Utility Scale Facilities	10,269	10,371	-1.0%	152	109	3,207	3,282	0	0	6,910	6,981	0	0
Nuclear	Utility Scale Facilities	671,473	664,632	1.0%	352,984	351,072	318,488	313,560	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	245,802	257,392	-4.5%	224,544	236,419	19,910	19,616	207	194	1,141	1,162	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	353,586	317,121	11.5%	40,166	36,925	286,475	253,814	2,692	2,721	24,252	23,661	0	0
... Wind	Utility Scale Facilities	227,609	205,646	10.7%	30,476	29,520	196,911	175,943	135	116	87	67	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	59,511	46,488	28.0%	4,742	2,765	54,117	43,228	569	458	82	37	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	34,860	33,983	2.6%	2,896	2,589	8,596	8,604	66	58	23,302	22,733	0	0
... Other Biomass	Utility Scale Facilities	17,778	17,938	-0.9%	1,181	1,206	13,894	13,818	1,922	2,089	781	825	0	0
... Geothermal	Utility Scale Facilities	13,829	13,067	5.8%	872	845	12,957	12,221	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-5,040	-5,361	-6.0%	-4,105	-4,497	-935	-863	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	10,472	10,871	-3.7%	484	456	5,270	5,402	853	909	3,865	4,105	0	0
All Energy Sources	Utility Scale Facilities	3,520,455	3,370,502	4.4%	1,964,243	1,910,187	1,423,847	1,330,131	11,173	10,925	121,192	119,258	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	25,847	20,957	23.3%	0	0	0	0	8,541	6,691	2,300	2,070	15,006	12,196
Estimated Total Solar Photovoltaic	All Facilities	82,026	64,430	27.3%	4,692	2,750	50,835	40,227	9,110	7,149	2,382	2,107	15,006	12,196
Estimated Total Solar	All Facilities	85,358	67,445	26.6%	4,742	2,765	54,117	43,228	9,110	7,149	2,382	2,107	15,006	12,196
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	528,561	554,572	-4.7%	394,029	406,879	132,181	145,291	78	77	2,273	2,325	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	23,897	16,691	43.2%	15,362	12,619	7,842	3,548	238	145	455	379	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,773	2,905	-4.6%	2,304	2,266	308	458	1	2	160	179	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,319,396	8,015,019	16.3%	4,743,729	4,010,233	4,076,223	3,514,735	43,950	42,026	455,494	448,025	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	11,393	12,121	-6.0%	1,954	2,331	931	942	413	415	8,095	8,433	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	2,269	1,397	62.4%	87	50	251	153	297	174	1,635	1,021	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	691	821	-15.9%	10	8	77	97	7	12	597	704	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,316,914	966,373	36.3%	34,730	31,892	276,173	257,510	381,580	86,444	624,432	590,526	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	539,954	566,693	-4.7%	395,983	409,210	133,112	146,233	492	492	10,368	10,758	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,166	18,088	44.7%	15,449	12,668	8,093	3,701	535	319	2,089	1,399	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,463	3,726	-7.1%	2,314	2,274	385	554	9	14	756	884	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	10,636,310	8,981,391	18.4%	4,778,459	4,042,125	4,352,396	3,772,245	425,530	128,470	1,079,925	1,038,552	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through October									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	Percentage Change
Residential	1,238,156	1,158,323	6.9%	160,081	149,751	6.9%	12.93	12.93	0.0%
Commercial	1,164,464	1,138,609	2.3%	124,505	121,987	2.1%	10.69	10.71	-0.2%
Industrial	799,135	824,601	-3.1%	55,683	57,096	-2.5%	6.97	6.92	0.7%
Transportation	6,455	6,261	3.1%	630	610	3.3%	9.76	9.74	0.2%
All Sectors	3,208,210	3,127,793	2.6%	340,899	329,444	3.5%	10.63	10.53	0.9%

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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.
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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.
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Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2018 and 2017

Total (All Sectors)

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal (1000 tons)	52,323	52,462	39.19	38.70	258	295	491,825	538,426	39.29	39.40
Petroleum Liquids (1000 barrels)	1,435	1,255	94.37	72.04	142	192	16,507	12,732	85.68	69.10
Petroleum Coke (1000 tons)	208	297	70.32	64.88	5	7	2,537	2,756	73.93	58.83
Natural Gas (1000 Mcf)	849,980	797,394	3.50	3.24	563	777	8,561,028	8,116,356	3.50	3.46

Electric Utilities

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal (1000 tons)	37,512	38,175	40.23	40.12	176	200	363,125	391,924	40.31	40.93
Petroleum Liquids (1000 barrels)	942	825	95.78	73.47	93	119	10,509	9,441	86.12	68.89
Petroleum Coke (1000 tons)	191	265	72.24	66.84	4	6	2,479	2,684	74.54	59.24
Natural Gas (1000 Mcf)	404,765	377,140	3.68	3.66	286	416	4,143,807	3,919,254	3.65	3.72

Independent Power Producers

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal (1000 tons)	14,235	13,545	35.93	33.87	65	72	122,091	138,823	35.58	34.35
Petroleum Liquids (1000 barrels)	464	406	91.70	69.17	40	64	5,702	3,069	84.90	69.75
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	382,024	358,457	3.27	2.69	230	310	3,790,678	3,546,484	3.36	3.13

Commercial Sector

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal (1000 tons)	2	2	66.53	64.50	1	1	8	20	66.46	63.30
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	770	588	3.45	3.88	3	3	7,391	6,156	3.60	3.97

Industrial Sector

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal (1000 tons)	574	741	51.33	53.40	16	22	6,601	7,659	51.94	52.60
Petroleum Liquids (1000 barrels)	29	24	91.01	71.09	9	9	296	223	83.31	69.29
Petroleum Coke (1000 tons)	17	32	48.96	48.91	1	1	58	71	47.61	43.13
Natural Gas (1000 Mcf)	62,421	61,209	3.49	3.17	44	48	619,151	644,463	3.25	3.30

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, 2018 and 2017

Total (All Sectors)

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal	1,000,696	999,170	2.05	2.03	258	295	9,398,152	10,294,267	2.06	2.06
Petroleum Liquids	8,675	7,578	15.61	11.93	142	192	99,607	76,438	14.17	11.51
Petroleum Coke	5,892	8,347	2.48	2.31	5	7	71,708	77,280	2.62	2.10
Natural Gas	877,637	823,614	3.39	3.13	563	777	8,839,043	8,389,329	3.39	3.35
Fossil Fuels	1,892,900	1,838,709	2.71	2.54	722	963	18,408,510	18,837,313	2.74	2.64

Electric Utilities

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal	718,353	733,109	2.10	2.09	176	200	6,956,943	7,569,281	2.10	2.12
Petroleum Liquids	5,772	5,030	15.64	12.05	93	119	63,880	57,034	14.16	11.40
Petroleum Coke	5,415	7,454	2.55	2.37	4	6	70,146	75,309	2.63	2.11
Natural Gas	417,512	389,312	3.56	3.54	286	416	4,276,075	4,049,491	3.54	3.61
Fossil Fuels	1,147,053	1,134,905	2.70	2.63	396	543	11,367,045	11,751,115	2.71	2.67

Independent Power Producers

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal	270,387	250,339	1.89	1.83	65	72	2,303,720	2,563,646	1.88	1.86
Petroleum Liquids	2,723	2,399	15.61	11.71	40	64	33,882	18,016	14.24	11.88
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	395,265	370,640	3.16	2.60	230	310	3,918,326	3,668,573	3.25	3.03
Fossil Fuels	668,376	623,379	2.64	2.29	277	366	6,255,928	6,250,236	2.73	2.51

Commercial Sector

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal	52	35	2.94	2.79	1	1	182	446	2.93	2.77
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	792	605	3.36	3.77	3	3	7,611	6,358	3.50	3.84
Fossil Fuels	843	640	3.33	3.72	3	3	7,793	6,803	3.49	3.77

Industrial Sector

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
Coal	11,903	15,687	2.47	2.52	16	22	137,306	160,894	2.50	2.50
Petroleum Liquids	180	149	14.50	11.43	9	9	1,845	1,388	13.35	11.11
Petroleum Coke	477	893	1.76	1.77	1	1	1,562	1,971	1.77	1.55
Natural Gas	64,068	63,058	3.40	3.08	44	48	637,032	664,907	3.16	3.20
Fossil Fuels	76,628	79,786	3.27	2.97	46	51	777,745	829,159	3.06	3.08

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.

Chapter 1

Net Generation

Table 1.1. Net Generation by Energy Source: Total (All Sectors), 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2008	1,985,801	31,917	14,325	882,981	11,707	806,208	254,831	864	125,237	-6,288	11,804	4,119,388	N/A	N/A	N/A
2009	1,755,904	25,972	12,964	920,979	10,632	798,855	273,445	891	143,388	-4,627	11,928	3,950,331	N/A	N/A	N/A
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	1,212	165,961	-5,501	12,855	4,125,060	N/A	N/A	N/A
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	1,818	192,163	-6,421	14,154	4,100,141	N/A	N/A	N/A
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	4,327	214,006	-4,950	13,787	4,047,765	N/A	N/A	N/A
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	9,036	244,472	-4,681	13,588	4,065,964	N/A	N/A	N/A
2014	1,581,710	18,276	11,955	1,126,609	12,022	797,166	259,367	17,691	261,522	-6,174	13,461	4,093,606	11,233	26,482	28,924
2015	1,352,398	17,372	10,877	1,333,482	13,117	797,178	249,080	24,893	270,268	-5,091	14,028	4,077,601	14,139	35,805	39,032
2016	1,239,149	13,008	11,197	1,378,307	12,807	805,694	267,812	36,054	305,579	-6,686	13,754	4,076,675	18,812	51,483	54,866
2017	1,205,835	12,414	8,976	1,296,415	12,469	804,950	300,333	53,286	332,991	-6,495	13,094	4,034,268	23,990	74,007	77,276
Year 2016															
January	113,459	1,396	966	110,044	1,195	72,525	25,615	1,486	25,193	-312	1,153	352,719	980	2,380	2,465
February	92,705	1,299	910	98,552	1,062	65,638	24,139	2,242	26,496	-399	1,041	313,685	1,145	3,145	3,386
March	72,173	874	927	103,890	1,197	66,149	27,390	2,617	28,467	-384	1,090	304,390	1,525	3,885	4,143
April	72,113	833	1,006	98,876	1,132	62,732	25,878	2,880	26,787	-452	1,109	292,894	1,703	4,309	4,583
May	81,695	984	974	110,430	1,053	66,576	25,486	3,425	25,286	-321	1,195	316,784	1,879	4,916	5,304
June	116,034	972	1,005	131,395	1,043	67,175	23,237	3,473	22,763	-497	1,180	367,781	1,928	4,990	5,401
July	136,316	1,273	1,049	151,554	1,077	70,349	21,455	3,945	24,428	-784	1,225	411,887	2,000	5,474	5,945
August	135,635	1,258	1,078	154,760	1,064	71,526	19,570	3,969	20,496	-902	1,248	409,701	1,942	5,543	5,911
Sept	114,138	946	980	125,603	1,020	65,448	16,368	3,635	22,894	-715	1,168	351,484	1,735	5,007	5,370
October	99,194	937	635	102,898	913	60,733	17,339	3,191	26,558	-561	1,108	312,945	1,552	4,495	4,743
November	86,940	1,070	799	93,942	1,013	65,179	18,808	2,767	26,052	-607	1,098	297,062	1,257	3,840	4,024
December	118,747	1,166	869	96,364	1,037	71,662	22,528	2,424	30,159	-753	1,139	345,343	1,167	3,500	3,591
Year 2017															
January	115,333	1,121	944	95,473	1,046	73,121	26,788	2,030	26,676	-435	1,093	343,190	1,246	3,186	3,276
February	86,822	874	723	82,694	977	63,560	23,643	2,555	27,317	-508	995	289,652	1,384	3,804	3,939
March	89,365	950	699	95,022	1,060	65,093	29,272	4,245	31,688	-521	1,062	317,935	1,972	5,921	6,218
April	81,335	846	431	88,418	1,001	56,743	29,390	4,696	30,854	-439	1,049	294,325	2,195	6,580	6,891
May	92,777	971	847	98,067	1,055	61,313	32,384	5,663	28,782	-423	1,083	322,518	2,423	7,684	8,086
June	107,508	1,001	901	117,317	992	67,011	30,222	6,175	26,258	-568	1,099	357,916	2,487	8,197	8,662
July	127,697	916	889	146,994	1,048	71,314	26,491	5,753	22,832	-759	1,211	404,386	2,555	7,996	8,308
August	119,488	970	765	141,209	1,134	72,384	21,851	5,434	20,527	-638	1,220	384,342	2,480	7,573	7,914
Sept	98,203	925	712	118,112	1,060	68,098	19,067	5,115	24,142	-606	1,033	335,861	2,225	6,991	7,340
October	89,775	956	572	106,852	999	65,995	18,284	4,821	31,558	-463	1,027	320,376	1,990	6,497	6,811
November	90,986	903	755	94,883	1,001	66,618	20,565	3,409	30,596	-478	1,077	310,315	1,561	4,839	4,970
December	106,546	1,982	737	111,373	1,096	73,700	22,377	3,389	31,762	-656	1,146	353,452	1,472	4,739	4,861
Year 2018															
January	118,939	5,289	952	110,064	996	74,649	25,594	3,413	33,934	-547	1,115	374,398	1,614	4,899	5,027
February	81,922	780	738	96,013	991	64,790	25,532	4,120	30,569	-315	1,001	306,142	1,761	5,689	5,880
March	80,613	811	648	104,939	1,063	67,033	25,950	5,211	34,124	-490	1,114	321,015	2,426	7,379	7,636
April	73,383	854	691	99,447	944	59,133	27,488	6,257	32,931	-377	1,039	301,791	2,736	8,679	8,993
May	85,311	1,022	415	116,110	1,008	67,320	30,433	7,079	30,288	-390	1,075	339,671	3,009	9,658	10,088
June	101,508	1,062	765	130,827	1,010	69,688	27,953	7,811	31,085	-433	1,111	372,386	3,058	10,352	10,869
July	115,472	970	924	167,066	1,102	72,456	24,013	6,943	22,964	-644	1,117	412,383	3,144	9,707	10,087
August	115,218	991	878	164,954	1,224	72,282	21,398	6,982	26,298	-747	1,007	410,485	3,018	9,591	10,000
Sept	96,743	1,040	835	142,745	1,001	64,725	18,663	6,471	24,319	-603	801	356,738	2,681	8,723	9,153
October	87,452	989	484	124,027	930	59,397	18,779	5,225	27,563	-492	1,092	325,446	2,400	7,350	7,625
Year to Date															
2016	1,033,461	10,772	9,528	1,188,002	10,757	668,853	226,476	30,863	249,368	-5,326	11,517	3,434,271	16,388	44,143	47,252
2017	1,008,304	9,529	7,483	1,090,158	10,371	664,632	257,392	46,488	270,634	-5,361	10,871	3,370,502	20,957	64,430	67,445
2018	956,562	13,809	7,331	1,256,192	10,269	671,473	245,802	59,511	294,075	-5,040	10,472	3,520,455	25,847	82,026	85,358
Rolling 12 Months Ending in October															
2017	1,213,991	11,766	9,152	1,280,464	12,422	801,473	298,728	51,679	326,845	-6,720	13,108	4,012,906	23,381	71,769	75,060
2018	1,154,093	16,694	8,823	1,462,449	12,367	811,790	288,744	66,309	356,432	-6,174	12,695	4,184,222	28,879	91,603	95,189

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 2017 and prior years are final. Values for 2018 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 1.1.A. Net Generation from Renewable Sources: Total (All Sectors), 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities										Small Scale Generation	Generation From Utility and Small Scale Facilities	
Period	Wind	Solar Photovoltaic	Solar Thermal	Wood and Wood-Derived Fuels	Landfill Gas	Biogenic Municipal Solid Waste	Other Waste Biomass	Geothermal	Conventional Hydroelectric	Total Renewable Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals													
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932	N/A	N/A	N/A
2009	73,886	157	735	36,050	7,924	8,058	2,461	15,009	273,445	417,724	N/A	N/A	N/A
2010	94,652	423	789	37,172	8,377	7,927	2,613	15,219	260,203	427,376	N/A	N/A	N/A
2011	120,177	1,012	806	37,449	9,044	7,354	2,824	15,316	319,355	513,336	N/A	N/A	N/A
2012	140,822	3,451	876	37,799	9,803	7,320	2,700	15,562	276,240	494,573	N/A	N/A	N/A
2013	167,840	8,121	915	40,028	10,658	7,186	2,986	15,775	268,565	522,073	N/A	N/A	N/A
2014	181,655	15,250	2,441	42,340	11,220	7,228	3,202	15,877	259,367	538,579	11,233	26,482	28,924
2015	190,719	21,666	3,227	41,929	11,291	7,211	3,201	15,918	249,080	544,241	14,139	35,805	39,032
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	254,303	50,017	3,269	41,152	11,543	6,951	3,115	15,927	300,333	686,610	23,990	74,007	77,276
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	3,386
March	21,939	2,360	257	3,403	949	579	281	1,315	27,390	58,474	1,525	3,885	4,143
April	20,799	2,606	273	2,967	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	19,840	1,940	90	3,505	1,050	617	280	1,383	26,788	55,494	1,246	3,186	3,276
February	21,198	2,419	136	3,186	910	528	256	1,239	23,643	53,515	1,384	3,804	3,939
March	24,993	3,949	297	3,457	1,007	557	290	1,385	29,272	65,205	1,972	5,921	6,218
April	24,613	4,385	310	3,149	956	544	254	1,337	29,390	64,939	2,195	6,580	6,891
May	22,450	5,261	402	3,189	989	604	267	1,283	32,384	66,829	2,423	7,684	8,086
June	19,809	5,710	465	3,439	956	588	251	1,214	30,222	62,655	2,487	8,197	8,662
July	15,960	5,442	311	3,703	948	604	261	1,355	26,491	55,077	2,555	7,996	8,308
August	13,621	5,093	341	3,753	945	617	246	1,345	21,851	47,812	2,480	7,573	7,914
Sept	17,855	4,766	349	3,294	914	558	224	1,297	19,067	48,325	2,225	6,991	7,340
October	25,306	4,507	314	3,306	921	558	238	1,229	18,284	54,663	1,990	6,497	6,811
November	24,082	3,278	131	3,430	951	571	272	1,289	20,565	54,569	1,561	4,839	4,970
December	24,575	3,267	123	3,738	995	606	276	1,571	22,377	57,528	1,472	4,739	4,861
Year 2018													
January	26,885	3,285	128	3,779	989	590	275	1,416	25,594	62,941	1,614	4,899	5,027
February	24,077	3,929	191	3,398	941	561	259	1,333	25,532	60,221	1,761	5,689	5,880
March	27,287	4,953	258	3,553	999	599	272	1,414	25,950	65,284	2,426	7,379	7,636
April	26,803	5,943	314	3,107	941	570	256	1,255	27,488	66,677	2,736	8,679	8,993
May	23,542	6,649	430	3,564	932	574	238	1,438	30,433	67,799	3,009	9,658	10,088
June	24,340	7,294	517	3,588	927	630	230	1,370	27,953	66,849	3,058	10,352	10,869
July	16,022	6,562	380	3,709	945	640	212	1,436	24,013	53,920	3,144	9,707	10,087
August	19,507	6,572	409	3,565	951	632	214	1,429	21,398	54,678	3,018	9,591	10,000
Sept	17,991	6,041	430	3,305	880	563	191	1,388	18,663	49,453	2,681	8,723	9,153
October	21,154	4,950	275	3,291	929	597	240	1,352	18,779	51,567	2,400	7,350	7,625
Year to Date													
2016	184,441	27,755	3,109	33,941	9,214	6,022	2,741	13,008	226,476	506,707	16,388	44,143	47,252
2017	205,646	43,472	3,016	33,983	9,597	5,774	2,567	13,067	257,392	574,513	20,957	64,430	67,445
2018	227,609	56,179	3,332	34,860	9,433	5,957	2,388	13,829	245,802	599,388	25,847	82,026	85,358
Rolling 12 Months Ending in October													
2017	248,197	48,388	3,290	40,990	11,601	7,016	3,157	15,884	298,728	677,251	23,381	71,769	75,060
2018	276,265	62,724	3,585	42,028	11,379	7,134	2,937	16,689	288,744	711,485	28,879	91,603	95,189

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.
Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 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.A. Net Generation by Energy Source: Electric Utilities, 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities											
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total
Annual Totals												
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	17	11,291	-5,143	545	2,475,367
2009	1,322,092	18,035	7,182	349,166	96	417,275	247,198	28	14,589	-3,369	483	2,372,776
2010	1,378,028	17,258	8,807	392,616	52	424,843	236,104	101	17,826	-4,466	462	2,471,632
2011	1,301,107	11,688	9,428	414,843	29	415,298	291,413	216	21,717	-5,492	604	2,460,851
2012	1,146,480	9,892	5,664	504,958	0	394,823	252,936	639	27,378	-4,202	603	2,339,172
2013	1,188,452	9,446	9,522	501,427	798	406,114	243,040	943	31,474	-3,773	615	2,388,058
2014	1,173,073	10,696	9,147	501,414	112	419,871	238,185	1,218	33,278	-5,144	622	2,382,473
2015	998,385	10,386	8,278	617,817	199	416,680	229,640	1,494	35,992	-4,105	558	2,315,323
2016	922,399	9,069	8,881	654,780	154	424,400	247,787	1,995	40,666	-5,629	421	2,304,923
2017	893,639	8,567	6,711	623,835	149	424,485	275,677	3,348	42,763	-5,448	551	2,274,277
Year 2016												
January	84,012	965	832	52,818	3	37,974	23,579	95	3,303	-230	34	203,384
February	69,852	830	734	48,009	4	34,281	22,015	135	3,624	-332	30	179,182
March	56,982	623	724	49,949	5	34,445	25,125	151	3,696	-291	42	171,452
April	53,542	602	858	46,425	7	34,036	23,742	169	3,887	-367	34	162,936
May	62,093	695	763	52,908	10	36,531	23,508	187	3,098	-257	33	179,569
June	86,611	710	793	63,858	16	37,000	21,716	188	3,034	-409	40	213,557
July	100,856	926	833	71,913	21	37,919	20,030	197	2,837	-678	34	234,890
August	100,156	905	856	72,293	13	37,927	18,241	207	2,432	-787	33	232,277
Sept	83,223	644	807	58,392	23	33,919	15,283	190	3,215	-626	35	195,105
October	72,950	658	418	47,710	7	30,016	16,149	182	3,479	-471	36	171,134
November	64,830	700	596	44,171	22	33,082	17,599	154	3,635	-522	35	164,301
December	87,293	811	667	46,333	22	37,268	20,799	139	4,425	-657	36	197,136
Year 2017												
January	85,985	810	743	45,702	13	38,425	24,717	136	3,161	-346	44	199,391
February	64,844	632	540	39,534	17	33,911	21,619	178	3,541	-418	39	164,437
March	65,992	755	535	46,397	16	34,693	26,768	260	4,241	-455	43	179,245
April	58,913	631	260	43,444	18	30,217	26,683	288	4,020	-368	46	164,153
May	69,099	710	654	48,524	5	31,728	29,577	328	3,467	-350	38	183,781
June	81,297	714	698	56,453	10	35,022	27,897	338	3,298	-474	45	205,299
July	96,782	648	673	71,107	19	37,874	24,333	324	2,639	-646	53	233,807
August	90,517	698	540	67,671	2	38,667	20,124	318	2,304	-531	55	220,364
Sept	71,859	661	523	56,393	0	35,496	17,749	304	2,946	-522	49	185,458
October	66,498	721	405	50,140	9	35,038	16,950	291	4,543	-388	44	174,251
November	64,983	633	583	45,117	15	34,541	18,529	279	4,235	-394	45	168,569
December	76,870	953	556	53,353	24	38,871	20,729	304	4,369	-557	50	195,521
Year 2018												
January	88,647	2,358	770	55,200	26	39,366	23,664	296	4,419	-475	42	214,312
February	61,029	609	575	46,838	17	33,941	23,504	345	3,931	-226	40	170,605
March	58,552	585	491	50,590	16	35,262	23,793	465	4,181	-408	49	173,577
April	55,319	619	477	48,319	28	30,580	25,150	515	3,871	-295	42	164,625
May	64,011	730	336	58,568	11	34,479	28,051	506	3,348	-309	47	189,778
June	77,886	747	670	65,943	13	36,437	25,826	582	3,510	-339	52	211,327
July	88,147	648	716	82,577	15	38,293	21,964	528	2,723	-522	57	235,146
August	87,383	700	686	80,195	24	38,885	19,240	536	2,973	-626	58	230,053
Sept	73,136	763	639	68,921	3	34,377	16,649	509	3,054	-500	50	197,602
October	65,038	733	378	59,485	0	31,364	16,703	461	3,416	-405	46	177,218
Year to Date												
2016	770,277	7,557	7,618	564,276	111	354,050	209,389	1,702	32,605	-4,450	350	1,943,485
2017	751,786	6,981	5,572	525,364	109	351,072	236,419	2,765	34,160	-4,497	456	1,910,187
2018	719,148	8,493	5,739	616,637	152	352,984	224,544	4,742	35,424	-4,105	484	1,964,243
Rolling 12 Months Ending in October												
2017	903,909	8,492	6,835	615,868	152	421,422	274,817	3,058	42,220	-5,676	527	2,271,625
2018	861,002	10,079	6,878	715,108	191	426,397	263,803	5,325	44,027	-5,056	579	2,328,333

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 2017 and prior years are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities											
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total
Annual Totals												
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	847	84,928	-1,145	6,414	1,498,982
2009	419,031	6,306	4,288	491,839	2,962	381,579	24,308	863	100,997	-1,259	6,146	1,437,061
2010	449,709	5,117	3,497	508,774	2,915	382,126	22,351	1,105	119,851	-1,035	6,345	1,500,754
2011	416,783	3,655	3,431	511,447	2,911	374,906	26,117	1,511	140,442	-928	7,059	1,487,335
2012	354,076	2,757	1,758	627,833	2,984	374,509	20,923	3,525	156,539	-748	7,030	1,551,186
2013	379,270	3,761	1,780	527,522	3,524	382,902	22,018	7,782	181,263	-908	6,742	1,515,657
2014	395,701	6,789	1,410	531,758	3,246	377,295	19,861	16,086	196,723	-1,030	6,690	1,554,530
2015	342,608	6,240	1,601	619,839	3,517	380,498	17,996	22,962	202,858	-987	6,838	1,603,971
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	304,198	3,281	1,480	572,919	3,978	380,465	23,034	49,375	258,962	-1,047	6,527	1,603,173
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	3,394	17,145	-89	557	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	34,394	1,591	2,250	23,013	-96	613	134,908
Year 2017												
January	28,587	254	139	41,183	336	34,695	1,918	1,876	20,878	-90	583	130,360
February	21,314	197	123	35,510	291	29,650	1,894	2,348	21,360	-90	514	113,110
March	22,696	147	81	40,458	342	30,400	2,358	3,941	24,871	-66	523	125,751
April	21,829	174	113	37,135	282	26,526	2,538	4,358	24,347	-71	507	117,739
May	23,043	220	136	41,497	345	29,585	2,628	5,277	22,777	-73	548	125,981
June	25,528	249	132	52,380	313	31,988	2,185	5,772	20,315	-93	549	139,318
July	30,237	227	138	66,734	350	33,440	2,030	5,366	17,417	-114	572	156,397
August	28,293	231	140	64,705	358	33,717	1,617	5,056	15,432	-107	580	150,023
Sept	25,701	223	136	53,827	346	32,602	1,228	4,755	18,701	-84	508	137,942
October	22,616	191	110	48,686	318	30,957	1,221	4,480	24,488	-75	518	133,509
November	25,364	215	111	41,702	337	32,077	1,891	3,093	23,772	-84	539	129,016
December	28,990	951	122	49,104	359	34,828	1,526	3,054	24,605	-99	586	144,026
Year 2018												
January	29,504	2,805	116	46,057	303	35,283	1,796	3,084	26,761	-72	580	146,217
February	20,198	122	106	41,330	309	30,849	1,893	3,734	24,131	-89	549	123,131
March	21,359	177	100	46,384	330	31,770	2,011	4,693	27,267	-82	570	134,579
April	17,451	191	154	43,138	306	28,553	2,194	5,677	26,540	-82	535	124,658
May	20,649	244	23	49,392	350	32,841	2,230	6,498	24,224	-81	533	136,903
June	22,986	263	NM	56,381	317	33,251	1,990	7,137	24,929	-95	590	147,768
July	26,660	261	135	75,390	348	34,163	1,917	6,337	17,483	-123	594	163,165
August	27,173	243	124	75,497	369	33,398	2,035	6,365	20,658	-121	442	166,182
Sept	22,986	230	125	65,199	315	30,348	1,897	5,887	18,763	-103	312	145,957
October	21,843	212	43	56,164	259	28,033	1,948	4,706	21,603	-87	564	135,288
Year to Date												
2016	255,156	2,729	1,161	541,109	3,133	314,803	15,825	28,677	190,781	-876	5,769	1,358,266
2017	249,844	2,114	1,248	482,114	3,282	313,560	19,616	43,228	210,586	-863	5,402	1,330,131
2018	230,809	4,747	945	554,932	3,207	318,488	19,910	54,117	232,358	-935	5,270	1,423,847
Rolling 12 Months Ending in October												
2017	301,952	2,745	1,487	565,604	3,907	380,051	22,330	48,054	253,359	-1,044	6,575	1,585,020
2018	285,163	5,913	NM	645,737	3,903	385,393	23,327	60,264	280,734	-1,118	6,395	1,696,890

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 2017 and prior years are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
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Table 1.2.C. Net Generation by Energy Source: Commercial Sector, 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2008	1,261	136	6	4,188	0	0	60	0	1,555	0	720	7,926	N/A	N/A	N/A
2009	1,096	157	5	4,225	0	0	71	0	1,769	0	842	8,165	N/A	N/A	N/A
2010	1,111	117	7	4,725	3	0	80	5	1,709	0	834	8,592	N/A	N/A	N/A
2011	1,049	86	3	5,487	3	0	26	84	2,392	0	950	10,080	N/A	N/A	N/A
2012	883	191	6	6,603	0	0	28	148	2,397	0	1,046	11,301	N/A	N/A	N/A
2013	839	118	5	7,154	0	0	44	294	2,662	0	1,118	12,234	N/A	N/A	N/A
2014	595	247	9	7,227	0	0	38	371	2,862	0	1,171	12,520	5,146	5,516	5,516
2015	509	183	8	7,471	0	0	35	416	2,803	0	1,170	12,595	5,689	6,106	6,106
2016	383	77	6	7,730	0	0	217	529	2,697	0	1,068	12,706	6,158	6,687	6,687
2017	329	103	8	8,042	0	0	240	521	2,729	0	1,088	13,060	7,685	8,206	8,206
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	13	1	681	0	0	27	17	232	0	84	1,098	420	438	438
February	32	8	1	597	0	0	15	27	206	0	78	963	458	485	485
March	33	9	1	652	0	0	15	42	233	0	86	1,071	629	671	671
April	20	5	0	574	0	0	23	46	222	0	87	976	699	745	745
May	19	7	0	619	0	0	24	53	245	0	101	1,069	770	823	823
June	21	5	0	718	0	0	15	61	225	0	89	1,135	777	838	838
July	25	7	0	786	0	0	14	58	237	0	99	1,227	808	866	866
August	23	8	1	766	0	0	17	55	231	0	100	1,202	788	843	843
Sept	27	6	1	701	0	0	14	52	216	0	90	1,107	709	761	761
October	24	6	1	661	0	0	29	47	217	0	94	1,079	632	679	679
November	29	7	1	611	0	0	23	34	228	0	88	1,020	502	536	536
December	35	23	1	674	0	0	23	29	238	0	91	1,114	492	521	521
Year 2018															
January	44	NM	1	674	0	0	23	28	223	0	85	1,122	546	575	575
February	31	8	1	637	0	0	23	36	199	0	73	1,007	599	634	634
March	26	8	1	652	0	0	NM	45	221	0	84	1,061	813	858	858
April	22	9	0	635	0	0	25	57	207	0	82	1,038	901	958	958
May	19	9	0	644	0	0	NM	66	213	0	91	1,068	986	1,052	1,052
June	21	8	0	706	0	0	NM	81	215	0	92	1,147	999	1,080	1,080
July	25	12	0	822	0	0	NM	68	213	0	91	1,250	1,031	1,100	1,100
August	30	10	0	831	0	0	NM	71	217	0	91	1,267	990	1,060	1,060
Sept	29	8	1	747	0	0	14	66	198	0	80	1,144	891	957	957
October	24	8	1	672	0	0	NM	51	217	0	84	1,070	785	835	835
Year to Date															
2016	307	60	4	6,611	0	0	179	460	2,245	0	898	10,764	5,378	5,838	5,838
2017	265	73	7	6,757	0	0	194	458	2,263	0	909	10,925	6,691	7,149	7,149
2018	270	125	5	7,020	0	0	207	569	2,123	0	853	11,173	8,541	9,110	9,110
Rolling 12 Months Ending in October															
2017	342	89	8	7,875	0	0	232	527	2,715	0	1,079	12,868	7,470	7,997	7,997
2018	334	NM	6	8,305	0	0	NM	632	2,589	0	1,032	13,307	9,535	10,167	10,167

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 2017 and prior years are final. Values for 2018 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.D. Net Generation by Energy Source: Industrial Sector, 2008-October 2018
(Thousand Megawatthours)

	Generation at Utility Scale Facilities												Small Scale Generation	Net Generation From Utility and Small Scale Facilities	
Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities	Estimated Solar Photovoltaic	Estimated Total Solar Photovoltaic	Estimated Total Solar
Annual Totals															
2008	15,703	1,555	1,664	76,421	8,507	0	1,676	0	27,462	0	4,125	137,113	N/A	N/A	N/A
2009	13,686	1,474	1,489	75,748	7,574	0	1,868	0	26,033	0	4,457	132,329	N/A	N/A	N/A
2010	18,441	844	1,414	81,583	8,343	0	1,668	2	26,574	0	5,214	144,082	N/A	N/A	N/A
2011	14,490	657	1,234	81,911	8,624	0	1,799	7	27,612	0	5,541	141,875	N/A	N/A	N/A
2012	12,603	563	2,359	86,500	8,913	0	2,353	14	27,693	0	5,108	146,107	N/A	N/A	N/A
2013	12,554	495	2,036	88,733	8,531	0	3,463	17	29,074	0	5,113	150,015	N/A	N/A	N/A
2014	12,341	544	1,389	86,209	8,664	0	1,282	16	28,659	0	4,978	144,083	1,139	1,156	1,156
2015	10,896	563	990	88,355	9,401	0	1,410	21	28,614	0	5,462	145,712	1,451	1,472	1,472
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	7,669	463	776	91,619	8,343	0	1,383	42	28,536	0	4,928	143,758	2,364	2,406	2,406
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	763	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	2,489	0	503	13,075	209	212	212
Sept	762	41	60	7,706	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	720	43	61	7,907	696	0	126	1	2,405	0	382	12,341	123	124	124
February	632	38	60	7,052	668	0	115	2	2,209	0	364	11,142	137	139	139
March	644	38	82	7,515	702	0	131	3	2,342	0	411	11,868	197	200	200
April	573	35	58	7,266	701	0	146	4	2,265	0	410	11,457	213	217	217
May	616	34	57	7,428	704	0	155	4	2,293	0	396	11,686	239	242	242
June	662	33	71	7,765	668	0	124	5	2,420	0	416	12,164	241	246	246
July	653	34	78	8,367	679	0	115	5	2,540	0	486	12,956	252	257	257
August	655	33	83	8,067	774	0	93	5	2,560	0	484	12,754	246	251	251
Sept	615	34	52	7,191	715	0	75	4	2,281	0	386	11,354	223	227	227
October	637	38	56	7,366	673	0	84	4	2,310	0	370	11,537	201	204	204
November	610	47	61	7,453	649	0	121	3	2,361	0	405	11,710	156	158	158
December	651	55	58	8,242	713	0	99	3	2,550	0	419	12,790	138	141	141
Year 2018															
January	744	81	66	8,134	667	0	112	4	2,531	0	408	12,747	145	150	150
February	664	41	55	7,208	665	0	112	5	2,309	0	339	11,399	154	159	159
March	676	41	56	7,313	717	0	122	7	2,455	0	410	11,799	219	226	226
April	591	35	59	7,355	610	0	119	8	2,313	0	379	11,470	239	247	247
May	632	40	55	7,506	647	0	125	9	2,503	0	405	11,922	265	274	274
June	615	43	77	7,797	680	0	114	11	2,432	0	376	12,144	266	277	277
July	639	50	73	8,277	740	0	113	9	2,546	0	376	12,823	275	284	284
August	633	37	68	8,430	831	0	106	11	2,451	0	416	12,982	267	278	278
Sept	592	38	70	7,878	682	0	103	10	2,303	0	359	12,035	246	255	255
October	547	37	63	7,706	671	0	115	8	2,327	0	398	11,871	224	231	231
Year to Date															
2016	7,722	425	745	76,005	7,513	0	1,083	24	23,737	0	4,500	121,755	1,794	1,818	1,818
2017	6,408	361	657	75,924	6,981	0	1,162	37	23,625	0	4,105	119,258	2,070	2,107	2,107
2018	6,334	445	642	77,603	6,910	0	1,141	82	24,170	0	3,865	121,192	2,300	2,382	2,382
Rolling 12 Months Ending in October															
2017	7,788	439	821	91,116	8,362	0	1,349	40	28,551	0	4,928	143,393	2,336	2,376	2,376
2018	7,595	546	761	93,299	8,272	0	1,361	88	29,081	0	4,689	145,692	2,594	2,681	2,681

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, 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 2017 and prior years are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated 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-October 2018
(Thousand Megawatthours)

	Small Scale Generation
Period	**Estimated Small Scale Solar Photovoltaic Generation**
Annual Totals	
2014	4,947
2015	6,999
2016	10,595
2017	13,942
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	703
February	789
March	1,147
April	1,283
May	1,415
June	1,469
July	1,495
August	1,446
Sept	1,293
October	1,157
November	904
December	841
Year 2018	
January	922
February	1,008
March	1,394
April	1,596
May	1,757
June	1,793
July	1,838
August	1,761
Sept	1,545
October	1,391
Year to Date	
2016	9,217
2017	12,196
2018	15,006
Rolling 12 Months Ending in October	
2017	13,575
2018	16,751

See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 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, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	7,609	8,151	-6.7%	186	166	7,089	7,665	105	114	229	207
Connecticut	2,801	2,472	13.3%	8	7	2,715	2,378	34	38	45	50
Maine	1,025	751	36.4%	0	0	866	613	11	20	148	118
Massachusetts	2,019	2,612	-22.7%	46	53	1,902	2,494	48	45	22	21
New Hampshire	828	1,380	-40.0%	52	48	767	1,323	6	6	3	3
Rhode Island	737	824	-10.6%	0	0	720	803	5	5	12	16
Vermont	199	112	77.7%	80	58	119	54	0	0	0	0
Middle Atlantic	32,637	33,291	-2.0%	2,550	2,452	29,542	30,294	183	184	362	361
New Jersey	5,393	5,880	-8.3%	NM	18	5,264	5,747	41	55	63	60
New York	10,944	10,589	3.4%	2,513	2,430	8,239	7,995	113	98	79	66
Pennsylvania	16,301	16,822	-3.1%	13	4	16,038	16,552	30	31	219	235
East North Central	47,214	45,835	3.0%	17,787	18,289	28,426	26,536	166	158	835	851
Illinois	14,218	14,813	-4.0%	267	239	13,666	14,318	45	35	241	222
Indiana	9,125	8,302	9.9%	6,818	6,306	2,026	1,643	15	22	265	331
Michigan	8,007	8,665	-7.6%	5,492	5,636	2,313	2,849	74	69	129	110
Ohio	10,797	8,400	28.5%	1,086	1,460	9,628	6,867	19	22	64	50
Wisconsin	5,066	5,656	-10.4%	4,123	4,649	793	860	13	10	137	138
West North Central	27,165	26,781	1.4%	21,828	20,699	4,959	5,686	46	50	332	346
Iowa	5,287	4,490	17.7%	4,053	3,149	1,046	1,139	16	17	173	185
Kansas	4,149	4,212	-1.5%	2,889	2,537	1,250	1,672	NM	1	10	NM
Minnesota	4,693	4,690	0.1%	3,528	3,447	1,040	1,114	14	14	111	116
Missouri	6,508	5,909	10.1%	6,122	5,635	369	255	14	16	3	3
Nebraska	2,690	2,761	-2.5%	2,208	2,236	459	499	1	1	22	24
North Dakota	3,206	3,871	-17.2%	2,580	3,058	613	795	0	0	NM	17
South Dakota	631	848	-25.6%	448	637	183	211	NM	0	0	0
South Atlantic	65,651	62,866	4.4%	52,870	52,140	11,064	9,058	119	123	1,599	1,545
Delaware	638	572	11.5%	5	4	508	471	NM	1	124	97
District of Columbia	4	5	-19.1%	0	0	0	0	4	5	0	0
Florida	21,513	20,781	3.5%	19,987	19,406	1,083	942	6	6	436	427
Georgia	10,898	10,340	5.4%	9,011	8,597	1,467	1,317	NM	0	420	425
Maryland	3,518	2,586	36.1%	239	64	3,206	2,459	53	43	21	20
North Carolina	10,292	9,491	8.4%	8,586	8,198	1,524	1,092	23	31	159	169
South Carolina	7,866	7,628	3.1%	7,178	7,104	545	397	0	0	144	126
Virginia	6,261	5,974	4.8%	4,485	4,625	1,537	1,109	31	38	207	203
West Virginia	4,662	5,489	-15.1%	3,380	4,141	1,193	1,270	0	0	88	78
East South Central	27,828	27,354	1.7%	23,249	23,689	3,819	2,923	17	15	743	727
Alabama	10,874	11,153	-2.5%	7,234	8,257	3,286	2,547	0	0	354	349
Kentucky	6,381	5,173	23.4%	6,279	5,070	52	46	0	0	50	57
Mississippi	4,980	4,606	8.1%	4,359	4,129	459	303	0	0	163	174
Tennessee	5,593	6,423	-12.9%	5,378	6,233	21	27	17	15	176	148
West South Central	57,344	55,526	3.3%	20,672	17,700	30,376	31,838	81	65	6,215	5,924
Arkansas	5,494	4,945	11.1%	4,725	4,363	641	431	NM	3	124	147
Louisiana	8,640	8,095	6.7%	5,538	5,106	550	711	16	8	2,535	2,270
Oklahoma	5,791	6,310	-8.2%	2,945	2,758	2,803	3,473	0	0	43	79
Texas	37,420	36,176	3.4%	7,464	5,473	26,381	27,223	61	54	3,513	3,427
Mountain	30,048	29,456	2.0%	22,149	22,086	7,600	7,032	50	50	249	288
Arizona	9,303	8,714	6.8%	7,213	7,091	2,075	1,608	14	14	0	0
Colorado	4,291	4,073	5.3%	3,183	2,961	1,098	1,104	2	2	7	6
Idaho	1,002	1,283	-21.9%	561	733	391	514	4	5	45	32
Montana	2,350	2,224	5.7%	641	812	1,706	1,409	0	0	3	3
Nevada	3,061	3,281	-6.7%	2,108	2,263	926	978	11	12	16	28
New Mexico	2,765	2,779	-0.5%	1,845	1,967	910	803	9	9	0	0
Utah	3,398	3,164	7.4%	3,046	2,778	296	299	9	7	47	80
Wyoming	3,879	3,937	-1.5%	3,551	3,481	198	318	0	0	130	139
Pacific Contiguous	28,604	29,619	-3.4%	15,036	15,999	12,049	12,117	244	247	1,274	1,255
California	17,014	16,770	1.5%	6,354	6,439	9,312	8,995	236	238	1,112	1,098
Oregon	4,160	4,719	-11.8%	2,721	3,222	1,383	1,435	7	7	49	55
Washington	7,429	8,130	-8.6%	5,962	6,339	1,354	1,686	1	3	113	102
Pacific Noncontiguous	1,348	1,496	-9.9%	891	1,030	366	360	58	73	34	34
Alaska	437	616	-29.1%	389	550	NM	19	23	40	9	7
Hawaii	911	880	3.5%	502	480	349	340	35	33	25	27
U.S. Total	325,446	320,376	1.6%	177,218	174,251	135,288	133,509	1,070	1,079	11,871	11,537

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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	89,018	87,791	1.4%	2,587	2,043	82,819	82,233	1,063	1,096	2,548	2,418
Connecticut	32,554	28,311	15.0%	73	80	31,649	27,382	322	344	509	504
Maine	9,750	9,359	4.2%	0	0	7,944	7,638	138	177	1,668	1,544
Massachusetts	23,928	27,635	-13.4%	563	455	22,640	26,491	496	466	230	224
New Hampshire	14,670	14,363	2.1%	1,165	734	13,424	13,547	55	56	26	26
Rhode Island	6,189	6,351	-2.5%	0	3	6,025	6,177	50	51	115	120
Vermont	1,926	1,773	8.7%	786	771	1,137	999	3	3	0	0
Middle Atlantic	354,468	346,947	2.2%	30,026	28,652	318,792	312,616	2,001	1,985	3,648	3,695
New Jersey	63,943	64,029	-0.1%	136	125	62,647	62,724	583	570	577	611
New York	111,863	106,682	4.9%	29,770	28,439	80,215	76,427	1,105	1,095	773	721
Pennsylvania	178,662	176,236	1.4%	120	88	175,930	173,465	313	320	2,298	2,362
East North Central	508,887	476,724	6.7%	202,530	196,141	295,740	270,734	1,680	1,622	8,937	8,227
Illinois	157,348	151,514	3.9%	4,810	4,327	149,641	144,545	438	365	2,459	2,278
Indiana	93,015	80,599	15.4%	69,840	63,653	19,764	13,717	219	221	3,192	3,009
Michigan	98,924	93,924	5.3%	68,573	67,691	28,368	24,457	696	695	1,287	1,081
Ohio	103,034	98,285	4.8%	15,092	19,117	87,141	78,397	222	237	579	534
Wisconsin	56,566	52,401	7.9%	44,216	41,352	10,826	9,619	105	105	1,420	1,325
West North Central	296,819	281,152	5.6%	242,051	231,173	50,582	46,109	521	504	3,665	3,366
Iowa	53,135	47,628	11.6%	40,867	35,626	10,245	10,164	181	173	1,841	1,665
Kansas	44,059	42,093	4.7%	29,456	28,092	14,527	13,958	13	12	63	31
Minnesota	52,493	47,633	10.2%	40,572	37,472	10,494	8,789	162	153	1,266	1,219
Missouri	71,999	71,632	0.5%	67,438	69,002	4,376	2,443	149	148	36	38
Nebraska	30,823	29,313	5.2%	26,462	25,130	4,036	3,881	15	16	310	287
North Dakota	34,754	33,837	2.7%	29,270	28,470	5,335	5,241	0	0	149	126
South Dakota	9,556	9,014	6.0%	7,987	7,381	1,569	1,633	NM	0	0	0
South Atlantic	695,704	667,259	4.3%	566,138	556,089	112,418	94,273	1,382	1,236	15,765	15,661
Delaware	5,454	6,650	-18.0%	35	20	4,520	5,592	6	5	892	1,034
District of Columbia	67	57	18.3%	0	0	0	0	67	57	0	0
Florida	208,634	203,465	2.5%	193,634	189,865	10,674	9,241	60	60	4,266	4,299
Georgia	109,457	107,147	2.2%	90,554	89,992	14,484	12,978	8	5	4,411	4,172
Maryland	37,046	27,972	32.4%	3,208	107	32,952	27,182	678	449	208	233
North Carolina	112,446	107,313	4.8%	97,135	95,316	13,538	10,163	238	293	1,536	1,541
South Carolina	85,581	77,961	9.8%	78,876	73,732	5,072	2,751	2	1	1,630	1,476
Virginia	79,703	75,023	6.2%	59,955	59,283	17,366	13,389	325	366	2,058	1,986
West Virginia	57,317	61,672	-7.1%	42,742	47,775	13,811	12,978	0	0	764	920
East South Central	310,885	294,088	5.7%	262,888	252,741	40,213	33,655	178	165	7,606	7,527
Alabama	122,310	116,920	4.6%	85,961	85,228	32,624	28,046	0	0	3,725	3,646
Kentucky	66,103	61,323	7.8%	64,994	60,477	636	333	0	0	473	513
Mississippi	54,411	50,258	8.3%	46,126	43,548	6,693	5,102	6	4	1,586	1,605
Tennessee	68,061	65,587	3.8%	65,808	63,488	259	174	173	161	1,822	1,764
West South Central	620,439	574,343	8.0%	218,602	192,896	338,061	318,147	821	785	62,954	62,513
Arkansas	56,528	50,252	12.5%	49,450	45,113	5,616	3,744	35	37	1,427	1,358
Louisiana	86,310	81,778	5.5%	53,687	47,535	7,821	8,656	139	112	24,662	25,476
Oklahoma	73,890	62,054	19.1%	35,980	31,447	37,168	29,937	0	0	742	671
Texas	403,710	380,258	6.2%	79,485	68,802	287,456	275,811	647	637	36,123	35,008
Mountain	308,958	302,160	2.2%	236,853	236,719	69,029	62,325	485	484	2,591	2,632
Arizona	94,989	89,662	5.9%	80,192	76,878	14,656	12,642	141	142	0	0
Colorado	46,346	44,969	3.1%	34,754	34,785	11,498	10,099	32	25	62	61
Idaho	14,698	14,273	3.0%	9,448	9,472	4,750	4,315	42	43	458	443
Montana	22,508	22,975	-2.0%	9,757	9,805	12,728	13,146	0	0	23	24
Nevada	34,121	32,322	5.6%	23,672	22,899	10,030	9,065	119	107	300	250
New Mexico	26,302	28,369	-7.3%	16,663	21,090	9,535	7,179	89	99	15	1
Utah	32,109	30,850	4.1%	28,248	26,771	3,316	3,305	62	68	482	706
Wyoming	37,886	38,740	-2.2%	34,120	35,020	2,516	2,574	0	0	1,250	1,147
Pacific Contiguous	321,430	326,585	-1.6%	193,161	204,654	112,711	106,580	2,411	2,466	13,147	12,885
California	167,072	177,188	-5.7%	64,966	78,526	88,353	85,060	2,318	2,386	11,435	11,216
Oregon	54,174	52,170	3.8%	40,430	40,774	13,143	10,836	69	59	532	502
Washington	100,183	97,226	3.0%	87,765	85,354	11,215	10,684	24	20	1,179	1,168
Pacific Noncontiguous	13,848	13,453	2.9%	9,406	9,078	3,483	3,459	630	583	330	334
Alaska	5,549	5,236	6.0%	4,949	4,685	210	191	301	267	89	94
Hawaii	8,299	8,217	1.0%	4,456	4,393	3,272	3,268	329	316	241	240
U.S. Total	3,520,455	3,370,502	4.4%	1,964,243	1,910,187	1,423,847	1,330,131	11,173	10,925	121,192	119,258

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

Table 1.4.A. Utility Scale Facility Net Generation from Coal by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	NM	7	NM	0	1	0	5	0	0	NM	1
Connecticut	-2	-1	58.2%	0	0	-2	-1	0	0	0	0
Maine	NM	7	NM	0	0	2	6	0	0	NM	1
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	1	-75.2%	0	1	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	2,549	2,844	-10.4%	0	0	2,534	2,821	0	0	NM	23
New Jersey	79	89	-11.6%	0	0	79	89	0	0	0	0
New York	3	11	-74.8%	0	0	3	0	0	0	0	11
Pennsylvania	2,468	2,744	-10.1%	0	0	2,453	2,732	0	0	NM	12
East North Central	21,067	20,544	2.5%	12,172	12,977	8,691	7,405	NM	7	197	155
Illinois	4,049	4,429	-8.6%	194	204	3,691	4,103	NM	2	160	120
Indiana	6,442	5,984	7.6%	6,040	5,723	399	257	3	5	0	0
Michigan	2,920	2,897	0.8%	2,887	2,854	30	40	0	0	NM	3
Ohio	5,036	4,312	16.8%	465	1,305	4,570	3,006	0	0	0	1
Wisconsin	2,619	2,922	-10.3%	2,586	2,890	0	0	0	0	34	31
West North Central	14,493	13,378	8.3%	14,315	13,167	0	0	5	6	173	205
Iowa	2,461	1,364	80.4%	2,345	1,230	0	0	3	5	112	129
Kansas	1,494	1,227	21.7%	1,494	1,227	0	0	0	0	0	0
Minnesota	1,950	1,782	9.4%	1,919	1,742	0	0	0	0	31	40
Missouri	4,575	5,161	-11.4%	4,573	5,160	0	0	2	1	0	0
Nebraska	2,024	1,476	37.1%	2,002	1,452	0	0	0	0	22	24
North Dakota	1,990	2,291	-13.1%	1,983	2,280	0	0	0	0	NM	12
South Dakota	0	75	-100.0%	0	75	0	0	0	0	0	0
South Atlantic	13,559	15,068	-10.0%	12,279	13,378	1,233	1,622	3	3	45	65
Delaware	-3	2	-240.2%	0	0	-3	2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,586	3,322	-22.2%	2,581	3,281	0	29	0	0	5	13
Georgia	2,856	2,543	12.3%	2,842	2,527	0	0	0	0	14	16
Maryland	297	607	-51.0%	0	0	294	602	0	0	4	5
North Carolina	1,599	2,063	-22.5%	1,576	2,037	9	11	3	3	11	13
South Carolina	1,810	1,046	73.0%	1,810	1,043	0	0	0	0	0	3
Virginia	239	460	-48.2%	178	411	49	34	0	0	11	15
West Virginia	4,176	5,024	-16.9%	3,292	4,080	884	944	0	0	0	0
East South Central	8,383	8,994	-6.8%	8,126	8,804	202	134	0	0	55	56
Alabama	2,034	2,456	-17.2%	2,030	2,454	0	0	0	0	4	2
Kentucky	4,709	4,339	8.5%	4,709	4,339	0	0	0	0	0	0
Mississippi	455	355	28.0%	253	221	202	134	0	0	0	0
Tennessee	1,185	1,844	-35.7%	1,134	1,790	0	0	0	0	51	54
West South Central	13,420	14,472	-7.3%	6,664	5,978	6,748	8,471	0	0	8	23
Arkansas	2,440	1,755	39.0%	1,942	1,425	495	327	0	0	4	3
Louisiana	708	803	-11.8%	546	527	162	276	0	0	0	0
Oklahoma	755	1,397	-46.0%	528	1,206	222	171	0	0	4	20
Texas	9,517	10,516	-9.5%	3,648	2,820	5,869	7,696	0	0	0	0
Mountain	12,900	13,332	-3.2%	11,350	11,986	1,518	1,266	0	0	31	80
Arizona	2,336	2,684	-12.9%	2,336	2,684	0	0	0	0	0	0
Colorado	2,122	2,234	-5.1%	2,120	2,234	0	0	0	0	2	0
Idaho	NM	3	NM	0	0	0	0	0	0	NM	3
Montana	1,457	1,129	29.0%	27	15	1,428	1,113	0	0	1	1
Nevada	157	57	174.8%	98	-3	59	60	0	0	0	0
New Mexico	1,367	1,416	-3.5%	1,367	1,416	0	0	0	0	0	0
Utah	2,118	2,502	-15.3%	2,088	2,435	29	28	0	0	0	38
Wyoming	3,341	3,306	1.1%	3,312	3,204	2	64	0	0	27	38
Pacific Contiguous	927	969	-4.4%	104	183	801	758	0	0	22	29
California	20	26	-24.2%	0	0	0	0	0	0	20	26
Oregon	104	183	-43.1%	104	183	0	0	0	0	0	0
Washington	803	761	5.5%	0	0	801	758	0	0	2	3
Pacific Noncontiguous	153	168	-9.2%	NM	25	115	134	NM	9	0	0
Alaska	NM	48	NM	NM	25	NM	14	NM	9	0	0
Hawaii	102	119	-14.6%	0	0	102	119	0	0	0	0
U.S. Total	87,452	89,775	-2.6%	65,038	66,498	21,843	22,616	24	24	547	637

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

Table 1.4.B. Utility Scale Facility Net Generation from Coal

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	857	1,454	-41.1%	543	167	296	1,278	0	0	18	9
Connecticut	252	95	166.0%	0	0	252	95	0	0	0	0
Maine	62	56	11.3%	0	0	44	47	0	0	18	9
Massachusetts	0	1,136	-100.0%	0	0	0	1,136	0	0	0	0
New Hampshire	543	167	224.5%	543	167	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	38,224	39,951	-4.3%	0	0	38,062	39,607	0	0	162	345
New Jersey	1,012	999	1.3%	0	0	1,012	999	0	0	0	0
New York	620	612	1.4%	0	0	609	422	0	0	11	190
Pennsylvania	36,591	38,341	-4.6%	0	0	36,440	38,185	0	0	151	155
East North Central	227,658	230,203	-1.1%	135,418	139,271	90,195	89,213	70	51	1,975	1,668
Illinois	50,444	47,817	5.5%	3,254	3,358	45,618	43,151	33	23	1,538	1,285
Indiana	64,298	59,727	7.7%	60,769	57,560	3,492	2,139	37	28	0	0
Michigan	36,085	35,846	0.7%	35,651	35,436	361	370	0	0	72	40
Ohio	49,227	57,506	-14.4%	8,499	13,946	40,723	43,553	0	0	5	8
Wisconsin	27,604	29,307	-5.8%	27,245	28,971	0	0	0	0	359	335
West North Central	156,503	153,824	1.7%	154,260	151,707	0	1	68	89	2,174	2,028
Iowa	23,423	21,519	8.8%	22,047	20,203	0	0	60	69	1,316	1,247
Kansas	16,890	16,107	4.9%	16,890	16,107	0	0	0	0	0	0
Minnesota	18,689	18,255	2.4%	18,236	17,845	0	0	1	1	453	409
Missouri	53,178	56,606	-6.1%	53,171	56,587	0	1	7	18	0	0
Nebraska	19,341	17,636	9.7%	19,031	17,349	0	0	0	0	310	287
North Dakota	23,068	22,065	4.5%	22,973	21,980	0	0	0	0	95	85
South Dakota	1,914	1,637	17.0%	1,914	1,637	0	0	0	0	0	0
South Atlantic	165,535	180,303	-8.2%	144,312	161,218	20,616	18,404	33	41	575	640
Delaware	274	261	5.1%	0	0	274	261	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	25,470	32,675	-22.1%	25,386	32,446	7	109	0	0	77	120
Georgia	26,535	28,130	-5.7%	26,376	27,991	0	0	0	0	159	139
Maryland	8,626	7,014	23.0%	0	0	8,577	6,954	0	0	48	60
North Carolina	27,300	29,831	-8.5%	27,072	29,566	83	92	27	33	118	140
South Carolina	16,447	15,648	5.1%	16,433	15,629	0	0	0	0	14	19
Virginia	7,873	9,273	-15.1%	7,218	8,699	492	404	5	8	158	162
West Virginia	53,010	57,472	-7.8%	41,827	46,887	11,183	10,584	0	0	0	0
East South Central	99,347	102,255	-2.8%	96,463	99,761	2,274	1,884	0	0	610	610
Alabama	27,770	26,622	4.3%	27,733	26,598	0	0	0	0	37	24
Kentucky	48,995	48,489	1.0%	48,995	48,489	0	0	0	0	0	0
Mississippi	4,287	3,919	9.4%	2,013	2,036	2,274	1,884	0	0	0	0
Tennessee	18,295	23,225	-21.2%	17,722	22,638	0	0	0	0	573	587
West South Central	139,327	159,192	-12.5%	76,869	76,975	62,253	81,939	0	0	204	279
Arkansas	24,099	21,650	11.3%	19,838	19,024	4,223	2,590	0	0	38	36
Louisiana	9,856	10,476	-5.9%	6,575	6,136	3,282	4,341	0	0	0	0
Oklahoma	12,431	14,835	-16.2%	10,807	13,196	1,458	1,396	0	0	166	243
Texas	92,940	112,231	-17.2%	39,650	38,619	53,290	73,611	0	0	0	0
Mountain	122,389	133,776	-8.5%	110,068	120,780	11,962	12,429	0	0	360	568
Arizona	25,456	26,178	-2.8%	25,456	26,178	0	0	0	0	0	0
Colorado	21,533	24,379	-11.7%	21,524	24,373	0	0	0	0	9	7
Idaho	21	18	15.4%	0	0	0	0	0	0	21	18
Montana	10,483	10,931	-4.1%	184	225	10,295	10,701	0	0	3	4
Nevada	1,804	1,703	5.9%	1,006	908	798	794	0	0	0	0
New Mexico	10,323	15,734	-34.4%	10,323	15,734	0	0	0	0	0	0
Utah	20,485	21,472	-4.6%	20,141	20,918	344	337	0	0	0	217
Wyoming	32,284	33,361	-3.2%	31,434	32,443	525	596	0	0	326	322
Pacific Contiguous	5,083	5,750	-11.6%	943	1,688	3,883	3,800	0	0	257	262
California	238	238	-0.1%	0	0	0	0	0	0	238	238
Oregon	943	1,688	-44.1%	943	1,688	0	0	0	0	0	0
Washington	3,901	3,824	2.0%	0	0	3,883	3,800	0	0	19	23
Pacific Noncontiguous	1,639	1,594	2.8%	271	218	1,269	1,290	99	85	0	0
Alaska	538	453	18.7%	271	218	168	150	99	85	0	0
Hawaii	1,101	1,141	-3.5%	0	0	1,101	1,141	0	0	0	0
U.S. Total	956,562	1,008,304	-5.1%	719,148	751,786	230,809	249,844	270	265	6,334	6,408

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	17	9	82.9%	NM	3	12	5	2	1	2	0
Connecticut	4	3	46.8%	NM	0	4	3	NM	0	0	0
Maine	3	2	82.7%	0	0	1	1	0	0	2	0
Massachusetts	7	3	124.5%	NM	2	5	1	NM	0	0	0
New Hampshire	1	1	-2.3%	NM	1	NM	0	1	1	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	0	0
Vermont	NM	1	NM	NM	1	0	0	0	0	0	0
Middle Atlantic	3	19	-82.5%	NM	2	-4	14	NM	0	2	3
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	8	7	3.0%	NM	2	NM	3	NM	0	1	3
Pennsylvania	-6	11	-157.3%	0	0	-7	10	0	0	NM	0
East North Central	40	47	-16.2%	21	33	15	11	1	1	2	2
Illinois	6	4	60.7%	1	1	5	3	0	0	0	0
Indiana	11	13	-17.6%	9	11	0	0	0	0	1	2
Michigan	8	9	-6.5%	7	8	0	0	0	1	0	0
Ohio	13	13	-4.5%	2	5	11	8	0	0	1	0
Wisconsin	2	9	-74.3%	2	8	0	0	0	0	NM	0
West North Central	24	23	2.3%	23	23	NM	0	0	0	0	0
Iowa	6	7	-13.4%	6	7	NM	0	0	0	0	0
Kansas	4	4	10.6%	4	4	0	0	0	0	0	0
Minnesota	3	4	-12.0%	3	3	NM	0	0	0	0	0
Missouri	7	7	3.0%	7	7	0	0	0	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	3	1	78.1%	3	1	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	NM	0	0	0
South Atlantic	124	142	-13.2%	84	101	27	30	3	3	10	8
Delaware	NM	0	NM	0	0	NM	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	46	47	-1.8%	45	45	NM	0	0	0	NM	2
Georgia	12	8	49.4%	7	3	NM	0	0	0	5	4
Maryland	4	0	NM	NM	1	4	-1	NM	0	0	0
North Carolina	8	25	-67.9%	6	23	NM	1	NM	0	1	1
South Carolina	8	4	104.7%	6	3	0	0	NM	0	1	1
Virginia	35	50	-30.9%	11	19	21	29	3	3	NM	0
West Virginia	10	8	30.2%	10	8	0	0	0	0	0	0
East South Central	28	20	42.2%	27	18	NM	1	0	0	NM	1
Alabama	2	3	-12.0%	2	1	NM	1	0	0	NM	1
Kentucky	7	5	31.4%	7	5	0	0	0	0	0	0
Mississippi	3	1	281.9%	3	1	0	0	0	0	0	0
Tennessee	16	11	44.5%	16	11	0	0	0	0	0	0
West South Central	10	14	-28.6%	9	9	1	4	0	0	0	1
Arkansas	3	6	-42.8%	3	3	0	2	0	0	0	0
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	0
Oklahoma	2	1	33.3%	1	1	0	0	0	0	0	0
Texas	4	5	-32.2%	3	3	1	2	0	0	0	0
Mountain	22	14	57.3%	21	13	1	1	0	0	0	0
Arizona	6	5	22.5%	6	5	0	0	0	0	0	0
Colorado	1	1	-35.7%	1	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1	0	58.5%	NM	0	1	0	0	0	0	0
Nevada	1	0	161.2%	1	0	0	0	0	0	0	0
New Mexico	3	3	37.7%	3	3	0	0	0	0	0	0
Utah	4	3	47.5%	4	3	0	0	0	0	0	0
Wyoming	6	2	204.3%	6	2	0	0	0	0	0	0
Pacific Contiguous	10	8	28.8%	7	5	2	2	NM	0	NM	1
California	4	4	2.4%	3	3	1	0	NM	0	0	0
Oregon	0	1	-67.7%	0	1	0	0	NM	0	0	0
Washington	6	3	113.0%	4	0	1	2	0	0	NM	1
Pacific Noncontiguous	711	659	8.0%	534	514	158	123	0	0	19	21
Alaska	63	60	4.2%	60	57	0	0	0	0	3	3
Hawaii	648	598	8.4%	475	457	158	123	0	0	16	18
U.S. Total	989	956	3.5%	733	721	212	191	8	6	37	38

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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 October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	1,262	227	456.9%	195	36	1,004	157	37	26	26	8
Connecticut	364	40	816.4%	NM	3	357	36	NM	1	1	0
Maine	197	40	393.5%	0	0	171	31	2	2	24	7
Massachusetts	464	114	307.8%	89	12	355	89	NM	11	1	1
New Hampshire	168	25	574.4%	96	14	59	1	13	10	0	0
Rhode Island	NM	5	NM	0	3	NM	0	1	2	0	0
Vermont	NM	3	NM	NM	3	0	0	0	0	0	0
Middle Atlantic	2,160	369	485.0%	569	59	1,534	270	NM	7	32	33
New Jersey	254	32	705.1%	1	0	246	31	5	0	1	0
New York	1,445	166	769.3%	566	59	836	73	NM	4	27	31
Pennsylvania	462	172	169.1%	2	0	452	166	4	3	NM	2
East North Central	513	422	21.5%	261	263	225	141	5	4	21	14
Illinois	57	44	29.4%	NM	7	47	37	0	0	0	0
Indiana	110	97	13.3%	93	87	NM	0	1	0	16	10
Michigan	103	89	16.0%	98	85	0	0	4	3	1	2
Ohio	220	160	36.8%	39	55	176	104	1	0	3	2
Wisconsin	22	30	-28.0%	20	30	1	0	0	0	NM	1
West North Central	294	222	32.3%	279	217	NM	3	2	1	1	1
Iowa	90	79	14.7%	89	78	1	0	0	0	0	0
Kansas	49	39	26.1%	49	39	0	0	0	0	0	0
Minnesota	37	26	41.4%	23	21	NM	2	1	1	1	1
Missouri	79	42	86.7%	79	42	0	0	0	0	0	0
Nebraska	6	4	55.1%	6	4	0	0	0	0	0	0
North Dakota	29	29	-2.9%	28	29	0	0	0	0	0	0
South Dakota	4	3	42.1%	4	3	0	0	NM	0	0	0
South Atlantic	2,711	1,394	94.5%	1,868	1,101	679	196	49	28	115	69
Delaware	149	9	NM	6	0	143	9	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	516	459	12.3%	482	443	12	2	0	0	NM	13
Georgia	192	99	94.7%	NM	56	46	4	4	2	64	37
Maryland	244	83	194.6%	4	1	235	80	NM	1	3	2
North Carolina	451	187	141.5%	411	168	NM	9	NM	1	NM	8
South Carolina	253	82	206.8%	204	75	39	1	NM	0	9	7
Virginia	774	377	105.5%	565	260	166	90	40	24	NM	3
West Virginia	133	99	34.0%	119	98	14	1	0	0	0	0
East South Central	262	200	30.8%	223	188	25	3	0	0	14	9
Alabama	61	29	107.3%	28	20	25	3	0	0	NM	7
Kentucky	71	66	8.0%	71	66	0	0	0	0	0	0
Mississippi	25	9	192.5%	NM	7	0	0	0	0	4	2
Tennessee	105	97	8.9%	103	95	0	0	0	0	2	1
West South Central	136	130	4.9%	107	73	22	53	1	0	7	4
Arkansas	34	41	-17.0%	NM	15	6	24	0	0	3	2
Louisiana	NM	15	NM	NM	15	0	0	0	0	0	0
Oklahoma	14	11	28.4%	13	10	0	0	0	0	1	1
Texas	53	63	-16.2%	33	32	NM	29	1	0	3	1
Mountain	157	175	-10.2%	139	159	18	16	0	0	0	0
Arizona	44	46	-4.0%	44	46	0	0	0	0	0	0
Colorado	9	6	46.9%	9	6	0	0	0	0	0	0
Idaho	0	0	114.7%	0	0	0	0	0	0	0	0
Montana	15	12	25.3%	NM	0	15	12	0	0	0	0
Nevada	9	8	2.2%	6	5	3	3	0	0	0	0
New Mexico	17	34	-49.9%	17	34	0	0	0	0	0	0
Utah	29	33	-11.2%	28	32	1	1	0	0	0	0
Wyoming	35	36	-4.5%	35	36	0	0	0	0	0	0
Pacific Contiguous	87	69	26.4%	37	41	13	13	NM	1	36	15
California	63	40	57.7%	29	29	5	3	0	0	28	7
Oregon	NM	10	NM	NM	10	0	0	NM	0	0	0
Washington	21	20	5.5%	5	2	8	10	0	0	8	7
Pacific Noncontiguous	6,225	6,320	-1.5%	4,814	4,845	1,213	1,263	6	5	192	207
Alaska	645	735	-12.2%	607	692	0	0	3	4	35	39
Hawaii	5,580	5,586	-0.1%	4,207	4,152	1,213	1,263	2	2	157	169
U.S. Total	13,809	9,529	44.9%	8,493	6,981	4,747	2,114	125	73	445	361

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

Table 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	13	NM	0	0	0	0	0	0	NM	13
New Jersey	6	6	10.1%	0	0	0	0	0	0	6	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	8	NM	0	0	0	0	0	0	NM	8
East North Central	88	187	-52.8%	72	103	0	69	0	0	17	16
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	84	100	-16.5%	68	85	0	0	0	0	16	16
Ohio	1	69	-98.1%	0	0	0	69	0	0	1	0
Wisconsin	3	18	-81.2%	3	18	0	0	0	0	0	0
West North Central	1	1	-15.5%	0	0	0	0	1	1	0	0
Iowa	1	1	-15.5%	0	0	0	0	1	1	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	109	107	2.4%	96	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	96	96	0.2%	96	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	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	233	223	4.3%	210	206	0	0	0	0	23	17
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	224	218	3.0%	210	206	0	0	0	0	14	11
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	6	NM	0	0	0	0	0	0	NM	6
Mountain	43	41	4.5%	0	0	43	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	43	41	4.5%	0	0	43	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	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	484	572	-15.4%	378	405	43	110	1	1	63	56

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

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

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	134	145	-7.5%	0	0	0	0	0	0	134	145
New Jersey	50	62	-19.6%	0	0	0	0	0	0	50	62
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	85	83	1.5%	0	0	0	0	0	0	85	83
East North Central	1,627	1,808	-10.0%	924	806	601	879	0	0	102	124
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	935	851	9.9%	842	726	0	0	0	0	92	124
Ohio	611	879	-30.4%	0	0	601	879	0	0	10	0
Wisconsin	81	79	2.9%	81	79	0	0	0	0	0	0
West North Central	41	29	39.6%	0	0	0	0	5	7	36	23
Iowa	41	29	39.6%	0	0	0	0	5	7	36	23
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	1,567	898	74.5%	1,386	786	0	0	0	0	181	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	1,386	786	76.3%	1,386	786	0	0	0	0	0	0
Georgia	181	111	62.0%	0	0	0	0	0	0	181	111
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	427	-100.0%	0	427	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	427	-100.0%	0	427	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	3,617	3,806	-5.0%	3,429	3,553	0	0	0	0	189	253
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	3,551	3,728	-4.8%	3,429	3,553	0	0	0	0	122	175
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	67	78	-14.8%	0	0	0	0	0	0	67	78
Mountain	344	369	-6.8%	0	0	344	369	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	344	369	-6.8%	0	0	344	369	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	7,331	7,483	-2.0%	5,739	5,572	945	1,248	5	7	642	657

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

Table 1.7.A. Utility Scale Facility Net Generation from Natural Gas by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	4,478	4,423	1.2%	NM	41	4,274	4,186	82	86	106	110
Connecticut	1,739	1,379	26.2%	3	6	1,657	1,285	34	38	45	50
Maine	281	166	69.5%	0	0	253	141	2	3	26	22
Massachusetts	1,299	1,856	-30.0%	NM	32	1,224	1,764	41	40	22	20
New Hampshire	458	227	101.7%	0	3	455	220	0	1	3	3
Rhode Island	701	796	-12.0%	0	0	685	776	5	5	12	16
Vermont	0	0	NM	0	0	0	0	0	0	0	0
Middle Atlantic	14,027	13,408	4.6%	522	517	13,199	12,598	89	85	217	208
New Jersey	3,105	3,032	2.4%	NM	18	3,046	2,966	11	17	32	31
New York	4,187	3,506	19.4%	506	498	3,553	2,913	70	58	58	37
Pennsylvania	6,735	6,870	-2.0%	0	1	6,599	6,719	8	10	127	140
East North Central	10,489	8,322	26.0%	3,272	2,540	6,856	5,379	123	122	239	281
Illinois	1,127	1,101	2.4%	NM	28	975	978	40	32	51	63
Indiana	1,906	1,434	32.9%	703	515	1,130	779	9	14	64	126
Michigan	2,207	2,359	-6.4%	608	677	1,492	1,597	50	48	57	37
Ohio	3,788	2,104	80.0%	591	126	3,158	1,944	17	21	22	12
Wisconsin	1,460	1,324	10.3%	1,308	1,195	100	80	7	6	44	44
West North Central	2,217	1,399	58.5%	1,857	1,136	255	170	26	26	79	67
Iowa	523	424	23.5%	457	360	NM	1	9	9	57	53
Kansas	331	207	60.0%	321	205	0	0	0	0	9	NM
Minnesota	498	355	40.0%	354	239	126	102	8	7	9	8
Missouri	622	303	105.4%	482	223	128	67	10	10	3	3
Nebraska	108	40	168.6%	108	40	0	0	0	0	0	0
North Dakota	55	33	66.5%	54	32	0	0	0	0	1	1
South Dakota	79	37	116.7%	79	37	0	0	0	0	0	0
South Atlantic	31,799	27,158	17.1%	24,941	22,281	6,389	4,460	61	51	407	365
Delaware	603	531	13.5%	4	3	502	461	0	0	97	67
District of Columbia	-1	0	--	0	0	0	0	-1	0	0	0
Florida	16,066	14,520	10.6%	15,174	13,797	759	597	2	2	130	124
Georgia	4,461	4,165	7.1%	3,152	3,011	1,261	1,112	0	0	48	41
Maryland	1,485	471	215.0%	238	63	1,188	359	50	41	9	8
North Carolina	3,839	2,974	29.1%	3,008	2,544	812	413	NM	7	11	9
South Carolina	2,172	1,524	42.5%	1,700	1,162	460	352	0	0	12	10
Virginia	2,993	2,715	10.2%	1,652	1,683	1,277	974	2	1	62	57
West Virginia	182	258	-29.6%	14	17	130	192	0	0	38	49
East South Central	10,756	8,677	24.0%	7,021	5,776	3,516	2,700	16	15	203	186
Alabama	5,123	4,272	19.9%	1,782	1,668	3,239	2,502	0	0	102	101
Kentucky	1,212	377	221.5%	1,143	312	50	44	0	0	20	21
Mississippi	3,317	3,254	2.0%	3,051	3,063	228	153	0	0	38	38
Tennessee	1,104	775	42.5%	1,044	733	0	1	16	15	44	27
West South Central	29,185	24,271	20.2%	10,851	7,858	12,810	11,223	73	56	5,451	5,135
Arkansas	1,989	1,423	39.8%	1,846	1,301	118	93	NM	3	21	26
Louisiana	5,602	5,000	12.0%	3,209	2,781	301	347	16	8	2,076	1,865
Oklahoma	2,872	2,125	35.1%	2,125	1,234	713	863	0	0	34	28
Texas	18,722	15,723	19.1%	3,671	2,542	11,677	9,920	53	45	3,320	3,216
Mountain	9,287	7,353	26.3%	6,482	5,370	2,646	1,813	37	37	122	133
Arizona	3,943	2,889	36.5%	2,246	1,720	1,684	1,156	12	12	0	0
Colorado	1,253	831	50.9%	954	715	298	114	0	0	2	2
Idaho	145	193	-24.8%	NM	41	97	141	3	3	11	8
Montana	40	37	7.5%	NM	24	16	12	0	0	1	1
Nevada	2,099	2,345	-10.5%	1,896	2,120	182	192	5	5	16	28
New Mexico	813	711	14.3%	443	511	362	191	9	9	0	0
Utah	904	280	222.5%	860	230	7	6	7	7	31	38
Wyoming	89	66	35.4%	26	8	0	0	0	0	63	58
Pacific Contiguous	11,570	11,591	-0.2%	4,309	4,376	6,220	6,156	164	184	876	875
California	9,228	8,435	9.4%	3,202	2,604	5,002	4,796	159	178	865	857
Oregon	1,586	1,792	-11.5%	608	906	966	875	5	4	7	7
Washington	755	1,364	-44.6%	499	865	252	486	0	2	5	11
Pacific Noncontiguous	220	248	-11.6%	214	244	0	0	0	0	6	4
Alaska	220	248	-11.6%	214	244	0	0	0	0	6	4
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	124,027	106,852	16.1%	59,485	50,140	56,164	48,686	672	661	7,706	7,366

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 2018 are preliminary. Values for 2017 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 October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	43,024	43,408	-0.9%	241	243	40,788	41,209	815	823	1,180	1,132
Connecticut	16,064	12,886	24.7%	34	53	15,203	11,987	319	343	508	504
Maine	2,000	2,135	-6.3%	0	0	1,663	1,843	25	25	312	266
Massachusetts	16,436	19,205	-14.4%	176	159	15,620	18,427	421	404	219	215
New Hampshire	2,739	3,134	-12.6%	31	31	2,676	3,068	6	8	26	26
Rhode Island	5,783	6,046	-4.4%	0	0	5,626	5,883	42	43	115	120
Vermont	1	1	8.4%	1	1	0	0	1	1	0	0
Middle Atlantic	140,490	134,027	4.8%	8,924	8,408	128,455	122,743	993	1,016	2,118	1,860
New Jersey	32,936	32,538	1.2%	161	185	32,276	31,863	171	186	329	304
New York	43,067	40,415	6.6%	8,757	8,216	33,066	31,188	713	719	532	291
Pennsylvania	64,486	61,074	5.6%	6	6	63,114	59,692	109	111	1,257	1,265
East North Central	112,104	82,325	36.2%	38,513	27,780	69,448	50,826	1,296	1,245	2,846	2,474
Illinois	14,408	12,873	11.9%	1,452	892	12,003	11,031	396	337	557	613
Indiana	21,090	14,355	46.9%	8,308	5,407	11,485	7,792	146	160	1,151	997
Michigan	26,663	21,650	23.2%	8,801	6,985	16,849	13,851	486	466	527	348
Ohio	34,677	22,422	54.7%	6,276	4,869	28,015	17,198	209	225	178	130
Wisconsin	15,265	11,024	38.5%	13,677	9,627	1,096	954	59	58	433	385
West North Central	27,778	16,998	63.4%	23,822	14,416	3,026	1,819	269	235	661	527
Iowa	6,972	3,478	100.5%	6,427	3,050	NM	1	83	70	462	357
Kansas	3,654	1,781	105.1%	3,595	1,751	0	0	0	0	59	30
Minnesota	8,329	5,649	47.4%	6,938	4,711	1,205	756	87	82	98	99
Missouri	6,149	4,413	39.4%	4,199	3,234	1,820	1,062	96	82	33	36
Nebraska	1,134	569	99.4%	1,132	568	0	0	3	1	0	0
North Dakota	615	565	9.0%	607	558	0	0	0	0	8	6
South Dakota	924	544	69.8%	924	544	0	0	0	0	0	0
South Atlantic	311,180	278,012	11.9%	250,059	228,067	56,674	45,669	772	557	3,675	3,719
Delaware	4,699	6,048	-22.3%	22	14	4,013	5,247	0	0	664	787
District of Columbia	20	19	5.2%	0	0	0	0	20	19	0	0
Florida	148,146	138,092	7.3%	139,840	131,177	6,990	5,691	17	21	1,299	1,203
Georgia	46,452	44,256	5.0%	33,934	33,157	11,999	10,602	0	0	519	497
Maryland	12,062	5,279	128.5%	3,195	99	8,139	4,670	651	436	77	74
North Carolina	37,160	31,765	17.0%	31,129	27,238	5,838	4,375	73	74	120	78
South Carolina	19,513	14,372	35.8%	15,302	11,962	4,105	2,309	0	0	106	100
Virginia	41,858	36,853	13.6%	26,475	24,279	14,765	12,012	11	7	607	556
West Virginia	1,269	1,329	-4.5%	162	142	825	762	0	0	282	424
East South Central	117,439	99,699	17.8%	78,404	66,337	36,823	31,227	173	162	2,039	1,973
Alabama	50,420	44,311	13.8%	17,311	15,564	32,082	27,750	0	0	1,027	996
Kentucky	12,678	8,260	53.5%	11,899	7,752	616	314	0	0	163	194
Mississippi	43,448	38,470	12.9%	38,952	34,943	4,114	3,153	6	4	376	370
Tennessee	10,893	8,659	25.8%	10,241	8,077	11	11	167	158	473	413
West South Central	312,844	265,109	18.0%	106,550	83,673	150,677	126,629	740	716	54,878	54,092
Arkansas	17,634	14,788	19.2%	16,265	13,551	1,081	985	31	31	258	222
Louisiana	53,427	49,907	7.1%	29,425	25,588	3,695	3,459	139	112	20,168	20,748
Oklahoma	36,439	25,869	40.9%	22,274	15,415	13,845	10,252	0	0	319	202
Texas	205,345	174,545	17.6%	38,586	29,119	132,056	111,933	570	573	34,133	32,920
Mountain	89,235	74,929	19.1%	68,511	57,847	19,058	15,475	344	360	1,323	1,248
Arizona	31,663	25,800	22.7%	21,544	17,506	10,000	8,174	120	121	0	0
Colorado	14,158	10,506	34.8%	11,732	8,879	2,410	1,610	0	0	16	17
Idaho	2,479	2,243	10.5%	1,123	1,113	1,223	988	33	33	101	109
Montana	366	350	4.7%	282	253	82	93	0	0	2	3
Nevada	23,081	22,629	2.0%	20,961	20,551	1,768	1,780	54	49	298	248
New Mexico	9,537	7,792	22.4%	5,924	4,930	3,512	2,764	87	97	15	1
Utah	7,172	4,983	43.9%	6,721	4,492	62	64	51	60	338	367
Wyoming	778	627	24.1%	225	123	1	1	0	0	552	503
Pacific Contiguous	99,301	93,029	6.7%	38,867	36,027	49,983	46,519	1,619	1,640	8,832	8,844
California	75,768	73,240	3.5%	25,861	25,076	39,658	37,866	1,561	1,594	8,688	8,704
Oregon	14,105	11,352	24.2%	7,237	5,952	6,754	5,302	43	33	71	64
Washington	9,429	8,437	11.7%	5,770	4,998	3,570	3,351	16	12	73	76
Pacific Noncontiguous	2,797	2,622	6.7%	2,745	2,566	0	0	0	2	52	54
Alaska	2,797	2,622	6.7%	2,745	2,566	0	0	0	2	52	54
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,256,192	1,090,158	15.2%	616,637	525,364	554,932	482,114	7,020	6,757	77,603	75,924

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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.C. Utility Scale Facility Net Generation from Natural Gas by Technology: Total (All Sectors), 2008-October 2018 (Thousand Megawatthours)

	Natural Gas					
Period	Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Natural Gas Other	Total
Annual Factors						
2008	693,958	80,144	107,316	1,482	80	882,981
2009	743,901	76,141	99,588	1,332	18	920,979
2010	804,033	85,820	96,332	1,490	22	987,697
2011	828,554	85,392	97,578	2,125	40	1,013,689
2012	1,017,040	98,446	108,285	1,986	138	1,225,894
2013	947,172	91,272	83,746	2,328	317	1,124,836
2014	958,921	90,159	74,100	2,921	508	1,126,609
2015	1,130,617	108,655	89,796	3,760	654	1,333,482
2016	1,152,245	123,429	98,204	3,714	715	1,378,307
2017	1,094,951	111,733	84,492	4,370	869	1,296,415
Year 2016						
January	97,555	7,212	4,933	295	50	110,044
February	86,920	6,841	4,491	253	47	98,552
March	87,256	9,126	7,184	275	49	103,890
April	80,910	9,788	7,843	278	56	98,876
May	92,066	9,681	8,328	301	53	110,430
June	108,301	11,690	10,993	345	66	131,395
July	120,441	15,821	14,812	402	78	151,554
August	124,933	15,905	13,421	421	80	154,760
Sept	104,442	11,340	9,422	333	65	125,603
October	84,780	9,990	7,788	276	65	102,898
November	80,168	8,609	4,859	252	54	93,942
December	84,473	7,426	4,129	282	53	96,364
Year 2017						
January	83,813	7,936	3,325	330	71	95,473
February	72,179	7,254	2,933	269	60	82,694
March	80,222	9,299	5,134	303	65	95,022
April	74,282	8,063	5,716	304	53	88,418
May	82,415	8,806	6,458	319	69	98,067
June	97,888	9,970	9,002	380	76	117,317
July	121,419	12,091	12,908	481	94	146,994
August	118,900	11,160	10,591	464	93	141,209
Sept	98,230	10,132	9,276	398	76	118,112
October	88,194	9,451	8,749	382	75	106,852
November	81,319	8,336	4,804	359	65	94,883
December	96,089	9,235	5,595	382	71	111,373
Year 2018						
January	92,784	10,674	6,232	364	11	110,064
February	85,094	6,493	4,140	277	10	96,013
March	89,751	9,049	5,778	350	10	104,939
April	82,019	10,962	6,097	355	13	99,447
May	92,471	13,275	9,896	451	18	116,110
June	107,092	13,122	10,132	463	17	130,827
July	131,302	20,325	14,638	778	23	167,066
August	131,140	19,540	13,518	733	22	164,954
Sept	116,190	15,277	10,711	549	18	142,745
October	101,053	13,224	9,249	484	17	124,027

Values for 2017 and prior years are final. Values for 2018 are preliminary.
The 'Natural Gas Other' category consists of power plants with prime movers of Fuel Cells and Other Prime Movers that consume natural gas.
Totals may not equal sum of components because of independent rounding.
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.

Table 1.8.A. Utility Scale Facility Net Generation from Other Gases by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	47	49	-4.9%	0	0	0	0	0	0	47	49
New Jersey	18	17	4.4%	0	0	0	0	0	0	18	17
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	29	33	-9.7%	0	0	0	0	0	0	29	33
East North Central	314	356	-12.0%	0	9	119	145	0	0	195	202
Illinois	18	14	23.5%	0	0	1	0	0	0	17	14
Indiana	163	176	-7.5%	0	0	0	0	0	0	163	176
Michigan	79	106	-25.4%	0	9	79	97	0	0	0	0
Ohio	54	60	-10.0%	0	0	39	48	0	0	15	12
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	5	4	8.3%	0	0	0	0	0	0	5	4
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	5	4	8.3%	0	0	0	0	0	0	5	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	29	32	-9.3%	0	0	0	0	0	0	29	32
Delaware	26	29	-9.7%	0	0	0	0	0	0	26	29
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	35.4%	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	3	-10.2%	0	0	0	0	0	0	3	3
East South Central	1	0	249.1%	0	0	0	0	0	0	1	0
Alabama	0	0	-100.0%	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	1	0	NM	0	0	0	0	0	0	1	0
West South Central	351	353	-0.6%	0	0	107	140	0	0	244	213
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	172	138	24.6%	0	0	0	0	0	0	172	138
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	179	215	-16.7%	0	0	107	140	0	0	72	76
Mountain	36	40	-8.9%	0	0	1	1	0	0	35	39
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	1	1	-9.8%	0	0	1	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	1	2	-57.0%	0	0	0	0	0	0	1	2
Wyoming	34	36	-5.8%	0	0	0	0	0	0	34	36
Pacific Contiguous	141	160	-11.6%	0	0	33	32	0	0	109	128
California	109	128	-15.1%	0	0	0	0	0	0	109	128
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	33	32	2.0%	0	0	33	32	0	0	0	0
Pacific Noncontiguous	6	4	41.2%	0	0	0	0	0	0	6	4
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	6	4	41.2%	0	0	0	0	0	0	6	4
U.S. Total	930	999	-6.9%	0	9	259	318	0	0	671	673

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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 October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	518	540	-4.0%	0	0	1	0	0	0	517	540
New Jersey	175	183	-4.7%	0	0	0	0	0	0	175	183
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	344	357	-3.6%	0	0	1	0	0	0	342	357
East North Central	3,821	3,851	-0.8%	152	109	1,654	1,746	0	0	2,015	1,996
Illinois	166	153	7.8%	0	0	1	0	0	0	165	153
Indiana	1,719	1,698	1.2%	0	0	0	0	0	0	1,719	1,698
Michigan	1,356	1,344	0.9%	152	109	1,204	1,235	0	0	0	0
Ohio	581	656	-11.5%	0	0	449	512	0	0	131	145
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	42	34	25.7%	0	0	0	0	0	0	42	34
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	34	25.7%	0	0	0	0	0	0	42	34
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	242	269	-10.1%	0	0	0	0	0	0	242	269
Delaware	218	236	-7.7%	0	0	0	0	0	0	218	236
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5	4	1.1%	0	0	0	0	0	0	5	4
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	20	29	-31.6%	0	0	0	0	0	0	20	29
East South Central	10	20	-48.5%	0	0	0	0	0	0	10	20
Alabama	1	8	-88.3%	0	0	0	0	0	0	1	8
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	9	11	-19.0%	0	0	0	0	0	0	9	11
West South Central	3,643	3,842	-5.2%	0	0	1,164	1,228	0	0	2,479	2,614
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,620	1,798	-9.9%	0	0	0	0	0	0	1,620	1,798
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,023	2,044	-1.1%	0	0	1,164	1,228	0	0	859	816
Mountain	316	316	0.0%	0	0	10	14	0	0	306	302
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	10	14	-24.0%	0	0	10	14	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	5	14	-64.3%	0	0	0	0	0	0	5	14
Wyoming	301	288	4.2%	0	0	0	0	0	0	301	288
Pacific Contiguous	1,627	1,457	11.6%	0	0	377	293	0	0	1,249	1,164
California	1,249	1,164	7.3%	0	0	0	0	0	0	1,249	1,164
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	377	293	28.6%	0	0	377	293	0	0	0	0
Pacific Noncontiguous	49	42	17.5%	0	0	0	0	0	0	49	42
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	49	42	17.5%	0	0	0	0	0	0	49	42
U.S. Total	10,269	10,371	-1.0%	152	109	3,207	3,282	0	0	6,910	6,981

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

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	1,342	2,394	-44.0%	0	0	1,342	2,394	0	0	0	0
Connecticut	908	975	-6.9%	0	0	908	975	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	372	490	-24.1%	0	0	372	490	0	0	0	0
New Hampshire	62	929	-93.3%	0	0	62	929	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	11,838	13,048	-9.3%	0	0	11,838	13,048	0	0	0	0
New Jersey	1,946	2,533	-23.2%	0	0	1,946	2,533	0	0	0	0
New York	3,639	3,982	-8.6%	0	0	3,639	3,982	0	0	0	0
Pennsylvania	6,254	6,534	-4.3%	0	0	6,254	6,534	0	0	0	0
East North Central	11,972	12,500	-4.2%	1,752	1,732	10,220	10,768	0	0	0	0
Illinois	7,805	8,032	-2.8%	0	0	7,805	8,032	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,991	2,333	-14.7%	1,752	1,732	240	601	0	0	0	0
Ohio	1,610	1,612	-0.2%	0	0	1,610	1,612	0	0	0	0
Wisconsin	566	523	8.2%	0	0	566	523	0	0	0	0
West North Central	3,165	3,104	2.0%	2,755	2,722	410	382	0	0	0	0
Iowa	410	382	7.3%	0	0	410	382	0	0	0	0
Kansas	909	907	0.3%	909	907	0	0	0	0	0	0
Minnesota	940	1,061	-11.5%	940	1,061	0	0	0	0	0	0
Missouri	907	156	481.7%	907	156	0	0	0	0	0	0
Nebraska	0	599	-100.0%	0	599	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	15,400	16,858	-8.6%	14,080	15,541	1,320	1,317	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,817	2,069	-12.2%	1,817	2,069	0	0	0	0	0	0
Georgia	2,817	2,939	-4.2%	2,817	2,939	0	0	0	0	0	0
Maryland	1,320	1,317	0.3%	0	0	1,320	1,317	0	0	0	0
North Carolina	3,483	3,243	7.4%	3,483	3,243	0	0	0	0	0	0
South Carolina	3,467	4,816	-28.0%	3,467	4,816	0	0	0	0	0	0
Virginia	2,496	2,474	0.9%	2,496	2,474	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,941	7,371	-19.4%	5,941	7,371	0	0	0	0	0	0
Alabama	2,490	3,454	-27.9%	2,490	3,454	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	1,052	844	24.6%	1,052	844	0	0	0	0	0	0
Tennessee	2,400	3,073	-21.9%	2,400	3,073	0	0	0	0	0	0
West South Central	5,106	6,015	-15.1%	2,204	2,967	2,903	3,047	0	0	0	0
Arkansas	632	1,378	-54.1%	632	1,378	0	0	0	0	0	0
Louisiana	1,571	1,589	-1.1%	1,571	1,589	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,903	3,047	-4.7%	0	0	2,903	3,047	0	0	0	0
Mountain	2,102	2,163	-2.8%	2,102	2,163	0	0	0	0	0	0
Arizona	2,102	2,163	-2.8%	2,102	2,163	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	2,530	2,542	-0.4%	2,530	2,542	0	0	0	0	0	0
California	1,668	1,684	-0.9%	1,668	1,684	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	862	858	0.5%	862	858	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	59,397	65,995	-10.0%	31,364	35,038	28,033	30,957	0	0	0	0

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

Table 1.9.B. Utility Scale Facility Net Generation from Nuclear Energy

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	26,177	26,083	0.4%	0	0	26,177	26,083	0	0	0	0
Connecticut	14,454	13,872	4.2%	0	0	14,454	13,872	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	3,488	4,053	-13.9%	0	0	3,488	4,053	0	0	0	0
New Hampshire	8,234	8,158	0.9%	0	0	8,234	8,158	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	131,058	131,616	-0.4%	0	0	131,058	131,616	0	0	0	0
New Jersey	27,160	28,238	-3.8%	0	0	27,160	28,238	0	0	0	0
New York	35,146	34,819	0.9%	0	0	35,146	34,819	0	0	0	0
Pennsylvania	68,752	68,558	0.3%	0	0	68,752	68,558	0	0	0	0
East North Central	130,839	129,766	0.8%	20,694	22,191	110,145	107,575	0	0	0	0
Illinois	81,123	80,297	1.0%	0	0	81,123	80,297	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	26,124	27,088	-3.6%	20,694	22,191	5,430	4,897	0	0	0	0
Ohio	15,162	14,485	4.7%	0	0	15,162	14,485	0	0	0	0
Wisconsin	8,430	7,896	6.8%	0	0	8,430	7,896	0	0	0	0
West North Central	37,078	38,515	-3.7%	33,082	34,194	3,996	4,321	0	0	0	0
Iowa	3,996	4,321	-7.5%	0	0	3,996	4,321	0	0	0	0
Kansas	7,373	8,852	-16.7%	7,373	8,852	0	0	0	0	0	0
Minnesota	12,069	11,612	3.9%	12,069	11,612	0	0	0	0	0	0
Missouri	8,835	7,987	10.6%	8,835	7,987	0	0	0	0	0	0
Nebraska	4,804	5,744	-16.4%	4,804	5,744	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	168,944	169,041	-0.1%	156,614	156,573	12,330	12,468	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	24,062	23,958	0.4%	24,062	23,958	0	0	0	0	0	0
Georgia	28,285	27,612	2.4%	28,285	27,612	0	0	0	0	0	0
Maryland	12,330	12,468	-1.1%	0	0	12,330	12,468	0	0	0	0
North Carolina	34,393	34,711	-0.9%	34,393	34,711	0	0	0	0	0	0
South Carolina	45,291	45,092	0.4%	45,291	45,092	0	0	0	0	0	0
Virginia	24,582	25,200	-2.5%	24,582	25,200	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	68,122	68,177	-0.1%	68,122	68,177	0	0	0	0	0	0
Alabama	32,398	35,421	-8.5%	32,398	35,421	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	5,139	6,562	-21.7%	5,139	6,562	0	0	0	0	0	0
Tennessee	30,585	26,194	16.8%	30,585	26,194	0	0	0	0	0	0
West South Central	59,623	53,702	11.0%	24,842	22,204	34,782	31,498	0	0	0	0
Arkansas	10,620	9,964	6.6%	10,620	9,964	0	0	0	0	0	0
Louisiana	14,222	12,240	16.2%	14,222	12,240	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	34,782	31,498	10.4%	0	0	34,782	31,498	0	0	0	0
Mountain	26,424	26,722	-1.1%	26,424	26,722	0	0	0	0	0	0
Arizona	26,424	26,722	-1.1%	26,424	26,722	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	23,207	21,011	10.5%	23,207	21,011	0	0	0	0	0	0
California	15,152	14,591	3.8%	15,152	14,591	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	8,055	6,420	25.5%	8,055	6,420	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	671,473	664,632	1.0%	352,984	351,072	318,488	313,560	0	0	0	0

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

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	685	311	120.1%	99	37	554	256	0	0	31	18
Connecticut	35	11	218.6%	4	1	30	10	0	0	0	0
Maine	297	164	81.3%	0	0	267	146	0	0	31	18
Massachusetts	95	47	104.9%	25	11	69	35	0	0	1	0
New Hampshire	141	55	158.5%	30	13	111	41	0	0	0	0
Rhode Island	1	0	--	0	0	1	0	0	0	0	0
Vermont	116	35	229.0%	40	12	76	23	0	0	0	0
Middle Atlantic	2,802	2,480	13.0%	2,049	1,977	749	500	0	0	4	3
New Jersey	4	0	NM	0	0	4	0	0	0	0	0
New York	2,498	2,386	4.7%	2,036	1,974	458	409	0	0	4	3
Pennsylvania	300	94	220.4%	13	3	287	91	0	0	0	0
East North Central	318	410	-22.6%	264	369	40	25	0	0	14	17
Illinois	13	9	39.1%	6	4	NM	5	0	0	0	0
Indiana	29	24	19.3%	29	24	0	0	0	0	0	0
Michigan	87	136	-35.6%	80	124	NM	9	0	0	NM	2
Ohio	47	22	114.3%	26	22	NM	0	0	0	0	0
Wisconsin	141	219	-35.6%	123	194	NM	11	0	0	12	15
West North Central	750	1,058	-29.2%	722	1,022	NM	22	0	0	14	14
Iowa	50	78	-35.9%	50	78	1	1	0	0	0	0
Kansas	3	3	13.4%	0	0	3	3	0	0	0	0
Minnesota	69	116	-40.5%	45	83	NM	18	0	0	14	14
Missouri	122	96	27.4%	122	96	0	0	0	0	0	0
Nebraska	79	122	-35.4%	79	122	0	0	0	0	0	0
North Dakota	136	212	-35.8%	136	212	0	0	0	0	0	0
South Dakota	290	431	-32.7%	290	431	0	0	0	0	0	0
South Atlantic	1,514	853	77.6%	1,163	747	301	77	2	1	49	27
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	11	87.7%	20	11	0	0	0	0	0	0
Georgia	252	185	36.3%	250	183	NM	0	0	0	1	1
Maryland	250	48	416.8%	0	0	250	48	0	0	0	0
North Carolina	484	314	54.1%	478	311	NM	3	1	1	NM	0
South Carolina	226	132	70.9%	222	129	NM	3	0	0	0	0
Virginia	134	82	64.0%	129	78	NM	4	0	0	0	0
West Virginia	149	81	83.6%	65	36	37	19	0	0	47	26
East South Central	2,152	1,761	22.2%	2,151	1,760	NM	1	0	0	0	0
Alabama	927	676	37.1%	927	676	0	0	0	0	0	0
Kentucky	406	399	1.7%	405	398	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	819	686	19.5%	819	686	0	0	0	0	0	0
West South Central	720	613	17.5%	635	524	85	88	NM	0	0	0
Arkansas	306	261	17.1%	301	255	NM	6	0	0	0	0
Louisiana	80	80	-0.3%	0	0	80	80	0	0	0	0
Oklahoma	207	179	15.4%	207	179	0	0	0	0	0	0
Texas	128	92	38.2%	127	89	1	3	NM	0	0	0
Mountain	1,989	2,311	-14.0%	1,907	2,221	81	89	1	1	0	0
Arizona	474	467	1.4%	474	467	0	0	0	0	0	0
Colorado	117	14	752.3%	103	10	NM	2	1	1	0	0
Idaho	565	741	-23.8%	511	673	54	68	0	0	0	0
Montana	580	760	-23.6%	572	749	NM	11	0	0	0	0
Nevada	112	147	-23.4%	108	140	NM	7	0	0	0	0
New Mexico	NM	15	NM	NM	15	0	0	0	0	0	0
Utah	68	89	-24.3%	67	89	1	0	0	0	0	0
Wyoming	61	78	-21.8%	60	77	1	1	0	0	0	0
Pacific Contiguous	7,750	8,236	-5.9%	7,631	8,077	118	158	NM	0	0	0
California	1,427	2,022	-29.4%	1,347	1,900	80	122	NM	0	0	0
Oregon	1,981	2,047	-3.2%	1,964	2,030	NM	17	0	0	0	0
Washington	4,343	4,166	4.2%	4,321	4,146	NM	20	0	0	0	0
Pacific Noncontiguous	99	251	-60.4%	81	216	5	4	NM	27	NM	4
Alaska	91	241	-62.4%	81	215	0	0	NM	27	0	0
Hawaii	9	10	-10.4%	1	2	5	4	0	0	NM	4
U.S. Total	18,779	18,284	2.7%	16,703	16,950	1,948	1,221	NM	29	115	84

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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 October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	6,505	6,202	4.9%	931	886	5,256	5,010	3	4	314	302
Connecticut	307	289	6.2%	32	22	275	267	0	0	0	0
Maine	2,901	2,763	5.0%	0	0	2,592	2,466	0	0	309	297
Massachusetts	905	903	0.3%	230	220	666	675	3	4	6	5
New Hampshire	1,281	1,179	8.6%	292	284	989	895	0	0	0	0
Rhode Island	3	2	51.7%	0	0	3	2	0	0	0	0
Vermont	1,109	1,066	4.0%	378	361	731	705	0	0	0	0
Middle Atlantic	28,138	27,529	2.2%	20,934	20,603	7,151	6,864	5	5	48	57
New Jersey	29	13	126.2%	0	0	29	13	0	0	0	0
New York	25,317	24,840	1.9%	20,821	20,521	4,443	4,256	5	5	48	57
Pennsylvania	2,792	2,677	4.3%	112	82	2,680	2,595	0	0	0	0
East North Central	4,455	4,202	6.0%	3,824	3,777	473	261	1	1	158	162
Illinois	117	104	12.6%	48	39	68	64	1	1	0	0
Indiana	271	255	6.2%	271	255	0	0	0	0	0	0
Michigan	1,404	1,396	0.6%	1,290	1,281	92	91	0	0	22	24
Ohio	452	231	95.7%	245	231	206	0	0	0	0	0
Wisconsin	2,212	2,216	-0.2%	1,970	1,971	106	106	0	0	136	138
West North Central	10,901	10,929	-0.3%	10,598	10,604	196	196	0	0	108	128
Iowa	853	916	-6.9%	848	910	5	6	0	0	0	0
Kansas	22	25	-14.4%	0	0	22	25	0	0	0	0
Minnesota	1,028	1,038	-0.9%	751	745	170	165	0	0	108	128
Missouri	1,079	1,009	7.0%	1,079	1,009	0	0	0	0	0	0
Nebraska	1,275	1,268	0.6%	1,275	1,268	0	0	0	0	0	0
North Dakota	2,173	2,199	-1.1%	2,173	2,199	0	0	0	0	0	0
South Dakota	4,472	4,475	-0.1%	4,472	4,475	0	0	0	0	0	0
South Atlantic	12,767	11,298	13.0%	9,575	8,608	2,703	2,197	12	10	478	483
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	190	191	-0.3%	190	191	0	0	0	0	0	0
Georgia	2,142	2,049	4.6%	2,119	2,026	NM	6	0	0	9	16
Maryland	2,205	1,733	27.2%	0	0	2,205	1,733	0	0	0	0
North Carolina	3,776	3,325	13.6%	3,719	3,286	39	30	10	9	NM	0
South Carolina	1,900	1,545	23.0%	1,849	1,505	50	39	2	1	0	0
Virginia	1,118	1,005	11.3%	1,064	952	54	53	0	0	0	0
West Virginia	1,436	1,451	-1.0%	634	647	341	336	0	0	462	467
East South Central	19,984	18,309	9.1%	19,975	18,300	NM	8	0	0	0	0
Alabama	8,455	7,610	11.1%	8,455	7,610	0	0	0	0	0	0
Kentucky	3,855	3,611	6.7%	3,846	3,603	NM	8	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	7,674	7,088	8.3%	7,674	7,088	0	0	0	0	0	0
West South Central	6,405	6,007	6.6%	5,557	5,159	846	847	NM	1	0	0
Arkansas	2,715	2,575	5.4%	2,669	2,537	46	37	0	0	0	0
Louisiana	772	783	-1.4%	0	0	772	783	0	0	0	0
Oklahoma	1,854	1,758	5.4%	1,854	1,758	0	0	0	0	0	0
Texas	1,064	891	19.4%	1,035	863	28	27	NM	1	0	0
Mountain	29,844	29,680	0.6%	28,553	28,386	1,278	1,281	12	13	0	0
Arizona	5,957	5,885	1.2%	5,957	5,885	0	0	0	0	0	0
Colorado	1,686	1,822	-7.5%	1,464	1,566	209	243	12	13	0	0
Idaho	9,033	9,045	-0.1%	8,175	8,213	858	832	0	0	0	0
Montana	9,246	9,279	-0.4%	9,116	9,147	130	131	0	0	0	0
Nevada	1,703	1,430	19.1%	1,638	1,372	66	59	0	0	0	0
New Mexico	168	170	-0.8%	168	170	0	0	0	0	0	0
Utah	1,093	1,095	-0.2%	1,087	1,087	6	8	0	0	0	0
Wyoming	958	954	0.5%	949	946	9	8	0	0	0	0
Pacific Contiguous	125,304	141,907	-11.7%	123,332	138,952	1,961	2,937	NM	18	0	0
California	23,322	38,783	-39.9%	21,966	36,434	1,346	2,330	NM	18	0	0
Oregon	31,354	32,381	-3.2%	31,088	32,115	265	266	0	0	0	0
Washington	70,628	70,743	-0.2%	70,278	70,402	350	341	0	0	0	0
Pacific Noncontiguous	1,499	1,329	12.7%	1,265	1,144	37	14	162	142	35	29
Alaska	1,409	1,278	10.3%	1,248	1,136	0	0	162	142	0	0
Hawaii	90	51	74.2%	17	8	37	14	0	0	35	29
U.S. Total	245,802	257,392	-4.5%	224,544	236,419	19,910	19,616	207	194	1,141	1,162

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

Table 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	984	897	9.6%	69	83	819	725	16	19	79	70
Connecticut	74	61	20.3%	0	0	74	61	NM	0	NM	0
Maine	413	389	6.2%	0	0	330	310	5	9	79	70
Massachusetts	220	181	21.6%	8	8	206	169	6	5	0	0
New Hampshire	160	162	-0.9%	22	30	134	128	5	5	0	0
Rhode Island	33	28	20.3%	0	0	33	27	1	1	0	0
Vermont	83	76	8.4%	40	46	43	30	0	0	0	0
Middle Atlantic	1,239	1,330	-6.9%	8	6	1,113	1,209	57	59	61	55
New Jersey	187	160	17.2%	8	6	156	127	23	25	NM	1
New York	562	660	-14.9%	0	0	525	628	21	21	16	12
Pennsylvania	490	510	-4.0%	0	0	432	454	13	13	44	43
East North Central	2,918	3,448	-15.4%	293	574	2,477	2,727	22	18	126	129
Illinois	1,189	1,202	-1.1%	5	3	1,184	1,199	NM	0	0	0
Indiana	543	648	-16.2%	38	33	497	607	2	2	6	7
Michigan	667	751	-11.3%	149	195	457	495	12	10	49	51
Ohio	248	207	19.8%	NM	2	219	180	1	1	24	24
Wisconsin	272	640	-57.5%	99	341	120	246	NM	4	47	48
West North Central	6,449	7,787	-17.2%	2,107	2,622	4,271	5,100	12	14	58	51
Iowa	1,836	2,234	-17.8%	1,195	1,474	635	756	3	2	3	3
Kansas	1,408	1,865	-24.5%	160	195	1,247	1,669	NM	1	0	0
Minnesota	1,203	1,340	-10.2%	250	306	894	981	4	4	54	48
Missouri	248	196	26.2%	NM	3	240	188	2	5	0	0
Nebraska	479	523	-8.5%	19	23	459	499	1	1	0	0
North Dakota	1,014	1,324	-23.4%	401	529	613	795	0	0	NM	0
South Dakota	261	305	-14.4%	78	93	183	211	0	0	0	0
South Atlantic	2,962	2,564	15.5%	446	259	1,597	1,387	37	49	882	868
Delaware	11	10	10.2%	NM	1	9	8	NM	1	1	1
District of Columbia	5	5	-3.5%	0	0	0	0	5	5	0	0
Florida	641	483	32.7%	255	107	211	209	4	4	171	163
Georgia	563	565	-0.2%	27	19	205	204	NM	0	332	341
Maryland	132	111	18.8%	NM	1	121	103	2	1	8	6
North Carolina	828	816	1.5%	36	41	671	637	11	20	110	117
South Carolina	242	187	29.8%	36	35	80	41	0	0	126	110
Virginia	397	272	46.0%	91	55	158	68	14	18	134	130
West Virginia	144	116	23.6%	0	0	144	116	0	0	0	0
East South Central	597	582	2.7%	16	13	100	87	NM	1	482	481
Alabama	298	292	2.0%	3	4	47	44	0	0	248	244
Kentucky	44	46	-3.9%	13	9	NM	1	0	0	30	36
Mississippi	154	152	1.1%	0	0	30	16	0	0	124	136
Tennessee	101	92	10.6%	0	0	21	26	NM	1	80	65
West South Central	8,239	9,485	-13.1%	115	167	7,709	8,856	8	9	407	454
Arkansas	122	121	0.9%	NM	0	23	3	1	0	99	117
Louisiana	238	232	2.9%	NM	NM	NM	8	0	0	231	223
Oklahoma	1,965	2,614	-24.8%	99	147	1,860	2,437	0	0	5	30
Texas	5,914	6,518	-9.3%	16	19	5,818	6,407	8	8	72	83
Mountain	3,634	4,184	-13.1%	310	366	3,283	3,790	12	12	29	16
Arizona	456	516	-11.6%	63	61	392	452	2	2	0	0
Colorado	810	1,017	-20.4%	22	30	786	986	NM	1	0	NM
Idaho	284	338	-16.0%	15	19	241	305	1	1	27	14
Montana	202	224	-9.9%	19	23	182	200	0	0	2	2
Nevada	689	728	-5.4%	3	3	680	718	6	7	0	0
New Mexico	569	634	-10.2%	21	22	548	612	NM	0	0	0
Utah	283	284	-0.4%	22	20	259	263	1	1	0	0
Wyoming	341	442	-22.9%	146	189	195	253	0	0	0	0
Pacific Contiguous	5,638	5,966	-5.5%	495	728	4,852	4,988	80	63	210	187
California	4,530	4,334	4.5%	175	158	4,215	4,065	77	59	63	51
Oregon	487	692	-29.6%	44	101	398	540	3	3	42	48
Washington	621	941	-34.0%	276	469	239	382	1	1	105	88
Pacific Noncontiguous	127	135	-6.2%	18	16	88	99	21	21	NM	0
Alaska	14	18	-24.7%	NM	9	NM	5	3	4	NM	0
Hawaii	113	117	-3.3%	11	7	84	94	18	17	0	0
U.S. Total	32,788	36,379	-9.9%	3,877	4,834	26,309	28,968	267	264	2,335	2,313

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

Table 1.11.B. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	10,138	9,267	9.4%	676	711	8,408	7,529	154	170	900	857
Connecticut	719	685	5.0%	3	3	715	681	NM	1	NM	0
Maine	4,285	4,036	6.2%	0	0	3,332	3,104	57	78	896	855
Massachusetts	2,320	1,889	22.8%	68	64	2,195	1,776	52	47	5	2
New Hampshire	1,665	1,659	0.4%	203	238	1,425	1,383	36	37	0	0
Rhode Island	339	297	14.2%	0	0	333	291	6	6	0	0
Vermont	810	702	15.5%	402	406	406	294	2	2	0	0
Middle Atlantic	12,924	11,803	9.5%	88	72	11,600	10,486	611	585	624	660
New Jersey	1,987	1,621	22.5%	88	72	1,599	1,278	290	264	10	8
New York	5,899	5,428	8.7%	0	0	5,549	5,083	196	193	155	153
Pennsylvania	5,037	4,754	6.0%	0	0	4,453	4,126	125	128	459	500
East North Central	27,767	24,016	15.6%	3,323	2,494	22,907	20,031	189	195	1,349	1,296
Illinois	10,847	10,020	8.3%	46	31	10,793	9,986	8	4	0	0
Indiana	5,270	4,213	25.1%	399	343	4,786	3,786	18	17	66	66
Michigan	6,628	6,008	10.3%	1,639	1,441	4,325	3,922	105	115	559	530
Ohio	2,097	1,949	7.6%	35	20	1,809	1,676	12	12	242	242
Wisconsin	2,924	1,826	60.2%	1,203	659	1,193	663	46	46	482	458
West North Central	63,778	60,114	6.1%	19,793	19,745	43,237	39,646	151	143	596	580
Iowa	17,760	17,285	2.8%	11,457	11,386	6,243	5,836	33	27	27	36
Kansas	16,067	15,285	5.1%	1,549	1,343	14,505	13,933	13	12	0	-3
Minnesota	12,004	10,725	11.9%	2,401	2,400	8,993	7,741	47	41	564	542
Missouri	2,652	1,467	80.8%	48	36	2,555	1,381	46	48	3	3
Nebraska	4,263	4,093	4.2%	214	197	4,036	3,881	12	15	0	0
North Dakota	8,790	8,904	-1.3%	3,452	3,661	5,335	5,241	0	0	3	2
South Dakota	2,241	2,356	-4.9%	672	722	1,569	1,633	0	0	0	0
South Atlantic	31,330	25,515	22.8%	4,578	2,776	17,348	13,591	390	444	9,015	8,704
Delaware	114	97	17.6%	7	5	91	75	6	5	10	11
District of Columbia	47	38	24.9%	0	0	0	0	47	38	0	0
Florida	6,389	4,744	34.7%	2,287	864	2,394	2,209	43	39	1,666	1,632
Georgia	6,118	5,896	3.8%	279	224	2,425	2,367	3	3	3,411	3,303
Maryland	1,299	1,131	14.8%	9	8	1,185	1,014	25	12	79	97
North Carolina	8,916	7,020	27.0%	411	346	7,295	5,423	124	176	1,086	1,076
South Carolina	2,718	2,064	31.7%	372	348	873	397	0	0	1,473	1,319
Virginia	4,270	3,221	32.6%	1,212	981	1,627	802	142	171	1,290	1,266
West Virginia	1,459	1,305	11.8%	0	0	1,459	1,305	0	0	0	0
East South Central	6,181	5,551	11.4%	169	123	1,082	532	5	3	4,925	4,893
Alabama	3,205	2,919	9.8%	36	15	517	293	0	0	2,651	2,611
Kentucky	454	438	3.6%	132	108	12	11	0	0	310	319
Mississippi	1,512	1,296	16.6%	0	0	305	65	0	0	1,207	1,231
Tennessee	1,010	897	12.6%	0	0	248	163	5	3	757	732
West South Central	94,322	81,614	15.6%	1,331	1,343	88,571	75,874	79	68	4,340	4,329
Arkansas	1,390	1,211	14.8%	NM	2	260	109	5	5	1,124	1,096
Louisiana	2,287	2,301	-0.6%	NM	2	73	73	0	0	2,212	2,226
Oklahoma	23,219	19,646	18.2%	1,146	1,169	21,821	18,253	0	0	252	224
Texas	67,426	58,456	15.3%	181	170	66,417	57,439	75	63	753	784
Mountain	39,821	35,890	11.0%	3,295	3,044	36,094	32,453	129	111	303	282
Arizona	5,421	5,045	7.5%	743	555	4,658	4,469	21	21	0	0
Colorado	9,146	8,487	7.8%	261	239	8,864	8,233	19	12	3	3
Idaho	3,109	2,911	6.8%	150	146	2,670	2,495	9	10	281	260
Montana	1,793	1,744	2.8%	175	179	1,600	1,548	0	0	18	18
Nevada	7,500	6,525	14.9%	37	36	7,396	6,429	66	58	2	2
New Mexico	6,257	4,640	34.9%	232	223	6,023	4,415	NM	2	0	0
Utah	3,136	3,098	1.2%	222	195	2,903	2,894	11	8	0	0
Wyoming	3,458	3,440	0.5%	1,477	1,471	1,982	1,969	0	0	0	0
Pacific Contiguous	66,002	62,107	6.3%	6,756	6,458	56,266	52,782	781	807	2,198	2,060
California	50,575	47,960	5.5%	1,971	1,921	47,200	44,705	746	773	658	561
Oregon	7,737	6,707	15.4%	1,158	1,009	6,091	5,235	27	26	461	437
Washington	7,690	7,440	3.4%	3,627	3,528	2,975	2,842	8	8	1,079	1,062
Pacific Noncontiguous	1,323	1,244	6.4%	157	158	963	890	203	194	1	1
Alaska	161	150	7.2%	81	74	42	41	36	34	1	1
Hawaii	1,163	1,093	6.3%	75	84	920	849	167	160	0	0
U.S. Total	353,586	317,121	11.5%	40,166	36,925	286,475	253,814	2,692	2,721	24,252	23,661

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

Table 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	-44	-25	78.0%	0	0	-44	-25	0	0	0	0
Connecticut	1	0	261.2%	0	0	1	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-45	-25	79.4%	0	0	-45	-25	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	-75	-100	-24.6%	-33	-50	-42	-50	0	0	0	0
New Jersey	0	-6	-99.3%	0	-6	0	0	0	0	0	0
New York	-33	-44	-24.8%	-33	-44	0	0	0	0	0	0
Pennsylvania	-42	-50	-15.2%	0	0	-42	-50	0	0	0	0
East North Central	-60	-48	25.4%	-60	-48	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	-60	-48	25.4%	-60	-48	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	27	-9	-394.9%	27	-9	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	27	-9	-394.9%	27	-9	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	-219	-264	-17.0%	-219	-264	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	-83	-85	-2.1%	-83	-85	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	-63	-84	-24.8%	-63	-84	0	0	0	0	0	0
Virginia	-73	-95	-23.4%	-73	-95	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-34	-58	-41.1%	-34	-58	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	-34	-58	-41.1%	-34	-58	0	0	0	0	0	0
West South Central	-15	-10	53.2%	-15	-10	0	0	0	0	0	0
Arkansas	1	0	234.8%	1	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-16	-10	56.7%	-16	-10	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-30	-38	-20.2%	-30	-38	0	0	0	0	0	0
Arizona	-13	-9	54.5%	-13	-9	0	0	0	0	0	0
Colorado	-17	-29	-42.5%	-17	-29	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	-41	89	-145.5%	-41	89	0	0	0	0	0	0
California	-41	90	-145.3%	-41	90	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	-82.8%	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	-492	-463	6.3%	-405	-388	-87	-75	0	0	0	0

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

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

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	-391	-358	9.5%	0	0	-391	-358	0	0	0	0
Connecticut	-1	-2	-69.0%	0	0	-1	-2	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-391	-355	9.9%	0	0	-391	-355	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	-1,033	-997	3.5%	-489	-491	-544	-506	0	0	0	0
New Jersey	-115	-133	-13.9%	-115	-133	0	0	0	0	0	0
New York	-374	-358	4.4%	-374	-358	0	0	0	0	0	0
Pennsylvania	-544	-506	7.5%	0	0	-544	-506	0	0	0	0
East North Central	-595	-563	5.7%	-595	-563	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	-595	-563	5.7%	-595	-563	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	25	105	-76.0%	25	105	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	25	105	-76.0%	25	105	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	-2,254	-3,040	-25.9%	-2,254	-3,040	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	-517	-1,074	-51.9%	-517	-1,074	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	-576	-878	-34.4%	-576	-878	0	0	0	0	0	0
Virginia	-1,161	-1,089	6.7%	-1,161	-1,089	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-518	-603	-14.2%	-518	-603	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	-518	-603	-14.2%	-518	-603	0	0	0	0	0	0
West South Central	-82	-83	-0.5%	-82	-83	0	0	0	0	0	0
Arkansas	31	20	57.6%	31	20	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-114	-103	10.8%	-114	-103	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-210	-291	-28.0%	-210	-291	0	0	0	0	0	0
Arizona	26	-13	-303.5%	26	-13	0	0	0	0	0	0
Colorado	-235	-278	-15.4%	-235	-278	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	17	469	-96.3%	17	469	0	0	0	0	0	0
California	-13	465	-102.8%	-13	465	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	31	4	742.8%	31	4	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-5,040	-5,361	-6.0%	-4,105	-4,497	-935	-863	0	0	0	0

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

Table 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	145	134	8.1%	0	0	131	118	4	8	9	8
Connecticut	43	45	-3.9%	0	0	43	45	0	0	0	0
Maine	27	25	9.5%	0	0	13	9	4	8	9	8
Massachusetts	71	61	16.8%	0	0	71	61	0	0	0	0
New Hampshire	4	4	1.9%	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	197	198	-0.7%	0	0	156	154	35	39	6	5
New Jersey	47	49	-4.7%	0	0	33	32	8	12	6	5
New York	80	80	-0.2%	0	0	60	61	19	19	0	0
Pennsylvania	70	69	1.7%	0	0	62	61	8	8	0	0
East North Central	69	68	1.5%	2	1	9	6	14	11	45	49
Illinois	11	22	-49.1%	0	0	-1	-2	0	0	12	24
Indiana	32	22	42.3%	0	0	0	0	2	1	30	21
Michigan	23	21	13.0%	0	0	10	9	12	10	2	1
Ohio	0	0	178.7%	0	0	0	-1	0	0	1	1
Wisconsin	2	2	-12.6%	2	1	0	0	0	0	0	1
West North Central	35	36	-3.7%	20	17	9	12	NM	3	4	5
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	-0.5%	0	0	0	0	0	0	0	0
Minnesota	31	32	-2.6%	17	12	9	12	NM	3	4	4
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	-12.1%	4	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	374	348	7.3%	0	0	197	165	12	16	164	167
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	241	232	3.6%	0	0	113	107	0	0	127	126
Georgia	8	10	-25.0%	0	0	0	0	0	0	8	10
Maryland	30	31	-3.0%	0	0	30	31	0	0	0	0
North Carolina	51	57	-9.5%	0	0	27	28	0	0	25	28
South Carolina	5	3	55.7%	0	0	0	0	0	0	4	3
Virginia	40	16	147.4%	0	0	28	0	12	16	0	0
West Virginia	-1	-1	-15.9%	0	0	-1	-1	0	0	0	0
East South Central	3	8	-56.9%	3	7	0	0	0	0	NM	1
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	3	7	-60.3%	3	7	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	1	NM	0	0	0	0	0	0	NM	1
West South Central	95	89	6.2%	0	0	12	9	0	0	82	80
Arkansas	0	0	94.3%	0	0	0	0	0	0	0	0
Louisiana	43	33	30.4%	0	0	0	0	0	0	43	33
Oklahoma	7	3	117.5%	0	0	7	2	0	0	0	1
Texas	45	53	-15.4%	0	0	5	7	0	0	40	46
Mountain	64	56	15.4%	7	4	27	32	0	0	30	20
Arizona	0	0	213.2%	0	0	0	0	0	0	0	0
Colorado	5	5	-7.7%	0	0	1	1	0	0	3	4
Idaho	5	8	-30.1%	0	0	0	0	0	0	5	8
Montana	27	30	-12.4%	0	0	27	30	0	0	0	0
Nevada	2	3	-42.3%	2	3	0	0	0	0	0	0
New Mexico	0	0	-131.0%	0	0	0	0	0	0	0	0
Utah	20	4	451.2%	5	1	0	0	0	0	15	3
Wyoming	6	6	-1.5%	0	0	0	0	0	0	6	6
Pacific Contiguous	78	58	35.0%	0	0	23	22	0	0	56	36
California	70	49	43.6%	0	1	15	12	0	0	56	36
Oregon	2	4	-35.5%	0	0	2	4	0	0	0	0
Washington	6	6	4.4%	0	0	6	6	0	0	0	0
Pacific Noncontiguous	32	31	4.4%	15	15	0	0	17	16	0	0
Alaska	0	0	33.1%	0	0	0	0	0	0	0	0
Hawaii	32	31	4.5%	15	15	0	0	17	16	0	0
U.S. Total	1,092	1,027	6.4%	46	44	564	518	84	94	398	370

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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 1.13.B. Utility Scale Facility Net Generation from Other Energy Sources

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	1,445	1,508	-4.2%	0	0	1,282	1,325	54	73	109	110
Connecticut	394	448	-11.9%	0	0	394	448	0	0	0	0
Maine	305	330	-7.5%	0	0	142	147	54	73	109	110
Massachusetts	706	690	2.2%	0	0	706	690	0	0	0	0
New Hampshire	40	41	-1.9%	0	0	40	41	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,854	1,963	-5.6%	0	1	1,473	1,536	368	371	13	55
New Jersey	455	476	-4.4%	0	1	326	301	117	119	13	55
New York	742	760	-2.4%	0	0	566	586	176	174	0	0
Pennsylvania	657	727	-9.7%	0	0	582	649	75	78	0	0
East North Central	697	693	0.6%	16	12	93	61	119	127	470	493
Illinois	185	205	-9.8%	0	0	-13	-21	0	0	198	226
Indiana	256	254	0.8%	0	0	0	0	17	16	239	239
Michigan	221	215	2.9%	0	0	106	91	101	111	14	13
Ohio	8	-4	-307.9%	-2	-3	0	-9	0	0	10	7
Wisconsin	27	23	18.6%	19	15	0	0	0	0	8	8
West North Central	379	381	-0.5%	191	183	115	124	26	28	47	45
Iowa	0	2	-100.0%	0	0	0	0	0	0	0	2
Kansas	4	4	7.3%	0	0	0	0	0	0	4	4
Minnesota	337	330	2.3%	154	138	115	124	26	28	43	39
Missouri	1	2	-68.0%	1	2	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	37	43	-13.5%	37	43	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,681	3,568	3.2%	0	0	2,069	1,749	127	155	1,485	1,664
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	2,470	2,555	-3.3%	0	0	1,272	1,230	0	0	1,198	1,325
Georgia	68	69	-0.7%	0	0	0	0	0	0	68	69
Maryland	280	263	6.3%	0	0	280	263	0	0	0	0
North Carolina	450	474	-4.9%	0	0	259	234	0	0	191	239
South Carolina	34	36	-5.7%	0	0	6	5	0	0	28	31
Virginia	389	183	112.9%	0	0	263	27	127	155	0	0
West Virginia	-10	-11	-8.8%	0	0	-10	-11	0	0	0	0
East South Central	58	54	7.6%	50	32	0	0	0	0	8	22
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	50	32	53.5%	50	32	0	0	0	0	0	0
Mississippi	0	2	-100.0%	0	0	0	0	0	0	0	2
Tennessee	8	20	-57.7%	0	0	0	0	0	0	8	20
West South Central	604	1,022	-40.9%	0	0	-254	80	0	0	858	942
Arkansas	5	3	53.3%	0	0	0	0	0	0	5	3
Louisiana	540	529	2.0%	0	0	0	0	0	0	540	529
Oklahoma	47	37	28.9%	0	0	44	36	0	0	4	1
Texas	11	452	-97.5%	0	0	-298	44	0	0	309	408
Mountain	639	593	7.7%	73	73	265	289	0	0	301	232
Arizona	-2	-1	79.9%	0	0	-2	-1	0	0	0	0
Colorado	50	47	5.7%	0	0	16	13	0	0	34	35
Idaho	55	55	-0.8%	0	0	0	0	0	0	55	55
Montana	251	277	-9.2%	0	0	251	277	0	0	0	0
Nevada	24	26	-7.3%	24	26	0	0	0	0	0	0
New Mexico	0	0	-87.7%	0	0	0	0	0	0	0	0
Utah	189	156	21.0%	49	47	0	0	0	0	140	108
Wyoming	72	33	115.2%	0	0	0	0	0	0	72	33
Pacific Contiguous	802	786	2.0%	0	9	227	236	0	0	574	542
California	718	707	1.5%	0	10	143	156	0	0	574	542
Oregon	32	32	0.5%	0	0	33	33	0	0	0	0
Washington	51	46	10.3%	0	-1	51	47	0	0	0	0
Pacific Noncontiguous	314	302	4.0%	154	146	0	2	160	154	0	0
Alaska	-2	-2	-12.7%	-2	-2	0	0	0	0	0	0
Hawaii	316	304	3.9%	156	149	0	2	160	154	0	0
U.S. Total	10,472	10,871	-3.7%	484	456	5,270	5,402	853	909	3,865	4,105

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

Table 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	296	312	-5.1%	18	22	274	286	3	3	0	0
Connecticut	NM	1	NM	0	0	NM	1	0	0	0	0
Maine	199	208	-4.7%	0	0	199	208	0	0	0	0
Massachusetts	19	24	-21.2%	NM	6	11	15	NM	2	0	0
New Hampshire	29	37	-22.4%	0	0	29	37	0	0	0	0
Rhode Island	15	14	8.7%	0	0	15	13	1	1	0	0
Vermont	33	27	22.2%	13	16	20	11	0	0	0	0
Middle Atlantic	611	769	-20.5%	0	0	611	768	NM	1	0	0
New Jersey	NM	2	NM	0	0	NM	2	0	0	0	0
New York	329	454	-27.6%	0	0	328	454	NM	1	0	0
Pennsylvania	281	312	-10.2%	0	0	281	312	0	0	0	0
East North Central	2,403	2,946	-18.4%	214	499	2,179	2,440	NM	1	NM	6
Illinois	1,148	1,166	-1.5%	NM	1	1,147	1,164	NM	0	0	0
Indiana	474	590	-19.7%	0	0	474	590	0	0	0	0
Michigan	453	538	-15.7%	141	188	312	350	0	0	0	0
Ohio	178	138	28.3%	NM	1	170	132	0	0	NM	5
Wisconsin	150	515	-70.8%	71	309	76	205	NM	0	1	1
West North Central	6,163	7,544	-18.3%	2,061	2,578	4,098	4,961	NM	5	0	0
Iowa	1,817	2,219	-18.1%	1,192	1,472	625	746	0	0	0	0
Kansas	1,403	1,860	-24.6%	160	194	1,242	1,664	NM	1	0	0
Minnesota	973	1,142	-14.8%	218	273	753	866	NM	3	0	0
Missouri	227	180	26.3%	0	0	227	180	0	0	0	0
Nebraska	469	515	-8.9%	13	17	456	498	0	0	0	0
North Dakota	1,013	1,324	-23.5%	401	529	613	795	0	0	0	0
South Dakota	261	304	-14.4%	78	93	183	211	0	0	0	0
South Atlantic	232	197	17.9%	0	0	232	197	0	0	0	0
Delaware	0	0	-0.5%	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	46	42	9.0%	0	0	46	42	0	0	0	0
North Carolina	42	38	10.6%	0	0	42	38	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	144	116	23.6%	0	0	144	116	0	0	0	0
East South Central	NM	4	NM	0	0	NM	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	NM	4	NM	0	0	NM	4	0	0	0	0
West South Central	7,511	8,749	-14.2%	109	162	7,397	8,581	5	5	NM	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1,953	2,579	-24.3%	94	144	1,859	2,435	0	0	0	0
Texas	5,559	6,171	-9.9%	15	19	5,538	6,146	5	5	NM	1
Mountain	2,058	2,519	-18.3%	200	259	1,857	2,260	NM	0	0	NM
Arizona	43	58	-25.6%	0	0	43	58	0	0	0	0
Colorado	714	920	-22.4%	22	29	691	890	NM	0	0	NM
Idaho	195	261	-25.1%	14	18	181	243	0	0	0	0
Montana	198	221	-10.4%	19	23	179	198	0	0	0	0
Nevada	27	37	-27.1%	0	0	27	37	0	0	0	0
New Mexico	468	530	-11.7%	0	0	468	530	NM	0	0	0
Utah	72	50	43.0%	0	0	72	50	0	0	0	0
Wyoming	341	442	-22.9%	146	189	195	253	0	0	0	0
Pacific Contiguous	1,828	2,198	-16.8%	354	569	1,474	1,629	1	1	0	0
California	1,004	840	19.6%	62	46	941	792	1	1	0	0
Oregon	343	560	-38.8%	38	95	305	465	0	0	0	0
Washington	481	798	-39.7%	253	427	228	371	0	0	0	0
Pacific Noncontiguous	50	67	-25.1%	NM	9	43	58	0	0	0	0
Alaska	10	14	-26.8%	NM	9	NM	5	0	0	0	0
Hawaii	40	53	-24.6%	0	0	40	53	0	0	0	0
U.S. Total	21,154	25,306	-16.4%	2,962	4,099	18,167	21,183	16	15	NM	8

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

Table 1.14.B. Utility Scale Facility Net Generation from Wind

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	3,014	2,676	12.6%	200	189	2,785	2,463	26	23	3	1
Connecticut	11	10	8.4%	0	0	11	10	0	0	0	0
Maine	1,982	1,806	9.7%	0	0	1,982	1,806	0	0	0	0
Massachusetts	197	190	3.9%	50	51	125	121	20	17	3	1
New Hampshire	365	319	14.4%	0	0	365	319	0	0	0	0
Rhode Island	131	118	11.5%	0	0	125	112	6	6	0	0
Vermont	327	233	40.6%	150	138	177	94	0	0	0	0
Middle Atlantic	6,663	6,058	10.0%	0	0	6,657	6,054	NM	3	2	1
New Jersey	19	18	4.7%	0	0	19	18	0	0	0	0
New York	3,640	3,370	8.0%	0	0	3,634	3,366	NM	3	2	1
Pennsylvania	3,005	2,669	12.6%	0	0	3,005	2,669	0	0	0	0
East North Central	22,339	18,904	18.2%	2,429	1,783	19,836	17,064	NM	8	65	49
Illinois	10,415	9,572	8.8%	11	10	10,400	9,558	NM	4	0	0
Indiana	4,534	3,567	27.1%	0	0	4,534	3,567	0	1	0	0
Michigan	4,384	3,883	12.9%	1,541	1,385	2,844	2,499	0	0	0	0
Ohio	1,391	1,249	11.3%	12	10	1,317	1,194	3	3	59	43
Wisconsin	1,614	631	155.7%	865	379	742	247	NM	0	6	6
West North Central	60,526	57,456	5.3%	19,297	19,288	41,192	38,132	37	36	0	0
Iowa	17,566	17,102	2.7%	11,423	11,364	6,140	5,735	3	3	0	0
Kansas	16,010	15,232	5.1%	1,547	1,341	14,451	13,879	13	12	0	0
Minnesota	9,341	8,571	9.0%	2,053	2,069	7,267	6,482	21	20	0	0
Missouri	2,424	1,297	86.9%	0	0	2,424	1,297	0	0	0	0
Nebraska	4,158	3,998	4.0%	149	131	4,008	3,867	0	0	0	0
North Dakota	8,787	8,902	-1.3%	3,452	3,661	5,335	5,241	0	0	0	0
South Dakota	2,239	2,354	-4.9%	672	722	1,567	1,631	0	0	0	0
South Atlantic	2,352	2,155	9.1%	0	0	2,348	2,151	4	4	0	0
Delaware	4	4	2.8%	0	0	0	0	4	4	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	453	452	0.2%	0	0	453	452	0	0	0	0
North Carolina	436	394	10.6%	0	0	436	394	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	1,459	1,305	11.8%	0	0	1,459	1,305	0	0	0	0
East South Central	45	35	26.9%	0	0	45	35	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	45	35	26.9%	0	0	45	35	0	0	0	0
West South Central	86,064	74,672	15.3%	1,262	1,307	84,746	73,322	46	34	NM	9
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	22,890	19,378	18.1%	1,087	1,140	21,803	18,238	0	0	0	0
Texas	63,174	55,294	14.3%	175	166	62,943	55,085	46	34	NM	9
Mountain	21,970	19,689	11.6%	2,046	2,024	19,916	17,659	NM	3	3	3
Arizona	499	454	9.9%	0	0	499	454	0	0	0	0
Colorado	8,035	7,509	7.0%	255	238	7,775	7,267	NM	1	3	3
Idaho	2,130	2,026	5.1%	139	136	1,991	1,890	0	0	0	0
Montana	1,741	1,716	1.5%	175	179	1,566	1,537	0	0	0	0
Nevada	311	288	8.2%	0	0	311	288	0	0	0	0
New Mexico	5,073	3,562	42.4%	0	0	5,071	3,560	NM	2	0	0
Utah	722	695	3.8%	0	0	722	695	0	0	0	0
Wyoming	3,458	3,440	0.5%	1,477	1,471	1,982	1,969	0	0	0	0
Pacific Contiguous	24,054	23,454	2.6%	5,161	4,855	18,885	18,589	4	5	5	5
California	11,682	11,967	-2.4%	753	750	10,920	11,207	4	5	5	5
Oregon	6,195	5,592	10.8%	1,101	951	5,094	4,641	0	0	0	0
Washington	6,177	5,895	4.8%	3,306	3,154	2,871	2,741	0	0	0	0
Pacific Noncontiguous	582	546	6.5%	81	74	501	472	0	0	0	0
Alaska	123	115	7.4%	81	74	42	41	0	0	0	0
Hawaii	458	432	6.2%	0	0	458	432	0	0	0	0
U.S. Total	227,609	205,646	10.7%	30,476	29,520	196,911	175,943	135	116	87	67

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

Table 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	561	500	12.1%	44	56	425	359	13	15	79	70
Connecticut	63	57	11.0%	0	0	63	57	0	0	0	0
Maine	213	180	18.7%	0	0	130	101	5	9	79	70
Massachusetts	100	85	16.8%	0	0	97	83	3	2	0	0
New Hampshire	132	125	5.5%	22	30	105	90	5	5	0	0
Rhode Island	15	13	21.4%	0	0	15	13	0	0	0	0
Vermont	38	41	-8.2%	23	26	NM	15	0	0	0	0
Middle Atlantic	475	471	0.9%	0	0	373	370	42	47	59	54
New Jersey	78	82	-5.1%	0	0	69	68	9	14	0	0
New York	196	195	0.5%	0	0	160	163	21	20	16	12
Pennsylvania	201	193	3.9%	0	0	145	139	13	12	43	42
East North Central	450	462	-2.5%	59	61	255	261	18	17	119	124
Illinois	36	33	8.7%	4	1	33	32	0	0	0	0
Indiana	39	39	-0.1%	27	27	4	4	2	2	6	7
Michigan	200	207	-3.5%	0	0	138	145	12	10	49	51
Ohio	58	60	-3.9%	NM	0	38	40	1	1	17	19
Wisconsin	118	123	-4.2%	27	33	41	39	4	4	46	47
West North Central	166	191	-12.9%	45	43	55	88	9	9	58	51
Iowa	18	15	25.8%	NM	1	10	9	3	2	3	3
Kansas	NM	4	NM	0	0	NM	5	0	0	0	0
Minnesota	124	153	-19.1%	32	33	36	70	2	2	54	48
Missouri	11	11	-1.2%	NM	3	NM	3	2	5	0	0
Nebraska	7	7	2.5%	6	6	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	1,603	1,579	1.5%	169	136	527	539	25	36	882	868
Delaware	NM	5	NM	0	0	NM	4	0	0	1	1
District of Columbia	5	5	-3.5%	0	0	0	0	5	5	0	0
Florida	410	417	-1.7%	60	54	175	198	4	4	171	162
Georgia	388	424	-8.4%	0	0	56	83	0	0	332	341
Maryland	47	46	1.1%	0	0	37	39	2	1	8	6
North Carolina	233	254	-8.3%	0	0	122	128	1	9	110	117
South Carolina	193	178	8.3%	36	35	31	33	0	0	126	110
Virginia	323	250	29.0%	73	47	102	55	14	18	134	130
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	519	521	-0.4%	9	7	29	32	0	0	481	481
Alabama	268	266	0.6%	0	0	20	22	0	0	248	244
Kentucky	40	44	-9.9%	9	7	NM	1	0	0	30	36
Mississippi	125	138	-8.8%	0	0	NM	2	0	0	124	136
Tennessee	86	73	17.5%	0	0	NM	8	0	0	79	65
West South Central	467	518	-9.9%	0	0	57	62	4	4	406	453
Arkansas	108	119	-9.3%	0	0	8	1	1	0	99	117
Louisiana	238	231	2.9%	0	0	NM	8	0	0	231	223
Oklahoma	7	32	-78.1%	0	0	NM	2	0	0	5	30
Texas	114	136	-15.9%	0	0	40	50	3	3	71	82
Mountain	87	62	39.3%	NM	1	54	44	2	2	29	16
Arizona	NM	9	NM	0	0	NM	9	0	0	0	0
Colorado	13	12	9.1%	0	0	13	12	0	0	0	0
Idaho	42	28	49.5%	NM	1	13	12	1	1	27	14
Montana	2	2	-2.1%	0	0	0	0	0	0	2	2
Nevada	NM	5	NM	0	0	NM	5	0	0	0	0
New Mexico	2	2	9.2%	0	0	2	2	0	0	0	0
Utah	7	5	37.7%	0	0	NM	4	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	697	691	0.8%	35	58	390	396	67	52	205	185
California	477	453	5.3%	7	11	349	345	63	48	58	49
Oregon	80	96	-16.6%	NM	5	30	40	3	3	42	48
Washington	140	142	-1.6%	23	42	11	11	1	1	105	88
Pacific Noncontiguous	33	28	16.1%	7	3	NM	4	21	21	NM	0
Alaska	3	4	-17.4%	0	0	0	0	3	4	NM	0
Hawaii	29	24	21.7%	7	3	NM	4	18	17	0	0
U.S. Total	5,057	5,023	0.7%	368	366	2,170	2,153	201	202	2,318	2,302

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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.B. Utility Scale Facility Net Generation from Biomass

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	5,718	5,717	0.0%	412	468	4,290	4,253	121	141	896	855
Connecticut	605	639	-5.4%	0	0	605	639	0	0	0	0
Maine	2,291	2,225	3.0%	0	0	1,339	1,292	57	78	896	855
Massachusetts	992	968	2.4%	0	0	966	944	26	24	0	0
New Hampshire	1,300	1,339	-3.0%	203	238	1,060	1,064	36	37	0	0
Rhode Island	175	166	4.8%	0	0	175	166	0	0	0	0
Vermont	356	379	-5.9%	209	230	146	147	2	2	0	0
Middle Atlantic	4,659	4,684	-0.5%	0	0	3,618	3,593	439	446	603	645
New Jersey	805	764	5.4%	0	0	671	626	135	138	0	0
New York	1,906	1,897	0.5%	0	0	1,566	1,560	187	185	153	152
Pennsylvania	1,948	2,022	-3.7%	0	0	1,381	1,406	116	123	450	493
East North Central	4,710	4,641	1.5%	651	568	2,606	2,643	171	185	1,282	1,245
Illinois	378	402	-5.9%	33	18	345	383	0	0	0	0
Indiana	393	390	0.6%	267	267	41	41	18	16	66	66
Michigan	2,099	2,068	1.5%	0	0	1,435	1,423	105	115	559	530
Ohio	572	605	-5.5%	12	3	374	399	6	7	181	197
Wisconsin	1,268	1,176	7.8%	338	280	410	397	42	46	477	452
West North Central	1,934	2,042	-5.3%	475	447	750	910	113	106	596	580
Iowa	179	178	0.9%	22	18	100	100	30	24	27	36
Kansas	49	49	0.4%	0	0	49	51	0	0	0	-3
Minnesota	1,495	1,610	-7.1%	345	329	561	718	25	21	564	542
Missouri	131	123	7.0%	44	33	40	40	45	46	3	3
Nebraska	77	82	-5.4%	65	66	0	0	12	15	0	0
North Dakota	3	2	64.9%	0	0	0	0	0	0	3	2
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	16,891	16,284	3.7%	1,948	1,626	5,681	5,626	251	328	9,011	8,702
Delaware	52	52	0.3%	0	0	42	41	0	0	10	11
District of Columbia	47	38	24.9%	0	0	0	0	47	38	0	0
Florida	4,266	4,122	3.5%	548	322	2,019	2,132	37	37	1,662	1,631
Georgia	4,168	4,128	1.0%	0	0	757	825	0	0	3,411	3,303
Maryland	455	440	3.3%	0	0	359	337	17	6	79	97
North Carolina	2,245	2,332	-3.7%	0	0	1,150	1,180	9	76	1,086	1,076
South Carolina	2,182	2,013	8.4%	372	348	337	346	0	0	1,473	1,319
Virginia	3,475	3,158	10.0%	1,027	956	1,017	765	142	171	1,290	1,266
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,296	5,271	0.5%	86	92	291	286	0	0	4,919	4,893
Alabama	2,856	2,806	1.8%	0	0	204	195	0	0	2,651	2,611
Kentucky	405	422	-3.8%	86	92	10	10	0	0	310	319
Mississippi	1,216	1,241	-2.0%	0	0	10	10	0	0	1,207	1,231
Tennessee	818	803	1.9%	0	0	67	71	0	0	751	732
West South Central	5,091	5,028	1.2%	0	0	729	676	32	32	4,330	4,320
Arkansas	1,207	1,184	2.0%	0	0	79	83	5	5	1,124	1,096
Louisiana	2,284	2,299	-0.6%	0	0	73	73	0	0	2,212	2,226
Oklahoma	269	239	12.7%	0	0	18	15	0	0	252	224
Texas	1,330	1,307	1.8%	0	0	560	505	27	27	743	775
Mountain	871	841	3.7%	11	10	542	535	20	18	298	277
Arizona	154	166	-7.1%	0	0	154	166	0	0	0	0
Colorado	138	138	-0.1%	0	0	138	138	0	0	0	0
Idaho	421	392	7.4%	11	10	120	112	9	10	281	260
Montana	18	18	0.6%	0	0	0	0	0	0	18	18
Nevada	57	48	19.5%	0	0	57	48	0	0	0	0
New Mexico	17	14	15.6%	0	0	17	14	0	0	0	0
Utah	67	65	2.9%	0	0	56	57	11	8	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	7,175	7,130	0.6%	450	536	3,941	3,859	638	696	2,146	2,040
California	4,805	4,781	0.5%	78	111	3,518	3,468	604	662	606	541
Oregon	858	805	6.6%	51	52	319	291	27	26	461	437
Washington	1,512	1,544	-2.1%	321	374	104	100	8	8	1,079	1,062
Pacific Noncontiguous	292	284	2.9%	44	47	44	41	203	194	1	1
Alaska	37	35	6.2%	0	0	0	0	36	34	1	1
Hawaii	255	249	2.4%	44	47	44	41	167	160	0	0
U.S. Total	52,637	51,921	1.4%	4,076	3,795	22,491	22,422	1,988	2,147	24,083	23,557

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	341	313	8.8%	22	20	319	293	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	6	7	-3.7%	0	0	6	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	294	267	10.1%	0	0	294	267	0	0	0	0
New Mexico	1	1	85.2%	0	0	1	1	0	0	0	0
Utah	39	38	1.0%	22	20	17	19	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	984	891	10.4%	64	58	920	833	0	0	0	0
California	968	878	10.2%	64	58	905	820	0	0	0	0
Oregon	16	13	20.4%	0	0	16	13	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	27	25	9.4%	0	0	27	25	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	27	25	9.4%	0	0	27	25	0	0	0	0
U.S. Total	1,352	1,229	10.0%	86	78	1,266	1,151	0	0	0	0

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

Table 1.16.B. Utility Scale Facility Net Generation from Geothermal

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	3,436	3,030	13.4%	222	195	3,214	2,835	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	66	66	-0.9%	0	0	66	66	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,971	2,577	15.3%	0	0	2,971	2,577	0	0	0	0
New Mexico	10	11	-1.3%	0	0	10	11	0	0	0	0
Utah	389	376	3.4%	222	195	167	181	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	10,126	9,769	3.6%	651	650	9,475	9,119	0	0	0	0
California	9,969	9,624	3.6%	651	649	9,319	8,975	0	0	0	0
Oregon	156	146	7.3%	0	2	156	144	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	267	268	-0.1%	0	0	267	268	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	267	268	-0.1%	0	0	267	268	0	0	0	0
U.S. Total	13,829	13,067	5.8%	872	845	12,957	12,221	0	0	0	0

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

Table 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	All Sectors							Electric Power Sector				Commercial Sector						Industrial Sector						Residential Sector	
								Electric Utilities		Independent Power Producers															
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	334	256	30.8%	127	85	207	170	7	5	120	80	NM	91	NM	1	117	90	NM	8	NM	0	8	8	81	73
Connecticut	46	34	34.9%	10	3	37	31	0	0	9	3	NM	12	NM	0	14	12	NM	2	NM	0	2	2	20	18
Maine	NM	4	NM	NM	1	4	3	0	0	NM	1	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Massachusetts	243	190	28.3%	102	72	141	117	3	1	98	70	NM	71	NM	1	91	71	6	6	0	0	6	5	45	42
New Hampshire	8	6	18.9%	0	0	8	6	0	0	0	0	2	2	0	0	2	2	1	0	0	0	1	0	5	4
Rhode Island	12	6	106.0%	3	1	9	5	0	0	3	1	5	2	0	0	5	2	0	0	0	0	0	0	4	2
Vermont	20	16	28.0%	12	8	8	8	4	3	8	5	3	3	0	0	3	3	NM	NM	0	0	NM	NM	5	5
Middle Atlantic	439	337	30.5%	153	91	286	246	8	6	129	71	145	121	15	12	130	109	NM	14	NM	1	15	13	141	123
New Jersey	253	203	24.8%	108	75	146	128	8	6	85	57	88	77	13	11	74	66	NM	9	NM	1	9	8	62	54
New York	146	102	43.9%	37	11	109	91	0	0	37	11	NM	34	NM	0	45	33	1	1	0	0	1	1	63	56
Pennsylvania	40	32	24.3%	8	4	31	28	0	0	6	3	NM	11	NM	0	11	10	NM	5	NM	0	4	4	16	13
East North Central	104	67	56.7%	65	40	39	27	20	13	44	26	NM	16	NM	0	24	16	2	2	0	0	2	1	13	9
Illinois	13	8	51.2%	5	3	8	5	NM	0	4	3	NM	3	NM	0	5	3	0	NM	0	0	0	NM	3	2
Indiana	38	22	72.5%	30	19	8	3	11	6	19	13	6	1	0	0	6	1	0	0	0	0	0	0	2	1
Michigan	20	11	72.3%	14	7	6	5	8	7	6	0	3	2	0	0	3	2	0	0	0	0	0	0	3	2
Ohio	24	18	32.6%	13	9	12	10	NM	1	11	7	NM	8	NM	0	9	7	1	1	0	0	1	0	3	2
Wisconsin	9	6	50.2%	4	2	5	4	0	0	3	2	NM	2	NM	0	2	2	1	1	0	0	1	1	2	2
West North Central	158	82	92.4%	120	52	38	30	NM	1	118	51	19	15	0	0	18	15	1	1	0	0	1	1	18	14
Iowa	NM	8	NM	NM	0	10	7	NM	0	NM	0	6	5	0	0	6	5	0	0	0	0	0	0	3	2
Kansas	NM	2	NM	NM	1	2	1	NM	0	NM	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Minnesota	112	49	128.0%	106	45	6	4	NM	0	106	45	2	2	0	0	2	2	1	0	0	0	1	0	3	2
Missouri	28	21	31.9%	10	5	18	16	0	0	9	5	9	8	0	0	9	8	0	0	0	0	0	0	9	8
Nebraska	3	2	94.0%	2	1	1	0	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
North Dakota	0	0	48.5%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	1,308	935	39.9%	1,122	787	186	148	272	122	838	651	66	57	12	13	54	44	NM	21	NM	0	24	21	108	82
Delaware	14	12	18.4%	5	4	8	7	NM	1	4	4	NM	2	NM	0	2	2	1	0	0	0	1	0	5	5
District of Columbia	6	4	33.0%	0	0	6	4	0	0	0	0	3	3	0	0	3	3	0	0	0	0	0	0	2	2
Florida	262	90	190.7%	225	65	37	25	189	53	35	12	NM	8	NM	0	9	8	NM	1	NM	0	1	1	28	17
Georgia	NM	160	NM	175	141	NM	NM	27	19	148	122	NM	NM	NM	0	NM	NM	NM	NM	0	0	NM	NM	NM	NM
Maryland	105	81	29.8%	39	23	65	58	NM	1	38	21	NM	16	NM	1	19	16	3	2	0	0	3	2	44	40
North Carolina	571	538	6.0%	553	524	17	15	36	41	507	471	19	20	10	12	9	9	1	1	0	0	1	1	8	6
South Carolina	71	22	231.2%	50	9	22	13	0	0	50	9	6	3	0	0	6	3	2	1	0	0	2	1	14	8
Virginia	82	27	203.2%	74	21	8	6	18	8	56	14	3	2	0	0	3	2	0	0	0	0	0	0	5	3
West Virginia	1	1	18.2%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
East South Central	88	68	30.8%	76	57	12	10	7	5	68	51	NM	8	NM	1	8	7	NM	0	NM	0	NM	0	4	3
Alabama	NM	27	NM	31	26	NM	NM	3	4	27	23	1	0	0	0	1	0	0	0	0	0	0	0	NM	NM
Kentucky	7	4	91.5%	4	2	3	2	4	1	NM	0	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Mississippi	30	16	88.0%	29	15	1	1	0	0	29	15	1	1	0	0	1	1	NM	NM	0	0	NM	NM	0	0
Tennessee	20	21	-4.2%	13	14	7	7	0	0	12	14	NM	6	NM	1	5	5	NM	NM	NM	0	NM	NM	2	2
West South Central	342	277	23.5%	261	218	81	59	6	4	255	213	17	12	0	0	17	12	0	0	0	0	0	0	63	47
Arkansas	17	4	361.9%	15	3	2	1	NM	0	15	3	1	0	0	0	1	0	0	0	0	0	0	0	1	NM
Louisiana	NM	17	NM	NM	NM	19	16	NM	NM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	18	16
Oklahoma	6	4	53.6%	5	3	1	0	5	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Texas	300	252	18.8%	241	211	59	41	NM	1	240	211	15	11	0	0	15	11	0	0	0	0	0	0	44	30
Mountain	1,398	1,484	-5.8%	1,066	1,198	332	286	87	86	970	1,102	106	101	9	10	97	91	7	5	0	0	6	5	229	190
Arizona	526	536	-1.9%	344	377	182	160	63	61	279	313	58	55	2	2	56	53	2	1	0	0	2	1	124	106
Colorado	129	129	-0.2%	83	85	46	44	NM	0	81	84	NM	18	NM	1	17	17	NM	NM	0	0	NM	NM	29	26
Idaho	44	44	-1.2%	40	43	3	2	0	0	40	43	0	NM	0	0	0	NM	0	0	0	0	0	0	3	1
Montana	NM	3	NM	NM	2	2	1	0	0	NM	2	0	NM	0	0	0	NM	0	0	0	0	0	0	1	1
Nevada	375	434	-13.6%	333	400	42	34	3	3	324	390	14	15	6	7	8	8	3	2	0	0	3	2	31	24
New Mexico	120	120	0.2%	98	102	22	18	21	22	78	80	8	6	0	0	8	6	0	0	0	0	0	0	14	12
Utah	199	217	-8.1%	165	190	34	27	0	0	165	190	7	6	0	0	7	6	1	1	0	0	1	1	27	21
Wyoming	1	0	33.8%	0	0	1	NM	0	0	0	0	0	NM	0	0	0	NM	0	0	0	0	0	0	0	0
Pacific Contiguous	3,078	2,899	6.2%	1,942	1,963	1,136	936	43	43	1,881	1,908	299	228	13	11	286	218	171	154	5	2	166	152	684	566
California	3,003	2,854	5.2%	1,894	1,941	1,109	914	43	42	1,833	1,886	290	221	13	11	277	210	170	152	5	2	165	151	667	553
Oregon	64	36	75.6%	48	23	16	14	NM	1	48	22	7	6	0	0	7	6	1	1	0	0	1	1	8	7
Washington	11	8	30.3%	0	0	11	8	0	0	0	0	2	1	0	0	2	1	0	NM	0	0	0	NM	9	7
Pacific Noncontiguous	100	94	6.9%	17	16	83	78	4	3	14	13	33	29	0	0	33	29	0	0	0	0	0	0	50	49
Alaska	0	0	53.0%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	100	94	6.9%	17	16	83	78	4	3	14	13	33	29	0	0	33	29	0	0	0	0	0	0	50	49
U.S. Total	7,350	6,497	13.1%	4,950	4,507	2,400	1,990	456	290	4,436	4,167	835	679	51	47	785	632	231	204	8	4	224	201	1,391	1,157

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 2018 are preliminary. Values for 2017 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.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report;
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 1.17.B. Net Generation from Solar Photovoltaic by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector						Commercial Sector						Industrial Sector						Residential Sector	
				Electric Utilities		Independent Power Producers																	
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	3,915	2,843	37.7%	1,407	875	2,509	1,969	64	54	1,333	814	1,389	1,029	7	6	1,382	1,022	103	88	2	1	101	86	1,026	860
Connecticut	540	398	35.8%	104	36	437	363	3	3	99	32	170	138	NM	1	169	138	22	19	NM	0	22	19	246	206
Maine	60	41	47.0%	11	5	49	36	0	0	11	5	17	13	0	0	17	13	0	0	0	0	0	0	32	23
Massachusetts	2,859	2,076	37.7%	1,131	731	1,727	1,345	19	13	1,105	711	1,088	796	6	5	1,083	790	72	63	2	1	70	61	575	493
New Hampshire	96	78	24.0%	0	0	96	78	0	0	0	0	28	23	0	0	28	23	6	5	0	0	6	5	62	50
Rhode Island	115	60	91.4%	33	13	82	47	0	0	33	13	43	23	0	0	43	23	0	0	0	0	0	0	39	24
Vermont	245	191	28.1%	127	90	118	100	43	37	84	53	42	36	0	0	42	36	2	2	0	0	2	2	73	63
Middle Atlantic	5,015	3,904	28.5%	1,601	1,062	3,414	2,841	88	72	1,325	840	1,710	1,416	169	135	1,541	1,281	197	167	19	15	178	153	1,695	1,408
New Jersey	2,871	2,306	24.5%	1,163	839	1,708	1,467	88	72	909	633	1,018	897	156	126	862	771	120	98	10	8	111	90	735	606
New York	1,689	1,218	38.7%	353	161	1,336	1,057	0	0	349	157	551	391	5	4	546	386	15	13	0	0	15	13	775	658
Pennsylvania	455	380	20.0%	85	62	370	317	0	0	67	50	142	129	9	5	133	123	61	57	9	7	52	50	185	144
East North Central	1,162	777	49.6%	718	471	444	305	243	143	465	324	283	185	9	3	274	182	25	20	2	2	23	18	147	105
Illinois	138	97	41.9%	54	46	84	51	2	2	48	45	58	33	NM	0	54	33	1	0	0	0	1	0	29	18
Indiana	428	284	50.6%	343	255	85	29	132	77	211	178	56	14	0	0	56	14	3	1	0	0	3	1	26	14
Michigan	217	116	86.7%	145	57	72	59	99	57	46	0	37	31	0	0	37	31	1	1	0	0	1	1	34	28
Ohio	270	211	28.3%	134	95	136	116	10	8	119	83	104	89	3	3	100	87	8	8	2	2	6	6	30	24
Wisconsin	109	68	59.4%	42	19	67	49	0	0	41	19	28	18	NM	0	27	18	12	10	0	0	12	10	28	21
West North Central	1,741	947	83.9%	1,318	616	423	331	22	11	1,295	604	210	172	1	1	208	171	16	8	0	0	16	8	199	152
Iowa	126	83	52.2%	15	4	112	79	12	4	NM	0	70	49	0	0	70	49	3	3	0	0	3	3	38	27
Kansas	31	19	66.1%	8	5	23	14	NM	2	6	3	9	5	0	0	9	5	0	0	0	0	0	0	15	10
Minnesota	1,242	596	108.3%	1,168	544	74	52	3	2	1,165	542	27	22	0	0	27	22	9	4	0	0	9	4	38	27
Missouri	301	228	32.0%	97	48	204	180	4	3	91	44	100	95	1	1	98	94	4	1	0	0	4	1	102	85
Nebraska	37	18	109.6%	28	13	9	5	0	0	28	13	3	2	0	0	3	2	0	0	0	0	0	0	5	3
North Dakota	0	0	8.3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	3	3	6.4%	NM	2	1	1	0	0	NM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	14,030	8,618	62.8%	12,037	7,062	1,993	1,557	2,580	1,135	9,319	5,814	713	593	135	111	579	482	268	215	NM	1	264	214	1,150	861
Delaware	154	122	26.7%	57	41	97	81	7	5	49	34	30	26	NM	1	28	24	8	5	0	0	8	5	61	52
District of Columbia	62	45	37.4%	0	0	62	45	0	0	0	0	37	25	0	0	37	25	0	0	0	0	0	0	24	20
Florida	2,431	853	184.9%	2,073	607	358	246	1,688	527	375	76	98	82	6	3	92	80	13	9	NM	1	9	8	258	158
Georgia	2,183	1,961	11.3%	1,950	1,768	233	193	279	224	1,668	1,541	33	28	3	2	30	26	188	154	0	0	188	154	15	14
Maryland	1,152	890	29.4%	391	238	762	652	9	8	373	225	216	186	8	6	208	180	33	29	0	0	33	29	521	443
North Carolina	6,416	4,455	44.0%	6,235	4,294	181	161	411	346	5,709	3,849	215	197	115	99	100	97	6	6	0	0	6	6	75	57
South Carolina	750	166	350.5%	536	51	214	116	0	0	536	51	54	27	0	0	54	27	19	11	0	0	19	11	141	78
Virginia	873	119	636.6%	795	62	78	56	185	25	610	37	28	21	0	0	28	21	1	1	0	0	1	1	49	35
West Virginia	8	7	21.1%	0	0	8	7	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	6	5
East South Central	967	359	169.8%	840	245	127	114	82	31	747	211	91	82	5	3	86	79	7	1	6	0	1	1	40	34
Alabama	358	121	197.3%	349	114	9	7	36	15	313	98	6	5	0	0	6	5	1	0	0	0	1	0	2	2
Kentucky	76	38	100.8%	48	16	28	22	46	16	NM	1	16	13	0	0	16	13	0	0	0	0	0	0	11	9
Mississippi	306	64	375.6%	296	56	10	9	0	0	296	56	6	5	0	0	6	5	0	0	0	0	0	0	4	3
Tennessee	227	136	67.2%	147	59	80	76	0	0	136	56	63	59	5	3	58	56	6	1	6	0	0	1	22	20
West South Central	4,001	2,509	59.5%	3,167	1,914	834	595	69	37	3,096	1,875	184	126	2	2	183	124	2	0	0	0	2	0	650	471
Arkansas	202	36	462.9%	183	27	19	8	NM	2	182	26	6	3	0	0	6	3	1	0	0	0	1	0	11	5
Louisiana	198	176	12.9%	NM	2	196	173	NM	2	0	0	12	7	0	0	12	7	0	0	0	0	0	0	183	166
Oklahoma	68	34	102.6%	59	29	9	5	59	29	0	0	3	1	0	0	3	1	0	0	0	0	0	0	6	4
Texas	3,532	2,263	56.1%	2,922	1,855	610	408	6	4	2,914	1,849	162	115	2	2	161	113	0	0	0	0	0	0	449	295
Mountain	16,027	14,416	11.2%	12,540	11,509	3,486	2,907	1,016	815	11,418	10,602	1,131	1,037	103	90	1,028	947	59	47	2	2	57	45	2,402	1,915
Arizona	5,982	5,388	11.0%	4,048	3,756	1,934	1,632	743	555	3,285	3,180	609	568	21	21	588	547	18	14	0	0	18	14	1,328	1,071
Colorado	1,484	1,302	14.0%	973	840	511	462	6	2	951	828	207	195	17	11	190	184	2	2	0	0	2	2	319	276
Idaho	522	441	18.3%	493	427	29	14	0	0	493	427	5	4	0	0	5	4	1	0	0	0	1	0	24	10
Montana	52	25	108.6%	34	11	18	14	0	0	34	11	5	4	0	0	5	4	0	0	0	0	0	0	13	10
Nevada	4,302	3,820	12.6%	3,877	3,461	424	359	37	36	3,773	3,364	156	145	66	58	91	87	30	23	2	2	27	21	307	251
New Mexico	1,378	1,225	12.5%	1,157	1,053	222	172	232	223	925	830	78	64	0	0	78	64	1	1	0	0	1	1	143	107
Utah	2,300	2,210	4.1%	1,958	1,961	342	249	0	0	1,958	1,961	69	55	0	0	69	55	7	7	0	0	7	7	266	187
Wyoming	6	4	34.1%	0	0	6	4	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	4	2
Pacific Contiguous	34,100	29,076	17.3%	22,369	19,574	11,732	9,503	496	416	21,687	19,035	3,050	2,200	139	106	2,911	2,093	1,704	1,559	47	16	1,657	1,543	7,164	5,866
California	33,243	28,638	16.1%	21,840	19,409	11,403	9,229	489	411	21,165	18,876	2,948	2,109	139	106	2,810	2,003	1,690	1,545	47	16	1,643	1,529	6,951	5,697
Oregon	718	330	117.4%	528	164	190	166	6	5	522	159	80	73	0	0	80	73	14	14	0	0	14	14	96	79
Washington	140	108	28.8%	0	0	139	108	0	0	0	0	22	18	0	0	22	18	0	0	0	0	0	0	117	90
Pacific Noncontiguous	1,067	982	8.7%	182	146	884	836	32	37	151	109	348	309	0	0	348	309	2	2	0	0	2	2	534	525
Alaska	3	2	50.7%	0	0	3	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Hawaii	1,064	980	8.6%	182	146	882	834	32	37	151	109	347	308	0	0	347	308	2	2	0	0	2	2	532	524
U.S. Total	82,026	64,430	27.3%	56,179	43,472	25,847	20,957	4,692	2,750	50,835	40,227	9,110	7,149	569	458	8,541	6,691	2,382	2,107	82	37	2,300	2,070	15,006	12,196

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 2018 are preliminary. Values for 2017 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.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report;
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 1.18.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	5	1	469.8%	5	1	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	5	1	469.8%	5	1	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	83	91	-9.5%	0	0	83	91	0	0	0	0
Arizona	54	72	-25.2%	0	0	54	72	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	29	19	49.5%	0	0	29	19	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	187	222	-15.8%	0	0	187	222	0	0	0	0
California	187	222	-15.8%	0	0	187	222	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	275	314	-12.6%	5	1	270	313	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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.18.B. Utility Scale Facility Net Generation from Solar Thermal

by State, by Sector, Year-to-Date through October 2018 and 2017 (Thousand Megawatthours)

	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	
Census Division and State	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	50	14	249.4%	50	14	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	50	14	249.4%	50	14	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	1,003	822	22.1%	0	0	1,003	822	0	0	0	0
Arizona	720	669	7.6%	0	0	720	669	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	283	152	86.0%	0	0	283	152	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	2,278	2,180	4.5%	0	0	2,278	2,180	0	0	0	0
California	2,278	2,180	4.5%	0	0	2,278	2,180	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	3,332	3,016	10.5%	50	14	3,282	3,001	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 2018 are preliminary. Values for 2017 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.

Chapter 2

Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	663,911	484,389	176,643	95	2,783
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	63,460	46,708	16,471	11	270
February	47,985	35,491	12,240	9	245
March	48,840	35,655	12,926	9	250
April	44,279	31,403	12,656	6	214
May	50,898	37,373	13,294	6	224
June	58,852	43,744	14,881	6	221
July	69,769	51,971	17,560	7	230
August	65,761	48,954	16,574	7	227
Sept	54,713	39,390	15,098	8	218
October	50,015	36,190	13,591	7	227
November	50,882	35,778	14,873	8	222
December	58,457	41,733	16,479	9	236
Year 2018					
January	64,517	47,706	16,524	12	274
February	45,655	33,933	11,471	9	243
March	44,388	32,273	11,864	8	243
April	40,554	30,358	9,980	6	210
May	47,469	35,222	12,011	6	230
June	56,030	42,467	13,338	6	219
July	63,805	48,286	15,283	7	229
August	63,710	47,867	15,612	9	222
Sept	53,945	40,309	13,416	8	212
October	48,488	35,607	12,682	7	191
Year to Date					
2016	564,448	414,045	147,777	89	2,537
2017	554,572	406,879	145,291	77	2,325
2018	528,561	394,029	132,181	78	2,273
Rolling 12 Months Ending in October					
2017	667,495	489,026	175,561	99	2,809
2018	637,900	471,540	163,534	96	2,731

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 2017 and prior years are final. Values for 2018 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, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	14,667	2,802	1,158	515	10,192
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	1,470	300	117	59	995
February	1,198	213	104	48	832
March	1,292	238	106	57	892
April	1,129	221	78	36	794
May	1,137	209	75	34	819
June	1,153	211	84	34	823
July	1,202	254	96	40	812
August	1,214	256	100	36	823
Sept	1,103	207	86	38	773
October	1,223	223	94	35	871
November	1,260	263	98	44	855
December	1,285	208	119	56	903
Year 2018					
January	1,404	235	141	58	970
February	1,266	215	139	45	868
March	1,242	205	96	43	897
April	1,107	183	80	39	805
May	1,097	171	79	35	811
June	1,089	192	91	36	770
July	1,068	201	81	40	746
August	1,032	195	77	41	720
Sept	1,079	193	79	42	765
October	1,009	164	67	35	743
Year to Date					
2016	13,816	2,445	1,102	459	9,810
2017	12,121	2,331	942	415	8,433
2018	11,393	1,954	931	413	8,095
Rolling 12 Months Ending in October					
2017	14,892	2,865	1,176	528	10,323
2018	13,939	2,425	1,147	513	9,854

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 2017 and prior years are final. Values for 2018 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, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	678,578	487,192	177,801	610	12,975
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	64,930	47,008	16,588	71	1,264
February	49,183	35,705	12,344	58	1,077
March	50,132	35,893	13,032	66	1,141
April	45,408	31,624	12,735	42	1,008
May	52,034	37,582	13,370	39	1,043
June	60,005	43,955	14,965	40	1,045
July	70,971	52,225	17,656	47	1,042
August	66,975	49,209	16,673	43	1,050
Sept	55,817	39,596	15,184	45	991
October	51,238	36,413	13,686	42	1,098
November	52,142	36,042	14,971	52	1,077
December	59,743	41,940	16,598	66	1,139
Year 2018					
January	65,921	47,941	16,665	70	1,245
February	46,922	34,148	11,609	54	1,111
March	45,630	32,478	11,961	51	1,140
April	41,661	30,541	10,059	45	1,015
May	48,566	35,393	12,091	41	1,041
June	57,119	42,659	13,430	42	988
July	64,873	48,487	15,364	47	975
August	64,742	48,061	15,688	49	943
Sept	55,025	40,502	13,496	51	977
October	49,497	35,772	12,749	42	934
Year to Date					
2016	578,264	416,491	148,878	548	12,347
2017	566,693	409,210	146,233	492	10,758
2018	539,954	395,983	133,112	492	10,368
Rolling 12 Months Ending in October					
2017	682,387	491,891	176,737	627	13,131
2018	651,839	473,964	164,681	609	12,585

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 2017 and prior years are final. Values for 2018 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, 2008-October 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	21,696	15,567	5,461	191	476
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	1,937	1,436	433	20	48
February	1,542	1,143	345	13	41
March	1,658	1,342	262	15	40
April	1,479	1,153	281	9	36
May	1,713	1,290	373	15	35
June	1,763	1,313	403	13	34
July	1,592	1,173	369	16	34
August	1,710	1,267	390	19	34
Sept	1,623	1,199	372	14	38
October	1,674	1,303	319	13	39
November	1,591	1,170	362	15	45
December	3,414	1,779	1,551	31	52
Year 2018					
January	9,044	4,359	4,541	66	77
February	1,369	1,090	219	15	44
March	1,409	1,058	297	12	42
April	1,529	1,128	349	16	37
May	1,780	1,297	421	20	42
June	1,826	1,343	421	19	43
July	1,689	1,166	439	28	56
August	1,745	1,257	425	25	38
Sept	1,775	1,346	373	20	37
October	1,732	1,318	359	17	38
Year to Date					
2016	18,739	13,478	4,723	85	453
2017	16,691	12,619	3,548	145	379
2018	23,897	15,362	7,842	238	455
Rolling 12 Months Ending in October					
2017	20,357	15,278	4,449	167	462
2018	28,902	18,311	9,756	284	551

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 2017 and prior years are final. Values for 2018 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, 2008-October 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	2,012	72	220	238	1,482
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	199	13	37	36	113
February	137	9	17	24	87
March	152	5	8	26	113
April	140	3	10	12	117
May	137	3	12	15	107
June	120	4	13	10	92
July	117	3	12	12	89
August	119	3	11	15	91
Sept	134	3	18	11	102
October	142	3	16	13	110
November	242	4	19	19	200
December	373	19	47	46	262
Year 2018					
January	716	49	107	108	452
February	147	5	10	26	107
March	165	4	13	22	126
April	147	4	12	19	113
May	164	3	17	17	126
June	221	5	14	16	187
July	173	3	11	30	129
August	195	4	39	25	128
Sept	170	6	12	17	135
October	169	5	16	17	131
Year to Date					
2016	1,933	55	197	184	1,496
2017	1,397	50	153	174	1,021
2018	2,269	87	251	297	1,635
Rolling 12 Months Ending in October					
2017	1,742	63	201	234	1,244
2018	2,884	110	317	361	2,096

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 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	23,708	15,640	5,681	429	1,958
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	2,136	1,450	470	56	161
February	1,679	1,152	362	37	128
March	1,810	1,346	271	40	152
April	1,620	1,155	291	21	153
May	1,850	1,293	385	30	142
June	1,883	1,317	416	23	126
July	1,709	1,177	381	28	123
August	1,829	1,270	400	33	125
Sept	1,756	1,202	390	24	140
October	1,816	1,306	335	26	149
November	1,833	1,174	381	34	245
December	3,787	1,797	1,598	77	314
Year 2018					
January	9,760	4,408	4,648	175	530
February	1,516	1,095	229	40	151
March	1,574	1,062	310	35	168
April	1,677	1,132	361	35	150
May	1,944	1,300	438	37	169
June	2,048	1,348	435	36	229
July	1,862	1,169	450	58	186
August	1,940	1,260	463	50	166
Sept	1,945	1,352	384	36	173
October	1,900	1,323	375	34	169
Year to Date					
2016	20,671	13,532	4,920	270	1,949
2017	18,088	12,668	3,701	319	1,399
2018	26,166	15,449	8,093	535	2,089
Rolling 12 Months Ending in October					
2017	22,099	15,341	4,650	401	1,706
2018	31,786	18,420	10,073	646	2,648

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 2017 and prior years are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	3,490	2,731	542	3	214
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	368	301	51	0	15
February	277	217	44	0	15
March	265	214	31	0	20
April	168	110	41	0	16
May	329	264	49	0	16
June	350	282	48	0	20
July	344	271	51	0	22
August	300	226	52	0	22
Sept	276	209	50	0	16
October	228	171	40	0	18
November	293	234	40	0	18
December	292	231	44	0	16
Year 2018					
January	349	296	38	0	15
February	275	234	30	0	10
March	245	198	35	0	12
April	246	193	37	0	15
May	161	140	8	0	13
June	312	269	24	0	19
July	346	284	41	0	21
August	332	272	39	0	20
Sept	316	259	39	0	18
October	190	158	15	0	16
Year to Date					
2016	3,611	2,927	491	1	192
2017	2,905	2,266	458	2	179
2018	2,773	2,304	308	1	160
Rolling 12 Months Ending in October					
2017	3,547	2,765	558	3	220
2018	3,357	2,769	392	2	194

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 2017 and prior years are final. Values for 2018 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, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	977	11	115	15	836
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	81	0	10	2	70
February	69	0	10	1	58
March	90	1	10	2	77
April	74	0	10	1	64
May	78	1	10	1	66
June	91	1	9	1	80
July	86	1	10	0	75
August	90	2	9	2	77
Sept	76	1	9	2	64
October	86	1	9	1	74
November	80	1	9	1	69
December	76	1	10	2	63
Year 2018					
January	72	1	9	2	60
February	63	1	8	2	53
March	62	1	9	1	50
April	78	1	10	1	66
May	64	1	6	0	57
June	66	1	1	0	63
July	71	1	9	0	61
August	69	1	9	0	59
Sept	72	1	7	1	63
October	75	0	9	1	64
Year to Date					
2016	904	5	93	7	799
2017	821	8	97	12	704
2018	691	10	77	7	597
Rolling 12 Months Ending in October					
2017	1,016	9	117	14	876
2018	847	13	96	10	729

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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 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	4,467	2,742	657	17	1,050
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	449	301	61	2	85
February	347	218	54	1	74
March	355	215	41	2	97
April	242	110	51	1	80
May	406	265	59	1	82
June	441	283	57	1	100
July	430	272	60	0	98
August	390	228	61	2	99
Sept	352	211	60	2	80
October	314	172	49	2	92
November	373	235	49	1	87
December	368	233	54	2	80
Year 2018					
January	421	297	47	2	75
February	338	235	38	2	63
March	307	199	44	2	63
April	323	195	47	1	81
May	225	141	14	0	70
June	378	270	26	0	82
July	417	285	49	0	82
August	401	273	49	0	79
Sept	389	260	47	1	81
October	264	159	24	1	80
Year to Date					
2016	4,515	2,932	584	8	991
2017	3,726	2,274	554	14	884
2018	3,463	2,314	385	9	756
Rolling 12 Months Ending in October					
2017	4,563	2,774	675	16	1,097
2018	4,204	2,782	488	12	923

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	9,507,760	4,754,883	4,161,987	50,060	540,830
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	679,456	337,365	291,293	4,212	46,587
February	587,375	291,892	250,059	3,763	41,661
March	690,237	350,941	290,725	4,044	44,527
April	646,952	331,856	268,401	3,537	43,158
May	720,458	374,380	298,341	3,820	43,917
June	872,928	436,021	386,492	4,400	46,015
July	1,104,716	552,301	498,292	4,942	49,181
August	1,043,414	516,896	474,421	4,803	47,295
Sept	877,808	433,254	397,947	4,400	42,206
October	791,673	385,327	358,763	4,105	43,478
November	686,346	340,195	298,079	3,776	44,297
December	806,395	404,455	349,174	4,259	48,508
Year 2018					
January	803,870	419,727	332,226	4,156	47,761
February	717,459	356,653	314,825	3,973	42,008
March	771,201	387,856	336,457	4,116	42,772
April	726,677	369,327	309,622	3,909	43,820
May	872,078	456,403	367,132	4,107	44,437
June	972,168	510,433	411,722	4,434	45,579
July	1,252,609	638,618	560,343	5,137	48,511
August	1,220,963	608,370	557,994	5,166	49,433
Sept	1,064,303	536,010	477,474	4,666	46,154
October	918,069	460,333	408,429	4,287	45,020
Year to Date					
2016	8,804,710	4,341,538	3,978,477	39,813	444,882
2017	8,015,019	4,010,233	3,514,735	42,026	448,025
2018	9,319,396	4,743,729	4,076,223	43,950	455,494
Rolling 12 Months Ending in October					
2017	9,380,419	4,687,590	4,107,632	48,516	536,681
2018	10,812,138	5,488,379	4,723,476	51,984	548,298

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Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
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Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	1,168,850	38,740	309,945	104,324	715,842
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	101,360	3,704	27,262	9,905	60,489
February	90,127	3,216	23,614	8,341	54,956
March	97,233	3,489	27,021	8,120	58,603
April	89,236	2,985	23,807	6,830	55,614
May	92,148	3,093	24,244	7,223	57,587
June	95,359	2,722	25,799	8,475	58,363
July	103,932	3,441	27,792	9,956	62,744
August	101,846	3,216	27,487	9,983	61,161
Sept	97,464	2,980	25,078	8,964	60,443
October	97,666	3,046	25,407	8,647	60,566
November	95,578	3,119	24,763	8,391	59,305
December	106,899	3,729	27,671	9,488	66,010
Year 2018					
January	143,718	3,580	29,041	44,014	67,082
February	129,472	3,168	26,534	39,844	59,926
March	135,672	3,311	28,121	40,356	63,885
April	128,365	2,981	25,434	39,362	60,588
May	129,536	3,149	26,428	40,286	59,673
June	132,500	3,535	26,778	41,046	61,139
July	141,471	4,154	30,260	43,383	63,675
August	141,825	4,146	29,291	44,204	64,184
Sept	133,764	3,498	27,336	40,848	62,083
October	100,591	3,209	26,951	8,236	62,195
Year to Date					
2016	962,885	31,764	300,659	68,412	562,050
2017	966,373	31,892	257,510	86,444	590,526
2018	1,316,914	34,730	276,173	381,580	624,432
Rolling 12 Months Ending in October					
2017	1,155,354	38,224	313,756	98,975	704,398
2018	1,519,392	41,578	328,607	399,459	749,747

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 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	10,676,610	4,793,623	4,471,932	154,383	1,256,672
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	780,816	341,068	318,555	14,116	107,077
February	677,502	295,109	273,673	12,104	96,617
March	787,471	354,430	317,746	12,165	103,130
April	736,188	334,841	292,208	10,367	98,772
May	812,607	377,474	322,585	11,043	101,504
June	968,287	438,743	412,291	12,875	104,377
July	1,208,649	555,742	526,084	14,898	111,925
August	1,145,261	520,111	501,908	14,786	108,456
Sept	975,272	436,234	423,025	13,364	102,649
October	889,339	388,373	384,170	12,752	104,044
November	781,924	343,314	322,841	12,167	103,602
December	913,294	408,184	376,845	13,747	114,519
Year 2018					
January	947,588	423,307	361,266	48,171	114,844
February	846,931	359,821	341,359	43,817	101,934
March	906,873	391,167	364,578	44,472	106,656
April	855,042	372,307	335,056	43,271	104,408
May	1,001,614	459,552	393,559	44,392	104,110
June	1,104,667	513,969	438,500	45,480	106,718
July	1,394,080	642,771	590,603	48,519	112,186
August	1,362,788	612,516	587,285	49,370	113,617
Sept	1,198,067	539,507	504,810	45,514	108,236
October	1,018,660	463,542	435,379	12,523	107,216
Year to Date					
2016	9,767,594	4,373,301	4,279,136	108,225	1,006,932
2017	8,981,391	4,042,125	3,772,245	128,470	1,038,552
2018	10,636,310	4,778,459	4,352,396	425,530	1,079,925
Rolling 12 Months Ending in October					
2017	10,535,772	4,725,814	4,421,389	147,491	1,241,079
2018	12,331,529	5,529,957	5,052,083	451,443	1,298,046

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, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	278,112	25,074	229,050	20,121	3,866
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	25,272	2,182	20,948	1,784	358
February	21,912	2,167	17,878	1,529	337
March	24,177	2,303	19,774	1,742	359
April	22,941	2,145	18,844	1,620	332
May	23,879	2,202	19,651	1,731	294
June	23,091	1,921	19,163	1,670	336
July	22,896	1,983	18,932	1,702	279
August	22,923	2,030	18,919	1,668	305
Sept	22,102	1,851	18,287	1,672	292
October	22,063	2,037	18,243	1,465	318
November	22,870	2,105	18,715	1,728	322
December	23,986	2,148	19,695	1,810	333
Year 2018					
January	25,148	2,570	20,492	1,782	305
February	23,593	2,396	19,225	1,661	311
March	25,276	2,604	20,497	1,847	327
April	23,720	2,353	19,467	1,593	307
May	23,568	2,195	19,632	1,474	267
June	23,693	2,007	19,930	1,504	252
July	23,947	2,006	20,218	1,492	232
August	24,698	2,059	20,932	1,494	214
Sept	21,204	1,702	17,849	1,454	198
October	23,066	1,909	19,207	1,704	246
Year to Date					
2016	225,000	20,298	184,565	16,929	3,208
2017	231,255	20,821	190,640	16,582	3,211
2018	237,913	21,799	197,449	16,005	2,659
Rolling 12 Months Ending in October					
2017	279,812	24,804	231,068	20,098	3,842
2018	284,770	26,052	235,859	19,544	3,315

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.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	3,940	2	1,948	1,099	891
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	352	0	171	94	87
February	329	0	156	92	81
March	353	0	177	92	84
April	346	0	153	107	87
May	299	0	134	85	80
June	329	0	165	89	75
July	312	0	176	85	51
August	348	0	172	98	78
Sept	330	0	169	98	62
October	319	0	170	93	56
November	298	0	140	85	73
December	324	0	165	81	77
Year 2018					
January	411	1	259	68	83
February	400	1	238	79	82
March	435	1	262	82	90
April	351	1	179	85	87
May	272	1	127	71	73
June	248	1	135	46	67
July	264	1	126	76	62
August	282	1	138	82	61
Sept	268	0	128	82	57
October	380	1	212	95	73
Year to Date					
2016	3,398	2	1,882	857	657
2017	3,318	2	1,642	933	741
2018	3,310	7	1,803	766	734
Rolling 12 Months Ending in October					
2017	4,083	2	2,099	1,110	872
2018	3,932	8	2,108	932	883

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	282,051	25,076	230,998	21,220	4,757
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	25,625	2,182	21,119	1,878	446
February	22,241	2,167	18,034	1,621	419
March	24,530	2,303	19,951	1,834	442
April	23,287	2,146	18,996	1,727	418
May	24,178	2,202	19,785	1,816	374
June	23,419	1,921	19,329	1,759	411
July	23,208	1,983	19,108	1,786	330
August	23,271	2,030	19,092	1,766	383
Sept	22,431	1,851	18,456	1,771	354
October	22,382	2,037	18,413	1,558	374
November	23,168	2,105	18,855	1,813	395
December	24,310	2,149	19,860	1,891	410
Year 2018					
January	25,560	2,571	20,751	1,850	388
February	23,993	2,396	19,463	1,740	393
March	25,710	2,605	20,759	1,929	417
April	24,071	2,353	19,645	1,679	394
May	23,839	2,195	19,759	1,545	340
June	23,941	2,008	20,064	1,550	319
July	24,211	2,007	20,344	1,568	293
August	24,981	2,059	21,071	1,576	275
Sept	21,471	1,702	17,978	1,536	255
October	23,446	1,909	19,418	1,799	319
Year to Date					
2016	228,398	20,300	186,447	17,786	3,865
2017	234,573	20,823	192,283	17,515	3,952
2018	241,223	21,806	199,252	16,772	3,393
Rolling 12 Months Ending in October					
2017	283,895	24,806	233,168	21,208	4,713
2018	288,701	26,060	237,967	20,476	4,198

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	16,348	422	13,381	2,537	8
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	1,434	35	1,194	205	0
February	1,244	19	1,034	191	0
March	1,330	36	1,091	204	0
April	1,288	35	1,044	209	0
May	1,410	36	1,147	226	1
June	1,421	38	1,175	207	1
July	1,440	41	1,172	226	1
August	1,453	47	1,182	223	1
Sept	1,321	41	1,072	207	1
October	1,317	33	1,065	218	1
November	1,311	30	1,074	207	1
December	1,378	32	1,132	214	1
Year 2018					
January	1,350	28	1,132	190	0
February	1,278	26	1,076	175	1
March	1,377	40	1,138	198	1
April	1,342	38	1,109	194	1
May	1,398	43	1,143	212	1
June	1,454	42	1,202	208	1
July	1,458	48	1,208	200	1
August	1,461	47	1,204	209	1
Sept	1,313	36	1,082	194	1
October	1,372	43	1,130	199	0
Year to Date					
2016	14,139	386	11,606	2,137	10
2017	13,659	361	11,175	2,116	7
2018	13,802	390	11,424	1,979	9
Rolling 12 Months Ending in October					
2017	16,514	438	13,522	2,545	8
2018	16,492	452	13,630	2,400	10

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	2,124	0	814	1,102	208
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	203	0	72	111	20
February	171	0	64	94	12
March	187	0	75	93	19
April	173	0	69	86	18
May	182	0	69	96	18
June	185	0	68	101	16
July	185	0	72	97	17
August	196	0	77	97	22
Sept	154	0	63	74	17
October	155	0	59	78	18
November	166	0	64	88	15
December	168	0	63	88	17
Year 2018					
January	170	0	64	90	17
February	151	0	60	80	12
March	155	0	64	79	12
April	147	0	54	77	16
May	161	0	59	86	16
June	163	0	65	80	18
July	164	0	65	83	17
August	168	0	66	80	21
Sept	134	0	58	58	17
October	150	0	61	73	16
Year to Date					
2016	1,867	0	746	941	180
2017	1,790	0	687	927	177
2018	1,563	0	616	785	162
Rolling 12 Months Ending in October					
2017	2,155	0	826	1,119	210
2018	1,897	0	743	960	194

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 2017 and prior years are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	18,473	422	14,195	3,639	216
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	1,637	35	1,266	316	20
February	1,415	19	1,098	286	12
March	1,517	36	1,165	297	19
April	1,461	35	1,113	294	18
May	1,592	36	1,215	322	19
June	1,606	38	1,243	309	17
July	1,625	41	1,244	323	18
August	1,649	47	1,259	320	23
Sept	1,475	41	1,135	281	18
October	1,472	33	1,124	295	19
November	1,477	30	1,138	295	15
December	1,546	32	1,195	301	18
Year 2018					
January	1,521	28	1,196	279	17
February	1,429	26	1,136	255	13
March	1,532	40	1,202	277	13
April	1,489	38	1,163	271	17
May	1,559	43	1,202	297	17
June	1,617	42	1,267	289	19
July	1,622	48	1,273	283	18
August	1,629	47	1,270	290	22
Sept	1,447	36	1,141	252	18
October	1,521	43	1,191	271	16
Year to Date					
2016	16,006	386	12,352	3,079	190
2017	15,449	361	11,862	3,043	183
2018	15,365	390	12,041	2,764	170
Rolling 12 Months Ending in October					
2017	18,669	438	14,349	3,665	217
2018	18,389	452	14,373	3,360	204

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 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2008-October 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	363,971	42,806	151,877	460	168,828
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	31,111	4,492	12,653	56	13,910
February	28,404	3,584	11,989	50	12,781
March	31,284	4,210	13,448	26	13,601
April	27,497	3,136	11,066	34	13,261
May	28,273	2,799	11,614	43	13,817
June	30,264	3,180	12,592	38	14,454
July	32,600	3,942	13,505	41	15,112
August	33,336	3,803	14,249	41	15,244
Sept	28,574	2,090	13,001	15	13,469
October	28,951	3,387	11,782	33	13,748
November	30,458	3,608	12,600	41	14,210
December	33,219	4,575	13,378	43	15,222
Year 2018					
January	32,264	4,532	13,000	63	14,668
February	28,875	3,645	11,706	42	13,482
March	30,272	4,010	11,813	36	14,414
April	25,869	2,208	10,102	16	13,542
May	30,796	3,455	12,419	32	14,890
June	31,124	4,157	12,647	53	14,267
July	31,808	4,337	12,558	59	14,854
August	30,312	4,299	11,616	69	14,328
Sept	27,931	3,607	10,844	52	13,428
October	27,753	3,491	10,896	27	13,340
Year to Date					
2016	298,840	34,388	124,105	411	139,936
2017	300,294	34,623	125,898	376	139,396
2018	297,004	37,742	117,600	449	141,213
Rolling 12 Months Ending in October					
2017	361,437	41,271	151,309	438	168,419
2018	360,681	45,925	143,578	533	170,645

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 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2008-October 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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	1,036,427	11,656	22,986	4,522	997,263
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	90,099	1,206	2,090	525	86,278
February	79,451	1,037	1,879	430	76,104
March	87,759	1,170	2,113	299	84,176
April	82,426	1,044	1,548	295	79,539
May	84,129	716	1,623	301	81,490
June	85,459	1,007	1,641	322	82,490
July	89,160	683	1,963	355	86,159
August	90,434	989	2,010	365	87,071
Sept	81,960	931	2,032	233	78,763
October	86,217	893	1,972	402	82,950
November	87,430	902	1,929	473	84,126
December	91,903	1,079	2,186	524	88,115
Year 2018					
January	88,471	859	2,073	454	85,086
February	83,125	832	2,122	474	79,698
March	85,627	994	2,053	493	82,086
April	84,957	913	1,784	339	81,920
May	84,885	946	1,779	319	81,841
June	85,398	968	1,815	402	82,214
July	88,781	914	2,034	382	85,450
August	90,409	847	2,034	417	87,111
Sept	82,161	918	1,655	336	79,252
October	86,411	979	1,924	329	83,179
Year to Date					
2016	789,040	8,604	18,848	3,779	757,808
2017	857,093	9,675	18,871	3,526	825,021
2018	860,225	9,171	19,272	3,945	827,837
Rolling 12 Months Ending in October					
2017	1,037,894	12,021	22,928	4,267	998,678
2018	1,039,558	11,151	23,387	4,941	1,000,078

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-October 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	1,262,675	29,150	148,198	1,410	1,083,917
2009	1,136,729	29,565	150,481	1,408	955,276
2010	1,225,571	40,167	155,429	1,338	1,028,637
2011	1,240,937	35,474	146,684	1,504	1,057,275
2012	1,273,500	32,723	157,468	1,427	1,081,882
2013	1,317,560	43,363	164,063	1,486	1,108,647
2014	1,377,629	54,478	196,775	4,727	1,121,648
2015	1,350,612	53,269	190,587	4,219	1,102,537
2016	1,329,824	51,986	172,421	4,993	1,100,424
2017	1,400,397	54,462	174,862	4,982	1,166,091
Year 2016					
January	116,318	5,169	15,520	500	95,128
February	109,878	4,947	15,548	456	88,928
March	109,606	4,471	14,999	311	89,825
April	100,276	3,279	11,956	384	84,657
May	105,246	3,446	12,275	294	89,231
June	109,140	4,542	13,594	474	90,530
July	112,964	5,010	15,056	435	92,462
August	114,690	5,044	16,353	514	92,780
Sept	105,816	4,002	15,063	446	86,306
October	103,946	3,083	12,589	376	87,898
November	109,567	3,729	14,108	360	91,370
December	132,377	5,265	15,360	443	111,310
Year 2017					
January	121,210	5,698	14,743	581	100,188
February	107,854	4,621	13,868	480	88,885
March	119,043	5,380	15,562	325	97,777
April	109,922	4,180	12,613	328	92,800
May	112,402	3,515	13,237	344	95,306
June	115,723	4,187	14,232	360	96,944
July	121,760	4,625	15,469	395	101,271
August	123,771	4,792	16,258	406	102,315
Sept	110,535	3,021	15,033	249	92,232
October	115,168	4,281	13,754	435	96,698
November	117,888	4,509	14,529	514	98,336
December	125,122	5,654	15,564	566	103,338
Year 2018					
January	120,735	5,391	15,073	517	99,754
February	112,000	4,477	13,828	516	93,179
March	115,899	5,004	13,866	528	96,501
April	110,825	3,122	11,886	356	95,462
May	115,681	4,401	14,198	351	96,731
June	116,522	5,124	14,462	455	96,481
July	120,589	5,251	14,592	441	100,304
August	120,721	5,146	13,650	486	101,439
Sept	110,092	4,525	12,499	388	92,679
October	114,164	4,470	12,820	356	96,519
Year to Date					
2016	1,087,880	42,992	142,953	4,190	897,745
2017	1,157,387	44,299	144,769	3,902	964,417
2018	1,157,228	46,913	136,872	4,394	969,050
Rolling 12 Months Ending in October					
2017	1,399,331	53,293	174,237	4,705	1,167,097
2018	1,400,239	57,076	166,965	5,474	1,170,724

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Table 2.8.A. Consumption of Coal for Electricity Generation by State, by Sector, October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	NM	2	NM	0	1	0	1	0	0	NM	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	NM	2	NM	0	0	0	1	0	0	NM	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	1	-71.0%	0	1	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	1,379	1,468	-6.1%	0	0	1,375	1,461	0	0	4	8
New Jersey	34	38	-11.0%	0	0	34	38	0	0	0	0
New York	1	4	-65.0%	0	0	1	0	0	0	0	4
Pennsylvania	1,344	1,426	-5.8%	0	0	1,340	1,422	0	0	4	4
East North Central	10,926	10,857	0.6%	6,492	6,868	4,372	3,932	2	2	60	56
Illinois	2,424	2,680	-9.5%	112	112	2,266	2,524	NM	1	45	43
Indiana	3,217	2,922	10.0%	3,017	2,791	199	130	1	1	0	0
Michigan	1,669	1,640	1.8%	1,652	1,621	16	18	0	0	1	1
Ohio	2,095	1,837	14.0%	204	577	1,891	1,260	0	0	0	0
Wisconsin	1,521	1,779	-14.0%	1,507	1,768	0	0	0	0	14	11
West North Central	8,937	8,408	6.3%	8,852	8,307	0	0	1	2	84	99
Iowa	1,392	763	82.0%	1,352	720	0	0	1	1	39	42
Kansas	968	799	21.0%	968	799	0	0	0	0	0	0
Minnesota	1,115	1,035	7.7%	1,100	1,013	0	0	0	0	15	22
Missouri	2,625	3,006	-13.0%	2,624	3,006	0	0	1	0	0	0
Nebraska	1,238	916	35.0%	1,211	884	0	0	0	0	27	32
North Dakota	1,599	1,842	-13.0%	1,597	1,838	0	0	0	0	3	4
South Dakota	0	47	-100.0%	0	47	0	0	0	0	0	0
South Atlantic	6,016	6,592	-8.7%	5,461	5,862	539	712	1	1	15	17
Delaware	2	4	-55.0%	0	0	2	4	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,142	1,546	-26.0%	1,141	1,531	0	13	0	0	1	2
Georgia	1,452	1,308	11.0%	1,449	1,304	0	0	0	0	3	3
Maryland	137	257	-47.0%	0	0	136	255	0	0	1	1
North Carolina	652	808	-19.0%	646	800	3	5	1	1	2	3
South Carolina	745	432	72.0%	745	432	0	0	0	0	0	1
Virginia	112	202	-44.0%	81	179	23	16	0	0	8	7
West Virginia	1,774	2,035	-13.0%	1,400	1,615	375	419	0	0	0	0
East South Central	4,284	4,592	-6.7%	4,047	4,425	224	155	0	0	12	12
Alabama	1,043	1,245	-16.0%	1,041	1,245	0	0	0	0	1	1
Kentucky	2,254	2,095	7.6%	2,254	2,095	0	0	0	0	0	0
Mississippi	372	298	25.0%	148	143	224	155	0	0	0	0
Tennessee	615	954	-36.0%	604	943	0	0	0	0	11	11
West South Central	8,929	9,906	-9.9%	4,332	3,947	4,594	5,946	0	0	3	12
Arkansas	1,439	1,019	41.0%	1,164	836	274	182	0	0	1	1
Louisiana	525	540	-2.7%	411	354	114	186	0	0	0	0
Oklahoma	487	901	-46.0%	348	783	137	107	0	0	2	11
Texas	6,477	7,445	-13.0%	2,408	1,974	4,069	5,471	0	0	0	0
Mountain	7,311	7,472	-2.2%	6,337	6,646	965	809	0	0	8	17
Arizona	1,302	1,442	-9.7%	1,302	1,442	0	0	0	0	0	0
Colorado	1,233	1,254	-1.7%	1,232	1,254	0	0	0	0	0	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	929	713	30.0%	26	15	902	698	0	0	0	0
Nevada	94	36	159.0%	59	0	35	36	0	0	0	0
New Mexico	706	793	-11.0%	706	793	0	0	0	0	0	0
Utah	1,015	1,173	-14.0%	987	1,138	27	28	0	0	0	7
Wyoming	2,032	2,061	-1.4%	2,024	2,005	1	47	0	0	7	9
Pacific Contiguous	608	615	-1.0%	62	112	542	497	0	0	5	6
California	4	5	-21.0%	0	0	0	0	0	0	4	5
Oregon	62	112	-45.0%	62	112	0	0	0	0	0	0
Washington	543	498	9.0%	0	0	542	497	0	0	1	1
Pacific Noncontiguous	97	102	-5.5%	NM	22	70	78	3	3	0	0
Alaska	NM	37	NM	NM	22	NM	12	3	3	0	0
Hawaii	60	66	-9.0%	0	0	60	66	0	0	0	0
U.S. Total	48,488	50,015	-3.1%	35,607	36,190	12,682	13,591	7	7	191	227

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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.8.B. Consumption of Coal for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	423	723	-41.0%	243	78	177	642	0	0	3	3
Connecticut	168	73	130.0%	0	0	168	73	0	0	0	0
Maine	12	13	-2.8%	0	0	9	10	0	0	3	3
Massachusetts	0	559	-100.0%	0	0	0	559	0	0	0	0
New Hampshire	243	78	211.0%	243	78	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	19,926	20,387	-2.3%	0	0	19,872	20,274	0	0	54	112
New Jersey	426	423	0.7%	0	0	426	423	0	0	0	0
New York	252	246	2.5%	0	0	249	184	0	0	4	62
Pennsylvania	19,248	19,718	-2.4%	0	0	19,198	19,668	0	0	50	50
East North Central	121,050	119,437	1.4%	72,960	73,263	47,418	45,562	20	13	652	599
Illinois	30,532	28,703	6.4%	1,822	1,808	28,222	26,428	11	7	477	461
Indiana	32,413	29,270	11.0%	30,649	28,208	1,756	1,056	9	6	0	0
Michigan	20,664	20,415	1.2%	20,453	20,225	178	178	0	0	33	13
Ohio	21,074	23,963	-12.0%	3,812	6,061	17,262	17,901	0	0	1	1
Wisconsin	16,367	17,085	-4.2%	16,225	16,961	0	0	0	0	142	124
West North Central	98,144	95,879	2.4%	97,131	94,908	0	0	17	24	996	947
Iowa	13,252	12,121	9.3%	12,813	11,708	0	0	15	18	424	395
Kansas	10,824	10,423	3.9%	10,824	10,423	0	0	0	0	0	0
Minnesota	10,846	10,633	2.0%	10,622	10,415	0	0	0	1	224	217
Missouri	31,135	33,093	-5.9%	31,133	33,089	0	0	2	4	0	0
Nebraska	12,175	10,729	13.0%	11,862	10,420	0	0	0	0	313	309
North Dakota	18,722	17,855	4.9%	18,688	17,829	0	0	0	0	35	27
South Dakota	1,189	1,024	16.0%	1,189	1,024	0	0	0	0	0	0
South Atlantic	72,638	78,380	-7.3%	63,494	70,113	8,944	8,045	9	11	191	211
Delaware	163	136	20.0%	0	0	163	136	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	11,320	14,730	-23.0%	11,302	14,659	3	48	0	0	15	23
Georgia	13,930	14,525	-4.1%	13,898	14,494	0	0	0	0	32	31
Maryland	3,774	3,025	25.0%	0	0	3,762	3,010	0	0	12	15
North Carolina	10,841	11,630	-6.8%	10,781	11,551	30	42	8	9	23	27
South Carolina	6,863	6,461	6.2%	6,861	6,457	0	0	0	0	3	4
Virginia	3,866	4,406	-12.0%	3,530	4,112	228	181	1	2	106	112
West Virginia	21,881	23,468	-6.8%	17,123	18,840	4,759	4,628	0	0	0	0
East South Central	50,521	52,237	-3.3%	47,980	50,082	2,408	2,025	0	0	133	130
Alabama	14,140	13,739	2.9%	14,128	13,731	0	0	0	0	12	8
Kentucky	23,525	23,296	1.0%	23,525	23,296	0	0	0	0	0	0
Mississippi	3,647	3,248	12.0%	1,239	1,223	2,408	2,025	0	0	0	0
Tennessee	9,209	11,953	-23.0%	9,088	11,831	0	0	0	0	121	122
West South Central	91,861	107,168	-14.0%	49,683	49,668	42,078	57,358	0	0	100	143
Arkansas	14,023	12,640	11.0%	11,711	11,169	2,305	1,464	0	0	7	7
Louisiana	6,849	7,251	-5.5%	4,575	4,370	2,274	2,881	0	0	0	0
Oklahoma	8,020	9,493	-16.0%	6,991	8,484	937	873	0	0	93	136
Texas	62,969	77,784	-19.0%	26,406	25,645	36,563	52,140	0	0	0	0
Mountain	69,727	75,848	-8.1%	61,727	67,579	7,909	8,144	0	0	91	126
Arizona	13,950	14,089	-1.0%	13,950	14,089	0	0	0	0	0	0
Colorado	12,491	13,850	-9.8%	12,488	13,848	0	0	0	0	2	2
Idaho	5	4	13.0%	0	0	0	0	0	0	5	4
Montana	6,910	7,119	-2.9%	183	217	6,726	6,901	0	0	1	2
Nevada	1,031	998	3.3%	571	535	460	463	0	0	0	0
New Mexico	5,656	8,966	-37.0%	5,656	8,966	0	0	0	0	0	0
Utah	9,821	10,142	-3.2%	9,486	9,761	336	337	0	0	0	44
Wyoming	19,863	20,680	-4.0%	19,393	20,163	388	443	0	0	82	74
Pacific Contiguous	3,260	3,546	-8.1%	579	1,007	2,628	2,485	0	0	53	54
California	48	48	0.2%	0	0	0	0	0	0	48	48
Oregon	579	1,007	-43.0%	579	1,007	0	0	0	0	0	0
Washington	2,634	2,491	5.7%	0	0	2,628	2,485	0	0	5	6
Pacific Noncontiguous	1,010	967	4.4%	233	182	745	756	32	30	0	0
Alaska	397	338	17.0%	233	182	131	127	32	30	0	0
Hawaii	614	629	-2.5%	0	0	614	629	0	0	0	0
U.S. Total	528,561	554,572	-4.7%	394,029	406,879	132,181	145,291	78	77	2,273	2,325

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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 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, October 2018 and October 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	32	21	57.0%	NM	8	25	11	3	1	1	0
Connecticut	11	6	91.0%	NM	0	11	6	NM	0	0	0
Maine	3	4	-16.0%	0	0	1	3	1	0	1	0
Massachusetts	12	6	98.0%	NM	4	10	2	NM	0	0	0
New Hampshire	2	2	-36.0%	NM	2	NM	0	1	1	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	0	0
Vermont	NM	2	NM	NM	2	0	0	0	0	0	0
Middle Atlantic	38	38	0.1%	NM	3	23	30	NM	1	3	4
New Jersey	NM	2	NM	1	0	NM	2	0	0	0	0
New York	18	12	47.0%	NM	3	NM	5	NM	0	1	3
Pennsylvania	17	24	-30.0%	0	0	14	23	1	0	2	1
East North Central	73	92	-21.0%	43	68	27	21	1	1	2	2
Illinois	11	7	54.0%	2	1	9	6	0	0	0	0
Indiana	19	22	-14.0%	18	21	0	0	0	0	1	2
Michigan	15	22	-34.0%	14	22	0	0	1	1	0	0
Ohio	23	25	-9.2%	4	10	18	15	0	0	0	0
Wisconsin	5	15	-69.0%	5	15	0	0	0	0	NM	0
West North Central	46	43	6.2%	45	41	NM	1	0	0	0	0
Iowa	8	8	-1.9%	8	8	NM	0	0	0	0	0
Kansas	8	8	-4.7%	8	8	0	0	0	0	0	0
Minnesota	6	8	-25.0%	6	7	NM	1	0	0	0	0
Missouri	13	14	-9.8%	13	14	0	0	0	0	0	0
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	0
North Dakota	5	3	74.0%	5	3	0	0	0	0	0	0
South Dakota	5	1	461.0%	5	1	0	0	NM	0	0	0
South Atlantic	233	284	-18.0%	164	199	51	68	10	9	9	8
Delaware	NM	1	NM	0	0	NM	1	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	84	90	-6.7%	81	87	NM	1	0	0	2	2
Georgia	18	12	47.0%	13	8	NM	1	NM	0	4	3
Maryland	10	15	-30.0%	NM	1	10	13	NM	0	0	0
North Carolina	21	49	-58.0%	18	46	NM	2	NM	0	1	1
South Carolina	14	7	85.0%	12	7	1	0	NM	0	1	1
Virginia	67	97	-31.0%	21	37	36	50	10	9	1	1
West Virginia	18	13	42.0%	18	13	0	0	0	0	0	0
East South Central	51	40	30.0%	51	37	NM	2	0	0	1	1
Alabama	4	5	-7.8%	4	2	NM	2	0	0	1	1
Kentucky	13	13	2.6%	13	13	0	0	0	0	0	0
Mississippi	5	1	270.0%	5	1	0	0	0	0	0	0
Tennessee	28	21	38.0%	28	20	0	0	0	0	0	0
West South Central	19	27	-29.0%	17	18	2	8	0	0	1	1
Arkansas	6	10	-42.0%	5	6	1	3	0	0	0	0
Louisiana	NM	5	NM	NM	5	0	0	0	0	0	0
Oklahoma	3	2	36.0%	3	2	0	0	0	0	0	0
Texas	6	10	-34.0%	5	5	NM	4	0	0	0	0
Mountain	44	28	58.0%	41	25	3	2	0	0	0	0
Arizona	11	9	22.0%	11	9	0	0	0	0	0	0
Colorado	1	3	-43.0%	1	3	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2	1	52.0%	NM	0	2	1	0	0	0	0
Nevada	2	1	155.0%	1	0	1	1	0	0	0	0
New Mexico	7	5	44.0%	7	5	0	0	0	0	0	0
Utah	8	5	51.0%	7	5	0	0	0	0	0	0
Wyoming	12	4	226.0%	12	4	0	0	0	0	0	0
Pacific Contiguous	17	15	17.0%	12	9	4	5	0	0	1	1
California	7	7	-0.7%	5	6	2	1	NM	0	0	0
Oregon	NM	3	NM	1	3	0	0	NM	0	0	0
Washington	9	5	88.0%	6	1	2	4	0	0	1	1
Pacific Noncontiguous	1,178	1,088	8.3%	933	894	224	172	1	1	21	22
Alaska	113	110	2.5%	108	106	0	0	0	0	5	4
Hawaii	1,065	978	9.0%	825	788	224	172	1	0	16	17
U.S. Total	1,732	1,674	3.4%	1,318	1,303	359	319	17	13	38	39

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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 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	2,100	494	325.0%	365	81	1,679	381	36	26	20	7
Connecticut	600	104	476.0%	NM	5	589	98	NM	1	1	0
Maine	317	99	220.0%	0	0	292	88	5	5	19	6
Massachusetts	784	227	245.0%	148	24	620	194	NM	8	1	1
New Hampshire	278	46	510.0%	186	34	80	2	12	9	0	0
Rhode Island	NM	7	NM	0	5	NM	0	1	2	0	0
Vermont	NM	12	NM	NM	11	0	0	0	0	0	0
Middle Atlantic	3,751	722	419.0%	1,020	118	2,652	542	NM	15	44	47
New Jersey	387	53	636.0%	3	0	378	52	4	0	1	0
New York	2,422	286	748.0%	1,014	118	1,361	132	NM	5	27	30
Pennsylvania	943	384	145.0%	3	0	913	358	12	9	16	17
East North Central	925	803	15.0%	540	532	359	253	7	5	19	12
Illinois	123	91	36.0%	NM	16	102	74	0	0	0	0
Indiana	195	171	14.0%	179	162	NM	0	1	0	15	9
Michigan	212	179	19.0%	207	174	0	0	5	4	1	1
Ohio	344	295	17.0%	86	114	254	179	1	1	2	2
Wisconsin	50	67	-25.0%	47	65	2	1	0	0	1	0
West North Central	538	407	32.0%	499	394	NM	11	2	1	1	1
Iowa	105	89	18.0%	103	87	2	2	0	0	0	0
Kansas	NM	87	NM	NM	87	0	0	0	0	0	0
Minnesota	78	53	46.0%	42	42	NM	9	2	1	1	1
Missouri	166	94	76.0%	166	94	0	0	0	0	0	0
Nebraska	15	11	37.0%	15	11	0	0	0	0	0	0
North Dakota	55	58	-4.3%	55	58	0	0	0	0	0	0
South Dakota	14	14	-3.4%	14	14	0	0	NM	0	0	0
South Atlantic	5,020	2,671	88.0%	3,538	2,107	1,235	416	145	85	101	64
Delaware	237	19	NM	12	1	225	18	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	934	827	13.0%	886	804	27	10	0	0	21	13
Georgia	347	176	97.0%	NM	134	NM	11	6	3	46	27
Maryland	498	199	150.0%	10	4	481	192	NM	2	3	1
North Carolina	886	352	152.0%	822	324	NM	18	NM	2	14	8
South Carolina	421	171	146.0%	367	161	44	2	NM	0	10	8
Virginia	1,456	755	93.0%	1,031	509	288	163	129	77	7	6
West Virginia	240	172	40.0%	214	170	26	2	0	0	0	0
East South Central	508	413	23.0%	437	397	58	6	0	0	13	9
Alabama	132	50	163.0%	65	38	58	6	0	0	9	6
Kentucky	140	155	-9.2%	140	155	0	0	0	0	0	0
Mississippi	47	20	137.0%	NM	18	0	0	0	0	3	1
Tennessee	189	188	0.5%	187	186	0	1	0	0	1	1
West South Central	259	247	4.9%	NM	143	42	99	1	1	7	5
Arkansas	57	72	-21.0%	NM	29	9	41	0	0	3	2
Louisiana	NM	36	NM	NM	36	0	0	0	0	0	0
Oklahoma	26	20	27.0%	24	19	0	0	0	0	1	1
Texas	98	119	-18.0%	61	59	NM	57	1	1	3	1
Mountain	311	342	-9.3%	271	306	39	36	0	0	0	0
Arizona	84	87	-3.2%	84	87	0	0	0	0	0	0
Colorado	22	18	20.0%	22	18	0	0	0	0	0	0
Idaho	0	0	129.0%	0	0	0	0	0	0	0	0
Montana	33	29	15.0%	NM	1	32	28	0	0	0	0
Nevada	18	18	1.4%	13	12	5	6	0	0	0	0
New Mexico	35	66	-48.0%	35	66	0	0	0	0	0	0
Utah	52	57	-8.9%	50	54	2	2	0	0	0	0
Wyoming	67	68	-0.4%	67	68	0	0	0	0	0	0
Pacific Contiguous	148	131	13.0%	71	82	31	26	NM	1	45	22
California	107	81	32.0%	55	58	16	8	NM	1	36	15
Oregon	NM	17	NM	NM	17	0	0	NM	0	0	0
Washington	33	33	0.7%	10	7	14	18	0	0	9	8
Pacific Noncontiguous	10,338	10,460	-1.2%	8,411	8,460	1,712	1,778	11	10	203	212
Alaska	1,150	1,320	-13.0%	1,098	1,263	0	0	4	4	49	53
Hawaii	9,187	9,140	0.5%	7,313	7,197	1,712	1,778	8	6	155	159
U.S. Total	23,897	16,691	43.0%	15,362	12,619	7,842	3,548	238	145	455	379

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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, October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	22.0%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	1	NM	0	0	0	0	0	0	NM	1
East North Central	44	84	-48.0%	37	52	0	25	0	0	7	7
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	42	52	-18.0%	36	44	0	0	0	0	7	7
Ohio	0	25	-99.0%	0	0	0	25	0	0	0	0
Wisconsin	2	7	-78.0%	2	7	0	0	0	0	0	0
West North Central	0	0	-20.0%	0	0	0	0	0	0	0	0
Iowa	0	0	-20.0%	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	37	37	-1.5%	35	35	0	0	0	0	NM	2
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	35	35	-0.9%	35	35	0	0	0	0	0	0
Georgia	NM	2	NM	0	0	0	0	0	0	NM	2
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	92	90	2.4%	86	84	0	0	0	0	6	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	89	86	3.5%	86	84	0	0	0	0	2	2
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3	4	-20.0%	0	0	0	0	0	0	3	4
Mountain	15	15	3.1%	0	0	15	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	15	15	3.1%	0	0	15	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	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	190	228	-17.0%	158	171	15	40	0	0	16	18

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Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	22	-18.0%	0	0	0	0	0	0	18	22
New Jersey	6	6	-4.0%	0	0	0	0	0	0	6	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	12	16	-23.0%	0	0	0	0	0	0	12	16
East North Central	707	800	-12.0%	474	417	184	323	0	0	49	59
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	485	442	9.9%	438	383	0	0	0	0	47	59
Ohio	185	323	-43.0%	0	0	184	323	0	0	1	0
Wisconsin	36	35	3.8%	36	35	0	0	0	0	0	0
West North Central	7	5	23.0%	0	0	0	0	1	2	5	3
Iowa	7	5	23.0%	0	0	0	0	1	2	5	3
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	543	313	73.0%	512	286	0	0	0	0	30	27
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	512	286	79.0%	512	286	0	0	0	0	0	0
Georgia	30	27	12.0%	0	0	0	0	0	0	30	27
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	166	-100.0%	0	166	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	166	-100.0%	0	166	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	1,375	1,464	-6.1%	1,317	1,396	0	0	0	0	57	68
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,339	1,427	-6.2%	1,317	1,396	0	0	0	0	21	31
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	36	37	-3.3%	0	0	0	0	0	0	36	37
Mountain	124	134	-7.8%	0	0	124	134	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	124	134	-7.8%	0	0	124	134	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	2,773	2,905	-4.6%	2,304	2,266	308	458	1	2	160	179

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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, October 2018 and October 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	32,575	32,502	0.2%	NM	432	31,358	30,931	414	467	623	671
Connecticut	12,101	9,989	21.0%	29	53	11,630	9,440	180	203	262	293
Maine	2,057	1,153	78.0%	0	0	1,928	1,035	11	13	117	105
Massachusetts	9,825	13,753	-29.0%	NM	325	9,366	13,101	201	226	109	100
New Hampshire	3,221	1,688	91.0%	2	54	3,201	1,614	1	3	18	16
Rhode Island	5,369	5,918	-9.3%	0	0	5,233	5,740	20	22	116	156
Vermont	2	0	866.0%	1	0	0	0	1	0	0	0
Middle Atlantic	104,011	101,650	2.3%	5,364	4,853	96,825	95,060	597	565	1,226	1,173
New Jersey	22,334	21,143	5.6%	NM	180	21,949	20,716	59	87	165	160
New York	32,826	27,625	19.0%	5,201	4,662	26,755	22,296	502	425	367	242
Pennsylvania	48,851	52,882	-7.6%	2	10	48,120	52,049	35	52	693	771
East North Central	80,712	65,378	23.0%	27,330	21,059	51,218	41,609	702	662	1,461	2,047
Illinois	12,150	11,834	2.7%	NM	306	10,699	10,894	243	201	339	434
Indiana	13,972	10,584	32.0%	6,023	4,340	7,485	5,204	46	75	419	965
Michigan	16,741	17,434	-4.0%	5,446	5,658	10,707	11,229	259	253	329	294
Ohio	27,086	15,479	75.0%	5,375	1,619	21,519	13,684	85	105	108	71
Wisconsin	10,762	10,046	7.1%	9,617	9,136	808	599	69	28	267	282
West North Central	17,454	10,993	59.0%	15,090	9,305	1,883	1,268	131	130	349	290
Iowa	3,371	2,808	20.0%	3,096	2,533	NM	11	43	46	232	219
Kansas	2,707	2,100	29.0%	2,651	2,092	0	0	0	0	56	NM
Minnesota	3,759	2,531	49.0%	2,799	1,736	884	727	36	29	40	39
Missouri	5,578	2,494	124.0%	4,518	1,900	999	531	52	53	10	11
Nebraska	887	400	122.0%	887	398	0	0	0	2	0	0
North Dakota	541	324	67.0%	530	311	0	0	0	0	11	13
South Dakota	610	335	82.0%	610	335	0	0	0	0	0	0
South Atlantic	237,444	201,985	18.0%	185,316	165,335	48,998	33,877	816	602	2,313	2,171
Delaware	4,405	3,888	13.0%	43	39	3,870	3,509	0	0	492	341
District of Columbia	25	0	--	0	0	0	0	25	0	0	0
Florida	119,894	107,737	11.0%	112,803	102,072	6,399	4,999	10	11	681	655
Georgia	31,689	29,585	7.1%	22,349	21,372	9,048	7,948	0	0	292	264
Maryland	11,141	4,235	163.0%	1,628	913	8,781	2,772	688	509	44	41
North Carolina	29,248	21,753	34.0%	23,294	18,544	5,814	3,083	81	77	59	50
South Carolina	16,971	12,265	38.0%	12,724	9,632	4,170	2,564	1	0	75	70
Virginia	22,496	20,231	11.0%	12,319	12,565	9,647	7,103	10	4	519	559
West Virginia	1,575	2,291	-31.0%	157	200	1,267	1,899	0	0	150	191
East South Central	82,348	64,817	27.0%	56,790	44,844	24,426	18,947	80	70	1,052	956
Alabama	36,718	30,628	20.0%	13,806	12,745	22,355	17,336	0	0	557	547
Kentucky	9,544	3,753	154.0%	8,910	3,149	554	520	0	0	81	84
Mississippi	24,153	24,405	-1.0%	22,451	23,138	1,518	1,080	0	0	184	187
Tennessee	11,932	6,031	98.0%	11,622	5,813	0	10	80	70	230	139
West South Central	210,892	173,436	22.0%	88,198	65,253	90,848	78,449	374	298	31,471	29,436
Arkansas	14,150	9,930	43.0%	13,358	9,247	653	515	NM	34	105	134
Louisiana	40,313	36,967	9.0%	25,830	23,572	2,120	2,550	72	34	12,290	10,812
Oklahoma	22,576	16,323	38.0%	16,993	9,866	5,273	6,221	0	0	310	236
Texas	133,852	110,216	21.0%	32,017	22,569	82,802	69,163	268	230	18,765	18,254
Mountain	69,306	55,186	26.0%	49,218	40,820	18,876	13,019	193	194	1,019	1,153
Arizona	29,234	21,774	34.0%	17,491	13,560	11,689	8,161	54	53	0	0
Colorado	9,716	6,027	61.0%	7,354	5,002	2,333	995	0	0	29	30
Idaho	1,064	1,367	-22.0%	NM	371	698	946	15	15	50	35
Montana	393	404	-2.9%	243	290	147	112	0	0	3	3
Nevada	15,052	16,712	-9.9%	13,613	15,105	1,283	1,351	21	22	135	235
New Mexico	6,741	5,972	13.0%	4,017	4,516	2,679	1,409	44	47	1	0
Utah	6,494	2,463	164.0%	5,998	1,904	47	46	59	58	391	455
Wyoming	612	467	31.0%	201	71	0	0	0	0	410	395
Pacific Contiguous	81,051	83,536	-3.0%	30,591	31,252	43,997	45,602	981	1,117	5,482	5,565
California	64,745	61,948	4.5%	22,755	19,318	35,614	36,073	964	1,089	5,412	5,469
Oregon	11,001	12,122	-9.3%	4,230	5,844	6,710	6,217	17	19	44	42
Washington	5,304	9,466	-44.0%	3,606	6,091	1,672	3,313	0	8	26	54
Pacific Noncontiguous	2,277	2,191	3.9%	2,254	2,174	0	0	0	0	24	17
Alaska	2,277	2,191	3.9%	2,254	2,174	0	0	0	0	24	17
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	918,069	791,673	16.0%	460,333	385,327	408,429	358,763	4,287	4,105	45,020	43,478

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

Table 2.11.B. Consumption of Nautral Gas for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	321,690	313,210	2.7%	2,686	2,702	308,079	299,387	4,126	4,492	6,798	6,629
Connecticut	114,938	92,180	25.0%	308	695	109,997	86,690	1,703	1,853	2,930	2,942
Maine	16,928	14,557	16.0%	0	0	15,368	13,173	125	128	1,435	1,257
Massachusetts	123,954	139,469	-11.0%	1,976	1,613	118,815	134,510	2,067	2,270	1,096	1,077
New Hampshire	19,872	22,896	-13.0%	392	383	19,289	22,313	25	34	166	165
Rhode Island	45,984	44,094	4.3%	0	0	44,610	42,701	202	205	1,171	1,188
Vermont	14	13	2.6%	10	10	0	0	4	3	0	0
Middle Atlantic	1,048,339	991,404	5.7%	85,928	74,764	943,712	899,394	6,564	6,706	12,135	10,541
New Jersey	238,485	227,403	4.9%	NM	1,833	234,139	223,048	898	947	1,677	1,575
New York	348,475	317,137	9.9%	84,100	72,872	255,706	237,134	5,092	5,196	3,577	1,934
Pennsylvania	461,378	446,864	3.2%	57	58	453,867	439,212	574	563	6,881	7,032
East North Central	873,064	645,414	35.0%	320,166	229,718	525,811	390,162	7,209	6,794	19,878	18,740
Illinois	147,869	128,295	15.0%	13,508	7,585	128,192	114,466	2,405	2,115	3,763	4,129
Indiana	158,999	108,552	46.0%	70,074	45,511	78,484	53,434	755	829	9,686	8,779
Michigan	199,369	162,564	23.0%	75,854	59,718	118,030	97,665	2,543	2,445	2,942	2,736
Ohio	251,387	160,971	56.0%	57,498	42,292	191,999	116,887	1,036	1,116	854	676
Wisconsin	115,439	85,031	36.0%	103,232	74,612	9,105	7,710	470	289	2,632	2,420
West North Central	214,407	134,069	60.0%	187,200	116,508	22,927	13,984	1,337	1,240	2,944	2,337
Iowa	46,369	24,309	91.0%	44,051	22,448	NM	11	416	382	1,899	1,468
Kansas	30,393	17,542	73.0%	30,056	17,380	0	0	0	0	337	162
Minnesota	59,115	40,878	45.0%	49,553	34,404	8,695	5,551	389	425	477	498
Missouri	55,321	35,546	56.0%	40,467	26,570	14,229	8,422	503	422	123	131
Nebraska	9,679	5,562	74.0%	9,650	5,553	0	0	29	10	0	0
North Dakota	6,050	5,471	11.0%	5,943	5,394	0	0	0	0	108	77
South Dakota	7,479	4,761	57.0%	7,479	4,761	0	0	0	0	0	0
South Atlantic	2,309,120	2,038,283	13.0%	1,839,936	1,663,254	439,346	347,609	8,649	6,513	21,189	20,907
Delaware	35,614	44,543	-20.0%	250	177	31,963	40,339	0	0	3,400	4,028
District of Columbia	538	542	-0.7%	0	0	0	0	538	542	0	0
Florida	1,101,807	1,019,301	8.1%	1,036,554	964,356	58,335	48,509	94	112	6,824	6,324
Georgia	329,859	313,791	5.1%	240,860	234,763	85,730	75,939	0	0	3,269	3,088
Maryland	95,666	43,896	118.0%	22,034	1,555	66,081	36,950	7,161	5,023	390	369
North Carolina	283,985	230,033	23.0%	238,945	196,050	43,666	32,765	795	792	578	426
South Carolina	147,903	112,065	32.0%	112,904	95,792	34,340	15,626	2	3	656	644
Virginia	302,640	263,158	15.0%	186,603	169,012	111,020	89,746	58	41	4,959	4,360
West Virginia	11,108	10,954	1.4%	1,785	1,551	8,210	7,736	0	0	1,113	1,668
East South Central	872,213	727,693	20.0%	602,503	499,096	258,135	217,717	862	768	10,713	10,112
Alabama	360,766	310,978	16.0%	131,452	112,838	223,558	192,791	0	0	5,757	5,350
Kentucky	99,839	65,844	52.0%	92,419	61,614	6,753	3,454	0	0	666	775
Mississippi	320,646	284,546	13.0%	291,088	261,326	27,711	21,355	39	24	1,808	1,840
Tennessee	90,962	66,325	37.0%	87,544	63,317	113	117	823	744	2,482	2,146
West South Central	2,249,731	1,897,614	19.0%	861,756	692,315	1,069,258	890,279	3,824	3,836	314,892	311,185
Arkansas	126,468	105,474	20.0%	118,877	98,535	5,977	5,448	346	357	1,267	1,134
Louisiana	382,014	358,626	6.5%	234,929	209,847	27,294	25,903	610	488	119,181	122,387
Oklahoma	276,515	197,042	40.0%	174,764	123,845	99,017	71,537	0	0	2,733	1,660
Texas	1,464,734	1,236,472	18.0%	333,186	260,088	936,970	787,390	2,868	2,990	191,711	186,004
Mountain	685,144	570,580	20.0%	531,910	444,965	140,150	112,998	1,821	1,851	11,264	10,766
Arizona	243,209	195,730	24.0%	171,767	136,975	70,919	58,228	523	527	0	0
Colorado	105,491	79,167	33.0%	85,406	64,812	19,814	14,074	0	0	271	281
Idaho	18,245	15,763	16.0%	8,738	8,452	8,895	6,673	141	142	471	496
Montana	3,840	3,968	-3.2%	3,086	3,109	744	845	0	0	10	14
Nevada	172,371	166,762	3.4%	157,173	151,968	12,452	12,466	223	204	2,524	2,123
New Mexico	80,608	64,759	24.0%	53,900	44,016	26,094	20,239	432	491	181	14
Utah	55,922	39,955	40.0%	50,054	34,624	1,221	460	502	486	4,145	4,386
Wyoming	5,458	4,476	22.0%	1,787	1,010	10	13	0	0	3,661	3,453
Pacific Contiguous	716,957	672,915	6.5%	283,137	263,321	368,806	343,207	9,556	9,805	55,458	56,583
California	552,152	534,526	3.3%	191,707	186,401	296,470	282,699	9,312	9,614	54,664	55,813
Oregon	97,485	78,524	24.0%	49,411	40,234	47,463	37,753	181	140	430	397
Washington	67,321	59,865	12.0%	42,019	36,685	24,873	22,755	64	51	365	373
Pacific Noncontiguous	28,732	23,837	21.0%	28,508	23,591	0	0	3	22	221	224
Alaska	28,732	23,837	21.0%	28,508	23,591	0	0	3	22	221	224
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	9,319,396	8,015,019	16.0%	4,743,729	4,010,233	4,076,223	3,514,735	43,950	42,026	455,494	448,025

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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 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, October 2018 and October 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	825	786	4.9%	0	0	799	762	27	24	0	0
Connecticut	NM	36	NM	0	0	NM	36	0	0	0	0
Maine	NM	59	NM	0	0	NM	59	0	0	0	0
Massachusetts	310	270	15.0%	0	0	310	270	0	0	0	0
New Hampshire	99	149	-34.0%	0	0	NM	125	27	24	0	0
Rhode Island	294	252	17.0%	0	0	294	252	0	0	0	0
Vermont	NM	20	NM	0	0	NM	20	0	0	0	0
Middle Atlantic	4,503	4,404	2.2%	0	0	4,349	4,224	76	68	78	113
New Jersey	681	692	-1.6%	0	0	653	663	28	29	0	0
New York	1,496	1,399	7.0%	0	0	1,496	1,399	0	0	0	0
Pennsylvania	2,326	2,314	0.5%	0	0	2,200	2,163	48	38	78	113
East North Central	5,234	5,120	2.2%	761	601	4,430	4,481	20	28	23	10
Illinois	800	874	-8.4%	NM	26	726	848	0	0	0	0
Indiana	792	677	17.0%	686	575	105	101	0	0	0	0
Michigan	1,806	1,737	4.0%	0	0	1,806	1,737	0	0	0	0
Ohio	916	938	-2.3%	0	0	916	938	0	0	0	0
Wisconsin	919	895	2.7%	0	0	876	857	20	28	23	10
West North Central	994	825	21.0%	347	265	648	560	0	0	0	0
Iowa	196	202	-3.1%	0	0	196	202	0	0	0	0
Kansas	NM	98	NM	0	0	NM	98	0	0	0	0
Minnesota	318	240	33.0%	NM	56	NM	183	0	0	0	0
Missouri	NM	152	NM	NM	75	NM	77	0	0	0	0
Nebraska	NM	134	NM	NM	134	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,466	4,594	-2.8%	453	381	3,736	3,816	132	222	145	174
Delaware	NM	105	NM	0	0	NM	95	0	0	NM	10
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	766	906	-15.0%	153	138	613	768	0	0	0	0
Georgia	590	534	10.0%	0	0	590	497	0	0	0	37
Maryland	238	278	-14.0%	0	0	NM	180	89	97	0	0
North Carolina	901	1,074	-16.0%	0	0	876	968	NM	106	0	0
South Carolina	467	392	19.0%	295	233	NM	32	0	0	136	127
Virginia	1,391	1,305	6.6%	4	9	1,368	1,277	NM	19	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	507	484	4.6%	NM	177	300	307	0	0	0	0
Alabama	NM	98	NM	0	0	NM	98	0	0	0	0
Kentucky	235	196	20.0%	NM	177	NM	19	0	0	0	0
Mississippi	NM	29	NM	0	0	NM	29	0	0	0	0
Tennessee	NM	162	NM	0	0	NM	162	0	0	0	0
West South Central	1,135	903	26.0%	0	0	1,085	849	51	54	0	0
Arkansas	NM	19	NM	0	0	NM	19	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	53	NM	0	0	NM	53	0	0	0	0
Texas	959	831	15.0%	0	0	908	777	51	54	0	0
Mountain	599	523	14.0%	NM	23	521	461	55	39	0	0
Arizona	NM	80	NM	0	0	NM	80	0	0	0	0
Colorado	NM	111	NM	0	0	NM	111	0	0	0	0
Idaho	NM	94	NM	NM	23	NM	50	20	20	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	NM	129	NM	0	0	NM	129	0	0	0	0
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	0
Utah	NM	106	NM	0	0	NM	88	35	18	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,742	4,350	9.0%	NM	590	3,339	2,782	1,283	957	0	21
California	4,160	3,482	19.0%	NM	203	2,904	2,343	1,246	915	0	21
Oregon	473	492	-4.0%	NM	121	326	331	37	41	0	0
Washington	NM	375	NM	0	267	NM	108	0	0	0	0
Pacific Noncontiguous	61	74	-17.0%	0	0	0	0	61	74	0	0
Alaska	61	74	-17.0%	0	0	0	0	61	74	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	23,066	22,063	4.5%	1,909	2,037	19,207	18,243	1,704	1,465	246	318

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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 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	8,780	8,864	-0.9%	0	0	8,586	8,664	193	200	0	0
Connecticut	394	363	8.6%	0	0	394	363	0	0	0	0
Maine	634	599	5.9%	0	0	634	599	0	0	0	0
Massachusetts	3,178	3,063	3.8%	0	0	3,178	3,063	0	0	0	0
New Hampshire	947	1,295	-27.0%	0	0	753	1,095	193	200	0	0
Rhode Island	3,409	3,329	2.4%	0	0	3,409	3,329	0	0	0	0
Vermont	NM	216	NM	0	0	NM	216	0	0	0	0
Middle Atlantic	46,491	44,598	4.2%	0	0	44,874	42,665	618	661	998	1,272
New Jersey	6,798	6,377	6.6%	0	0	6,548	6,106	250	271	0	0
New York	14,755	13,898	6.2%	0	0	14,755	13,898	0	0	0	0
Pennsylvania	24,937	24,323	2.5%	0	0	23,571	22,661	368	390	998	1,272
East North Central	53,091	52,889	0.4%	7,697	6,147	44,921	46,259	261	301	212	181
Illinois	8,514	10,679	-20.0%	699	365	7,815	10,314	0	0	0	0
Indiana	8,029	6,686	20.0%	6,998	5,744	1,031	942	0	0	0	0
Michigan	18,104	17,266	4.9%	0	0	18,104	17,266	0	0	0	0
Ohio	9,030	9,116	-0.9%	0	0	9,030	9,116	0	0	0	0
Wisconsin	9,414	9,142	3.0%	0	38	8,941	8,621	261	301	212	181
West North Central	10,451	9,221	13.0%	3,690	2,964	6,761	6,257	0	0	0	0
Iowa	2,131	2,159	-1.3%	0	0	2,131	2,159	0	0	0	0
Kansas	1,222	1,085	13.0%	0	0	1,222	1,085	0	0	0	0
Minnesota	3,249	2,707	20.0%	874	604	2,375	2,103	0	0	0	0
Missouri	2,306	1,800	28.0%	1,272	889	1,034	911	0	0	0	0
Nebraska	1,544	1,471	5.0%	1,544	1,471	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	45,958	44,956	2.2%	4,514	3,723	38,785	37,614	1,210	1,987	1,449	1,632
Delaware	1,150	1,048	9.8%	0	0	1,050	949	0	0	100	99
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	7,701	8,657	-11.0%	1,465	1,329	6,236	7,328	0	0	0	0
Georgia	6,647	5,947	12.0%	0	0	6,555	5,684	0	0	92	263
Maryland	2,530	2,405	5.2%	0	0	1,697	1,562	833	844	0	0
North Carolina	9,266	9,629	-3.8%	0	0	9,050	8,685	216	944	0	0
South Carolina	4,633	3,914	18.0%	3,006	2,329	370	315	0	0	1,258	1,270
Virginia	14,030	13,355	5.1%	43	65	13,826	13,090	161	200	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	5,113	4,985	2.6%	2,110	2,190	3,003	2,795	0	0	0	0
Alabama	929	911	2.0%	0	0	929	911	0	0	0	0
Kentucky	2,331	2,422	-3.8%	2,110	2,190	221	232	0	0	0	0
Mississippi	NM	175	NM	0	0	NM	175	0	0	0	0
Tennessee	1,635	1,478	11.0%	0	0	1,635	1,478	0	0	0	0
West South Central	12,198	12,003	1.6%	0	0	11,706	11,580	493	423	0	0
Arkansas	1,399	1,269	10.0%	0	0	1,399	1,269	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	410	365	12.0%	0	0	410	365	0	0	0	0
Texas	10,389	10,368	0.2%	0	0	9,897	9,946	493	423	0	0
Mountain	5,980	5,476	9.2%	229	209	5,297	4,895	454	372	0	0
Arizona	843	818	3.0%	0	0	843	818	0	0	0	0
Colorado	972	1,141	-15.0%	0	0	972	1,141	0	0	0	0
Idaho	739	822	-10.0%	229	209	348	447	162	166	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,599	1,317	21.0%	0	0	1,599	1,317	0	0	0	0
New Mexico	NM	17	NM	0	0	NM	17	0	0	0	0
Utah	1,735	1,359	28.0%	0	0	1,443	1,153	292	206	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	49,173	47,629	3.2%	3,560	5,589	33,516	29,911	12,097	12,004	0	125
California	41,946	39,226	6.9%	858	1,657	29,336	25,829	11,753	11,615	0	125
Oregon	4,675	4,577	2.2%	1,140	1,142	3,191	3,046	344	389	0	0
Washington	2,551	3,827	-33.0%	1,562	2,790	989	1,037	0	0	0	0
Pacific Noncontiguous	679	635	6.9%	0	0	0	0	679	635	0	0
Alaska	679	635	6.9%	0	0	0	0	679	635	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	237,913	231,255	2.9%	21,799	20,821	197,449	190,640	16,005	16,582	2,659	3,211

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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, October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	292	301	-2.8%	0	0	280	284	12	17	0	0
Connecticut	100	101	-1.0%	0	0	100	101	0	0	0	0
Maine	20	26	-22.0%	0	0	8	9	12	17	0	0
Massachusetts	161	163	-0.8%	0	0	161	163	0	0	0	0
New Hampshire	11	11	-4.1%	0	0	11	11	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	460	462	-0.2%	0	0	370	361	91	101	0	0
New Jersey	115	118	-2.2%	0	0	90	88	25	30	0	0
New York	177	176	0.3%	0	0	133	126	44	50	0	0
Pennsylvania	169	168	0.6%	0	0	147	147	22	21	0	0
East North Central	19	18	8.2%	3	3	0	0	17	15	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	1	28.0%	0	0	0	0	2	1	0	0
Michigan	15	14	8.6%	0	0	0	0	15	14	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	3	-1.8%	3	3	0	0	0	0	0	0
West North Central	51	53	-4.2%	40	30	11	22	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	51	53	-4.2%	40	30	11	22	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	450	392	15.0%	0	0	411	348	39	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	289	288	0.4%	0	0	289	288	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	57	59	-3.5%	0	0	57	59	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	103	45	131.0%	0	0	64	0	39	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	0	1	-59.0%	0	0	0	0	0	0	0	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	1	-59.0%	0	0	0	0	0	0	0	1
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	58	51	13.0%	0	0	58	51	0	0	0	0
California	36	27	32.0%	0	0	36	27	0	0	0	0
Oregon	7	10	-25.0%	0	0	7	10	0	0	0	0
Washington	14	14	0.6%	0	0	14	14	0	0	0	0
Pacific Noncontiguous	41	40	2.7%	0	0	0	0	41	40	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	41	40	2.7%	0	0	0	0	41	40	0	0
U.S. Total	1,372	1,317	4.1%	43	33	1,130	1,065	199	218	0	1

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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 October 2018 and October 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	2,924	3,085	-5.2%	0	0	2,779	2,915	145	170	0	0
Connecticut	980	1,036	-5.4%	0	0	980	1,036	0	0	0	0
Maine	238	265	-10.0%	0	0	93	95	145	170	0	0
Massachusetts	1,604	1,680	-4.5%	0	0	1,604	1,680	0	0	0	0
New Hampshire	102	105	-2.7%	0	0	102	105	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	4,477	4,566	-2.0%	0	0	3,564	3,589	913	977	0	0
New Jersey	1,194	1,191	0.3%	0	0	904	899	290	292	0	0
New York	1,656	1,723	-3.9%	0	0	1,238	1,249	418	475	0	0
Pennsylvania	1,627	1,652	-1.5%	0	0	1,422	1,441	205	211	0	0
East North Central	194	199	-2.4%	29	30	0	0	165	168	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	16	15	12.0%	0	0	0	0	16	15	0	0
Michigan	149	154	-3.0%	0	0	0	0	149	154	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	29	30	-5.9%	29	30	0	0	0	0	0	0
West North Central	546	536	1.9%	362	330	184	196	0	10	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	546	536	1.9%	362	330	184	196	0	10	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,693	4,297	9.2%	0	0	4,312	3,861	382	436	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	3,176	3,268	-2.8%	0	0	3,176	3,268	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	546	527	3.7%	0	0	546	527	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	970	502	93.0%	0	0	589	66	382	436	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	9	7	29.0%	0	0	0	0	0	0	9	7
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	9	7	29.0%	0	0	0	0	0	0	9	7
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	586	614	-4.5%	0	0	586	614	0	0	0	0
California	360	390	-7.5%	0	0	360	390	0	0	0	0
Oregon	92	91	1.7%	0	0	92	91	0	0	0	0
Washington	134	134	0.1%	0	0	134	134	0	0	0	0
Pacific Noncontiguous	374	355	5.4%	0	0	0	0	374	355	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	374	355	5.4%	0	0	0	0	374	355	0	0
U.S. Total	13,802	13,659	1.1%	390	361	11,424	11,175	1,979	2,116	9	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.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, October 2018 and October 2017 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	4,331	3,820	13.0%	716	809	3,239	2,666	1	1	375	344
Connecticut	NM	104	NM	0	0	NM	104	0	0	0	0
Maine	1,763	1,397	26.0%	0	0	1,388	1,052	0	0	375	344
Massachusetts	NM	174	NM	0	0	NM	174	0	0	0	0
New Hampshire	1,684	1,595	5.6%	370	436	1,315	1,158	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	519	550	-5.7%	347	373	NM	177	1	0	0	0
Middle Atlantic	880	1,038	-15.0%	0	0	576	573	0	0	304	466
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	661	638	3.7%	0	0	576	573	0	0	85	65
Pennsylvania	219	400	-45.0%	0	0	0	0	0	0	219	400
East North Central	1,845	2,021	-8.7%	352	449	927	981	0	0	565	591
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,189	1,240	-4.2%	0	0	916	969	0	0	272	271
Ohio	90	102	-12.0%	0	0	11	11	0	0	79	91
Wisconsin	566	679	-17.0%	352	449	0	0	0	0	214	229
West North Central	491	930	-47.0%	126	180	112	510	17	26	237	215
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	478	904	-47.0%	126	180	112	510	4	0	237	215
Missouri	13	26	-49.0%	0	0	0	0	13	26	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	9,770	9,527	2.6%	1,970	1,552	2,547	2,704	8	7	5,245	5,265
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,966	1,804	9.0%	697	638	558	474	0	0	711	691
Georgia	2,470	2,840	-13.0%	0	0	443	784	0	0	2,027	2,056
Maryland	54	43	26.0%	0	0	0	0	8	7	46	36
North Carolina	1,435	1,513	-5.2%	0	0	860	913	0	0	575	600
South Carolina	1,353	1,412	-4.1%	148	154	464	514	0	0	741	745
Virginia	2,492	1,915	30.0%	1,126	759	NM	19	0	0	1,145	1,137
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,838	3,054	-7.1%	0	0	170	199	0	0	2,668	2,854
Alabama	1,724	1,925	-10.0%	0	0	170	199	0	0	1,553	1,726
Kentucky	142	164	-13.0%	0	0	0	0	0	0	142	164
Mississippi	581	643	-9.7%	0	0	0	0	0	0	581	643
Tennessee	391	321	22.0%	0	0	0	0	0	0	391	321
West South Central	2,217	2,740	-19.0%	0	0	0	241	0	0	2,217	2,498
Arkansas	488	608	-20.0%	0	0	0	0	0	0	488	608
Louisiana	1,334	1,323	0.8%	0	0	0	0	0	0	1,334	1,323
Oklahoma	34	166	-80.0%	0	0	0	0	0	0	34	166
Texas	361	643	-44.0%	0	0	0	241	0	0	361	402
Mountain	468	300	56.0%	0	0	327	220	0	0	141	80
Arizona	NM	108	NM	0	0	NM	108	0	0	0	0
Colorado	98	87	12.0%	0	0	98	87	0	0	0	0
Idaho	153	85	80.0%	0	0	31	25	0	0	122	60
Montana	20	20	-2.1%	0	0	0	0	0	0	20	20
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	4,913	5,522	-11.0%	327	398	2,998	3,689	0	0	1,588	1,435
California	3,349	3,745	-11.0%	0	0	2,819	3,339	0	0	530	406
Oregon	528	755	-30.0%	0	0	NM	350	0	0	349	406
Washington	1,036	1,022	1.4%	327	398	0	0	0	0	709	623
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	27,753	28,951	-4.1%	3,491	3,387	10,896	11,782	27	33	13,340	13,748

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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through October 2018 and October 2017 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	44,012	46,545	-5.4%	6,420	7,078	33,284	35,234	17	44	4,292	4,188
Connecticut	2,101	1,925	9.2%	0	0	2,101	1,925	0	0	0	0
Maine	18,757	19,349	-3.1%	0	0	14,456	15,124	9	36	4,292	4,188
Massachusetts	1,688	1,890	-11.0%	0	0	1,688	1,890	0	0	0	0
New Hampshire	16,645	18,262	-8.9%	3,306	3,831	13,339	14,431	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	4,822	5,120	-5.8%	3,114	3,247	1,699	1,865	9	8	0	0
Middle Atlantic	9,782	10,877	-10.0%	0	0	5,766	5,610	0	0	4,016	5,267
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	6,595	6,438	2.4%	0	0	5,764	5,609	0	0	832	830
Pennsylvania	3,187	4,439	-28.0%	0	0	2	1	0	0	3,185	4,438
East North Central	20,252	20,198	0.3%	4,161	3,922	9,976	10,281	0	0	6,115	5,995
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	12,884	13,058	-1.3%	0	0	9,856	10,157	0	0	3,029	2,902
Ohio	950	1,059	-10.0%	0	0	121	125	0	0	829	934
Wisconsin	6,419	6,081	5.5%	4,161	3,922	0	0	0	0	2,257	2,160
West North Central	7,653	9,011	-15.0%	1,507	1,628	3,341	4,690	321	298	2,484	2,396
Iowa	2	10	-80.0%	0	0	0	0	2	10	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	7,398	8,740	-15.0%	1,507	1,628	3,341	4,690	66	26	2,484	2,396
Missouri	253	261	-3.3%	0	0	0	0	253	261	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	104,165	102,148	2.0%	22,309	18,679	27,608	30,380	111	34	54,137	53,055
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	18,844	16,685	13.0%	6,164	3,381	5,417	6,111	0	0	7,263	7,193
Georgia	27,587	27,250	1.2%	0	0	6,718	7,419	0	0	20,868	19,832
Maryland	551	550	0.1%	0	0	0	0	111	34	440	516
North Carolina	13,668	14,352	-4.8%	0	0	8,063	8,780	0	0	5,605	5,572
South Carolina	14,977	15,715	-4.7%	1,529	1,520	4,992	5,527	0	0	8,456	8,667
Virginia	28,538	27,595	3.4%	14,617	13,778	2,418	2,543	0	0	11,504	11,274
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	30,519	30,673	-0.5%	0	0	1,773	1,766	0	0	28,746	28,907
Alabama	19,640	19,744	-0.5%	0	0	1,773	1,766	0	0	17,867	17,978
Kentucky	1,470	1,458	0.9%	0	0	0	0	0	0	1,470	1,458
Mississippi	5,687	5,843	-2.7%	0	0	0	0	0	0	5,687	5,843
Tennessee	3,722	3,628	2.6%	0	0	0	0	0	0	3,722	3,628
West South Central	25,903	24,785	4.5%	0	0	2,191	1,218	0	0	23,712	23,567
Arkansas	5,632	5,678	-0.8%	0	0	0	0	0	0	5,632	5,678
Louisiana	12,896	12,872	0.2%	0	0	0	0	0	0	12,896	12,872
Oklahoma	1,457	1,288	13.0%	0	0	22	0	0	0	1,434	1,288
Texas	5,919	4,947	20.0%	0	0	2,169	1,218	0	0	3,750	3,729
Mountain	4,730	5,313	-11.0%	0	0	3,271	3,954	0	0	1,460	1,359
Arizona	1,988	2,600	-24.0%	0	0	1,988	2,600	0	0	0	0
Colorado	1,020	1,101	-7.3%	0	0	1,020	1,101	0	0	0	0
Idaho	1,516	1,406	7.8%	0	0	263	253	0	0	1,253	1,154
Montana	207	205	0.6%	0	0	0	0	0	0	207	205
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	49,987	50,744	-1.5%	3,344	3,317	30,390	32,765	0	0	16,252	14,663
California	33,716	34,844	-3.2%	0	0	28,438	30,916	0	0	5,278	3,928
Oregon	5,642	5,446	3.6%	0	0	1,952	1,849	0	0	3,690	3,598
Washington	10,629	10,454	1.7%	3,344	3,317	0	0	0	0	7,285	7,137
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	297,004	300,294	-1.1%	37,742	34,623	117,600	125,898	449	376	141,213	139,396

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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Chapter 3

Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2008 - October 2018

	Electric Power Sector			Electric Utilities			Independent Power Producers		
Period	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
2008	161,589	40,804	739	127,463	26,108	468	34,126	14,696	270
2009	189,467	39,210	1,394	154,815	25,811	1,194	34,652	13,399	201
2010	174,917	35,706	1,019	143,744	24,798	850	31,173	10,908	168
2011	172,387	34,847	508	142,103	25,648	404	30,284	9,198	104
2012	185,116	32,224	495	150,942	23,875	414	34,174	8,349	81
2013	147,884	31,673	390	120,792	22,494	303	27,092	9,179	86
2014	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142
2015	195,548	32,884	1,340	153,226	21,443	1,163	42,322	11,441	177
2016	162,009	31,839	845	130,885	21,013	603	31,124	10,827	241
2017	137,687	29,294	864	114,782	20,253	692	22,905	9,041	171
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	31,565	780	128,256	20,846	589	30,652	10,719	191
Sept	156,567	31,637	768	127,532	20,924	566	29,035	10,713	201
October	160,932	31,831	813	131,510	21,017	606	29,422	10,813	207
November	170,277	32,503	833	138,091	21,583	606	32,185	10,921	227
December	162,009	31,839	845	130,885	21,013	603	31,124	10,827	241
Year 2017, End of Month Stocks									
January	156,214	31,761	768	125,221	20,912	540	30,994	10,849	228
February	160,502	31,500	756	128,051	20,731	544	32,451	10,769	212
March	161,815	32,174	785	128,645	21,565	558	33,170	10,609	227
April	163,937	31,969	844	130,461	21,531	622	33,475	10,438	221
May	162,542	31,578	772	129,300	21,123	562	33,242	10,455	210
June	158,014	31,208	742	126,564	21,038	535	31,450	10,171	207
July	145,811	31,033	724	117,584	20,901	544	28,228	10,132	180
August	141,204	30,750	749	114,228	20,687	569	26,976	10,064	181
Sept	139,571	30,346	798	113,247	20,516	624	26,324	9,830	173
October	141,463	30,227	862	114,939	20,336	683	26,524	9,891	179
November	143,424	30,501	859	117,758	20,626	677	25,666	9,875	182
December	137,687	29,294	864	114,782	20,253	692	22,905	9,041	171
Year 2018, End of Month Stocks									
January	123,513	26,070	967	103,912	18,126	587	19,601	7,944	380
February	120,858	26,841	934	101,745	18,582	570	19,113	8,259	364
March	126,407	26,766	953	106,644	18,678	621	19,763	8,088	332
April	128,964	26,656	947	108,127	18,659	655	20,837	7,997	292
May	128,363	26,753	948	107,433	18,722	656	20,930	8,031	292
June	121,448	26,308	817	101,778	18,316	534	19,670	7,992	283
July	110,731	25,730	884	93,357	17,791	623	17,375	7,939	261
August	104,138	24,571	809	88,189	16,950	588	15,950	7,621	221
Sept	100,717	24,402	749	84,887	16,736	564	15,829	7,666	184
October	105,193	24,305	687	87,594	16,502	519	17,599	7,803	168

Notes: See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms. Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 3.2 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by State, October 2018 and 2017

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	October 2018	October 2017	Percentage Change	October 2018	October 2017	Percentage Change	October 2018	October 2017	Percentage Change
New England	685	1,063	-35.5%	2,852	4,012	-28.9%	0	0	--
Connecticut	W	W	W	989	1,472	-32.8%	0	0	--
Maine	0	0	--	180	391	-54.0%	0	0	--
Massachusetts	W	W	W	1,277	1,601	-20.2%	0	0	--
New Hampshire	W	W	W	233	338	-31.0%	0	0	--
Rhode Island	W	W	W	136	164	-17.2%	0	0	--
Vermont	0	0	--	38	46	-19.1%	0	0	--
Middle Atlantic	3,269	4,648	-29.7%	4,475	5,610	-20.2%	0	0	--
New Jersey	W	141	W	575	644	-10.7%	0	0	--
New York	W	W	W	2,913	3,716	-21.6%	0	0	--
Pennsylvania	3,078	W	W	987	1,251	-21.1%	0	0	--
East North Central	20,922	29,797	-29.8%	969	1,079	-10.1%	W	215	W
Illinois	5,427	6,766	-19.8%	75	94	-19.9%	0	0	--
Indiana	6,193	8,279	-25.2%	96	110	-12.9%	W	W	W
Michigan	3,446	5,472	-37.0%	280	320	-12.7%	W	W	W
Ohio	2,838	5,461	-48.0%	327	371	-11.7%	W	W	W
Wisconsin	3,019	3,819	-21.0%	192	184	4.0%	W	W	W
West North Central	21,869	27,497	-20.5%	727	951	-23.6%	0	0	--
Iowa	3,852	6,611	-41.7%	87	152	-42.7%	0	0	--
Kansas	3,629	4,108	-11.7%	97	119	-18.4%	0	0	--
Minnesota	2,785	3,569	-22.0%	97	130	-25.3%	0	0	--
Missouri	7,467	8,095	-7.8%	304	352	-13.7%	0	0	--
Nebraska	2,205	3,209	-31.3%	86	119	-27.3%	0	0	--
North Dakota	W	W	W	20	31	-34.1%	0	0	--
South Dakota	W	W	W	35	49	-27.8%	0	0	--
South Atlantic	17,331	24,476	-29.2%	9,685	11,990	-19.2%	W	W	W
Delaware	W	W	W	336	408	-17.5%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,141	4,146	-24.2%	4,135	5,467	-24.4%	W	W	W
Georgia	3,538	5,101	-30.6%	704	801	-12.1%	0	0	--
Maryland	1,333	1,551	-14.1%	547	774	-29.3%	0	0	--
North Carolina	3,424	4,214	-18.7%	1,097	1,210	-9.3%	0	0	--
South Carolina	1,946	4,138	-53.0%	557	668	-16.6%	0	0	--
Virginia	730	W	W	2,175	2,511	-13.4%	0	0	--
West Virginia	W	3,940	W	133	151	-11.7%	W	W	W
East South Central	9,213	13,593	-32.2%	1,446	1,877	-23.0%	0	W	W
Alabama	W	3,083	W	301	326	-7.8%	0	0	--
Kentucky	4,676	7,021	-33.4%	248	241	2.7%	0	W	W
Mississippi	W	950	W	235	564	-58.4%	0	0	--
Tennessee	1,890	2,538	-25.5%	663	745	-11.1%	0	0	--
West South Central	14,210	19,427	-26.9%	1,520	1,703	-10.7%	W	W	W
Arkansas	2,558	2,720	-6.0%	152	183	-16.7%	0	0	--
Louisiana	1,755	2,310	-24.0%	325	377	-13.9%	W	W	W
Oklahoma	3,138	3,782	-17.0%	94	97	-3.2%	0	0	--
Texas	6,760	10,615	-36.3%	950	1,046	-9.2%	0	0	--
Mountain	16,867	19,608	-14.0%	335	402	-16.5%	W	W	W
Arizona	2,835	3,235	-12.4%	129	134	-3.2%	0	0	--
Colorado	3,948	4,378	-9.8%	121	142	-15.1%	0	0	--
Idaho	0	0	--	0	0	-26.4%	0	0	--
Montana	W	W	W	16	21	-23.3%	W	W	W
Nevada	W	W	W	2	5	-69.1%	0	0	--
New Mexico	W	W	W	11	35	-68.0%	0	0	--
Utah	3,963	5,042	-21.4%	30	30	2.2%	0	0	--
Wyoming	3,880	4,471	-13.2%	26	35	-25.6%	0	0	--
Pacific Contiguous	W	W	W	332	337	-1.5%	0	0	--
California	0	0	--	183	170	7.8%	0	0	--
Oregon	W	W	W	61	69	-11.0%	0	0	--
Washington	W	W	W	88	98	-10.8%	0	0	--
Pacific Noncontiguous	W	W	W	1,964	2,266	-13.4%	0	0	--
Alaska	0	W	W	56	286	-80.3%	0	0	--
Hawaii	W	W	W	1,907	1,980	-3.7%	0	0	--
U.S. Total	105,193	141,463	-25.6%	24,305	30,227	-19.6%	687	862	-20.3%

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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 Divison, October 2018 and 2017

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**October 2018**	**October 2017**	**Percentage Change**	**October 2018**	**October 2017**	**October 2018**	**October 2017**
Coal (Thousand Tons)							
New England	685	1,063	-35.5%	W	W	W	W
Middle Atlantic	3,269	4,648	-29.7%	0	W	3,269	W
East North Central	20,922	29,797	-29.8%	14,151	19,490	6,771	10,307
West North Central	21,869	27,497	-20.5%	21,869	27,497	0	0
South Atlantic	17,331	24,476	-29.2%	15,108	21,749	2,223	2,727
East South Central	9,213	13,593	-32.2%	9,213	13,593	0	0
West South Central	14,210	19,427	-26.9%	10,684	13,050	3,526	6,377
Mountain	16,867	19,608	-14.0%	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	**105,193**	**141,463**	**-25.6%**	**87,594**	**114,939**	**17,599**	**26,524**
Petroleum Liquids (Thousand Barrels)							
New England	2,852	4,012	-28.9%	393	639	2,459	3,373
Middle Atlantic	4,475	5,610	-20.2%	1,733	2,339	2,742	3,271
East North Central	969	1,079	-10.1%	643	746	327	332
West North Central	727	951	-23.6%	705	924	21	26
South Atlantic	9,685	11,990	-19.2%	8,001	9,800	1,684	2,189
East South Central	1,446	1,877	-23.0%	1,373	1,805	73	73
West South Central	1,520	1,703	-10.7%	1,179	1,308	341	395
Mountain	335	402	-16.5%	306	367	29	35
Pacific Contiguous	332	337	-1.5%	239	233	93	104
Pacific Noncontiguous	1,964	2,266	-13.4%	1,930	2,176	33	90
U.S. Total	**24,305**	**30,227**	**-19.6%**	**16,502**	**20,336**	**7,803**	**9,891**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	W	215	W	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	W	W	W	W
East South Central	0	W	W	0	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	**687**	**862**	**-20.3%**	**519**	**683**	**168**	**179**

W = Withheld to avoid disclosure of individual company data.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 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, 2008 - October 2018

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2008	65,818	91,214	4,556	161,589
2009	91,922	92,448	5,097	189,467
2010	81,108	86,915	6,894	174,917
2011	82,056	85,151	5,179	172,387
2012	86,437	93,833	4,846	185,116
2013	73,113	69,720	5,051	147,884
2014	72,771	72,552	6,225	151,548
2015	82,004	108,614	4,931	195,548
2016	67,241	90,376	4,393	162,009
2017	56,140	77,875	3,672	137,687
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	65,797	86,082	4,335	156,214
February	67,752	88,326	4,424	160,502
March	67,783	89,381	4,651	161,815
April	68,195	90,736	5,005	163,937
May	68,333	89,005	5,204	162,542
June	66,591	86,722	4,701	158,014
July	60,766	80,765	4,281	145,811
August	59,208	77,758	4,238	141,204
Sept	58,453	77,173	3,945	139,571
October	59,122	78,821	3,519	141,463
November	59,427	79,916	4,081	143,424
December	56,140	77,875	3,672	137,687
Year 2018, End of Month Stocks				
January	48,427	72,013	3,074	123,513
February	48,164	69,785	2,909	120,858
March	49,560	73,633	3,213	126,407
April	51,011	74,629	3,324	128,964
May	51,844	73,306	3,212	128,363
June	48,898	69,359	3,191	121,448
July	44,958	62,926	2,847	110,731
August	42,817	58,500	2,821	104,138
Sept	40,821	57,051	2,845	100,717
October	43,049	59,128	3,016	105,193

Notes: See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 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.

Chapter 4

Receipts and Cost of Fossil Fuels

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2008 - October 2018

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
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	12,261,029	642,364	2.06	39.27	1.28	94.7	96,977	16,127	11.86	71.35	0.49	68.0
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	1,111,151	58,266	2.09	39.82	1.26	89.7	9,669	1,609	11.97	72.02	0.46	75.3
February	1,007,951	52,810	2.06	39.28	1.30	107.4	6,294	1,044	11.67	70.33	0.49	62.2
March	976,663	50,872	2.07	39.71	1.35	101.5	12,196	2,053	11.62	69.03	0.54	113.5
April	901,976	46,731	2.08	40.06	1.33	102.9	6,356	1,055	11.62	69.98	0.48	65.2
May	957,276	49,830	2.09	40.13	1.33	95.8	6,638	1,108	11.44	68.50	0.47	59.9
June	1,042,460	54,220	2.07	39.86	1.31	90.4	7,471	1,241	10.91	65.68	0.47	65.9
July	1,095,129	57,572	2.06	39.15	1.22	81.1	6,695	1,121	10.90	65.08	0.48	65.6
August	1,187,341	62,125	2.05	39.16	1.29	92.8	7,022	1,162	11.12	67.19	0.47	63.6
Sept	1,015,150	53,538	2.02	38.29	1.23	95.9	6,518	1,083	11.68	70.30	0.49	61.6
October	999,170	52,462	2.03	38.70	1.27	102.4	7,578	1,255	11.93	72.04	0.52	69.1
November	984,968	52,087	2.04	38.56	1.26	99.9	9,787	1,622	12.29	74.17	0.47	88.5
December	981,795	51,851	2.04	38.66	1.26	86.8	10,753	1,773	13.99	84.87	0.46	46.8
Year 2018												
January	951,750	50,275	2.07	39.16	1.24	76.3	29,693	4,947	13.68	82.51	0.48	50.7
February	849,609	44,615	2.07	39.43	1.26	95.1	10,931	1,797	12.60	76.84	0.47	118.5
March	940,506	48,770	2.04	39.42	1.33	106.9	7,265	1,210	13.39	80.46	0.42	76.8
April	818,670	42,632	2.07	39.74	1.32	102.3	6,423	1,060	13.73	83.20	0.41	63.2
May	892,553	46,150	2.05	39.61	1.37	95.0	8,730	1,441	14.29	86.69	0.34	74.1
June	931,118	48,533	2.05	39.26	1.35	85.0	8,103	1,346	15.01	90.40	0.32	65.8
July	991,966	52,164	2.06	39.10	1.28	80.4	6,853	1,129	14.69	89.17	0.33	60.6
August	1,075,669	56,419	2.06	39.28	1.30	87.1	5,477	902	15.16	92.04	0.36	46.5
Sept	945,615	49,944	2.05	38.87	1.25	90.8	7,457	1,240	15.31	92.07	0.38	63.7
October	1,000,696	52,323	2.05	39.19	1.35	105.7	8,675	1,435	15.61	94.37	0.42	75.5
Year to Date												
2016	10,324,062	536,031	2.12	40.84	1.35	92.7	84,155	13,885	9.17	55.63	0.49	67.2
2017	10,294,267	538,426	2.06	39.40	1.29	95.0	76,438	12,732	11.51	69.10	0.49	70.4
2018	9,398,152	491,825	2.06	39.29	1.30	91.1	99,607	16,507	14.17	85.68	0.41	63.1
Rolling 12 Months Ending in October												
2017	12,486,477	653,165	2.06	39.46	1.29	95.7	94,092	15,653	11.30	67.94	0.49	70.8
2018	11,364,914	595,763	2.05	39.17	1.30	91.4	120,147	19,902	13.98	84.54	0.42	62.6

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:
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 2017 and prior years are final. Values for 2018 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), 2008 - October 2018 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
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	2.13	59.90	5.56	74.1	9,951,815	9,628,733	3.37	3.49	90.2	2.65
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	55.9	715,582	691,578	4.11	4.25	88.6	2.88
February	7,593	271	2.00	56.03	5.85	78.1	628,949	608,845	3.56	3.67	89.9	2.63
March	8,628	309	2.06	57.51	5.29	87.2	734,674	711,169	3.35	3.46	90.3	2.66
April	5,835	208	2.00	55.96	5.34	86.1	689,233	667,137	3.38	3.49	90.6	2.65
May	6,776	242	2.05	57.46	5.57	59.6	766,572	742,712	3.48	3.59	91.4	2.70
June	8,657	308	2.11	59.32	5.55	69.9	910,687	881,511	3.29	3.40	91.0	2.64
July	8,498	302	2.09	58.85	5.50	70.1	1,133,095	1,095,411	3.21	3.32	90.6	2.64
August	7,972	284	2.08	58.24	5.47	72.8	1,076,917	1,041,412	3.13	3.23	90.9	2.56
Sept	7,915	284	2.10	58.73	5.43	80.6	910,005	879,186	3.16	3.27	90.2	2.56
October	8,347	297	2.31	64.88	5.61	94.6	823,614	797,394	3.13	3.24	89.7	2.54
November	7,469	266	2.49	69.77	5.67	71.4	720,648	697,890	3.35	3.46	89.3	2.62
December	8,088	287	2.17	60.99	5.74	78.0	841,838	814,486	3.63	3.75	89.2	2.80
Year 2018												
January	7,009	248	2.38	67.41	5.31	58.8	779,006	754,166	5.02	5.19	79.6	3.50
February	7,769	277	2.43	68.09	5.49	81.9	688,539	667,072	3.61	3.72	78.8	2.79
March	7,841	281	2.54	70.89	5.54	91.6	749,405	725,132	3.18	3.29	80.0	2.57
April	6,564	232	2.56	72.38	6.09	71.7	706,952	685,216	3.13	3.23	80.1	2.58
May	4,344	152	2.41	68.58	6.09	67.7	814,786	789,317	3.04	3.14	78.8	2.56
June	7,382	260	2.73	77.61	5.97	68.7	927,153	897,864	3.11	3.21	81.3	2.61
July	8,307	293	2.71	76.81	5.73	70.2	1,156,051	1,120,081	3.29	3.40	80.4	2.73
August	8,443	298	2.79	78.94	5.67	74.3	1,136,864	1,101,523	3.27	3.38	80.8	2.69
Sept	8,158	288	2.94	83.35	5.63	74.1	1,002,649	970,676	3.11	3.21	81.0	2.62
October	5,892	208	2.48	70.32	5.77	78.8	877,637	849,980	3.39	3.50	83.4	2.71
Year to Date												
2016	97,632	3,479	1.55	43.45	5.37	77.0	9,171,038	8,870,549	2.78	2.87	90.8	2.44
2017	77,280	2,756	2.10	58.83	5.53	74.0	8,389,329	8,116,356	3.35	3.46	90.4	2.64
2018	71,708	2,537	2.62	73.93	5.71	73.3	8,839,043	8,561,028	3.39	3.50	80.5	2.74
Rolling 12 Months Ending in October												
2017	96,589	3,443	2.11	59.20	5.53	75.5	9,837,396	9,516,987	3.37	3.48	90.3	2.64
2018	87,265	3,090	2.56	72.37	5.71	73.5	10,401,529	10,073,404	3.41	3.52	81.7	2.73

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 2017 and prior years are final. Values for 2018 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, 2008 - October 2018

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
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	9,011,629	467,595	2.12	40.81	1.16	96.0	70,422	11,640	11.60	70.19	0.47	74.4
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	0.48	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	797,433	41,477	2.14	41.15	1.14	88.2	6,680	1,100	11.15	67.71	0.44	75.9
February	737,614	38,372	2.11	40.53	1.20	107.5	4,658	770	11.60	70.11	0.46	66.9
March	706,986	36,570	2.12	41.05	1.20	101.9	10,582	1,778	11.59	68.99	0.53	132.1
April	650,562	33,339	2.14	41.82	1.22	105.4	4,760	788	11.41	68.97	0.46	68.2
May	702,581	36,058	2.16	42.07	1.21	95.9	4,694	778	11.40	68.79	0.45	60.1
June	786,845	40,393	2.13	41.51	1.20	91.9	5,771	951	10.93	66.29	0.47	72.2
July	821,488	42,591	2.11	40.78	1.11	81.6	4,826	803	10.96	65.87	0.45	68.3
August	890,849	46,092	2.11	40.79	1.18	93.7	5,210	855	11.12	67.72	0.46	67.4
Sept	741,814	38,857	2.08	39.69	1.10	98.1	4,823	792	11.80	71.87	0.48	65.9
October	733,109	38,175	2.09	40.12	1.15	104.8	5,030	825	12.05	73.47	0.49	63.2
November	726,042	38,128	2.11	40.23	1.13	105.8	7,044	1,156	12.00	73.12	0.41	98.5
December	716,306	37,543	2.11	40.20	1.11	89.5	6,345	1,043	12.93	78.67	0.42	58.0
Year 2018												
January	690,227	36,292	2.08	39.64	1.11	75.7	12,565	2,096	13.91	83.50	0.43	47.5
February	638,278	33,348	2.10	40.24	1.16	97.7	8,008	1,303	12.43	76.46	0.46	119.0
March	700,041	36,379	2.10	40.33	1.17	112.0	5,017	827	13.19	79.99	0.36	77.9
April	605,929	31,436	2.12	40.90	1.22	102.9	5,034	826	13.61	83.01	0.36	73.0
May	658,511	34,012	2.10	40.57	1.23	96.1	6,271	1,028	14.30	87.27	0.29	79.0
June	693,365	36,117	2.10	40.34	1.20	84.7	5,985	986	14.68	89.15	0.28	73.1
July	745,064	39,045	2.10	40.14	1.14	80.5	5,128	836	14.29	87.66	0.27	71.5
August	806,053	42,128	2.11	40.46	1.18	87.7	4,686	769	15.08	91.87	0.34	61.0
Sept	701,123	36,855	2.12	40.31	1.14	91.0	5,414	897	15.44	93.24	0.35	66.3
October	718,353	37,512	2.10	40.23	1.21	104.9	5,772	942	15.64	95.78	0.39	71.2
Year to Date												
2016	7,669,928	394,169	2.17	42.18	1.22	94.6	60,948	9,954	8.95	54.79	0.45	73.6
2017	7,569,281	391,924	2.12	40.93	1.17	95.8	57,034	9,441	11.40	68.89	0.48	74.5
2018	6,956,943	363,125	2.10	40.31	1.18	91.7	63,880	10,509	14.16	86.12	0.36	68.0
Rolling 12 Months Ending in October												
2017	9,156,230	473,962	2.12	40.98	1.18	96.4	69,379	11,472	11.19	67.68	0.47	74.8
2018	8,399,292	438,795	2.10	40.29	1.17	92.6	77,269	12,708	13.86	84.30	0.37	69.0

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

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

- Values for 2017 and prior years are final. Values for 2018 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, 2008 - October 2018 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
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	4,794,383	4,640,827	3.62	3.74	96.8	2.68
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	337,596	326,324	4.31	4.46	95.7	2.82
February	7,593	271	2.00	56.03	5.85	124.3	294,616	285,401	3.80	3.92	96.7	2.62
March	8,628	309	2.06	57.51	5.29	143.9	355,096	343,820	3.53	3.64	97.0	2.67
April	5,835	208	2.00	55.96	5.34	188.7	338,000	327,213	3.52	3.63	97.7	2.65
May	6,776	242	2.05	57.46	5.57	91.5	383,433	371,812	3.68	3.80	98.5	2.73
June	8,386	298	2.14	60.07	5.55	105.5	442,214	428,256	3.55	3.66	97.6	2.67
July	8,245	292	2.11	59.61	5.49	107.5	554,383	536,001	3.45	3.57	96.5	2.68
August	7,676	273	2.11	59.17	5.45	119.8	519,749	502,748	3.42	3.53	96.7	2.62
Sept	7,658	274	2.12	59.07	5.42	130.2	435,093	420,539	3.54	3.66	96.4	2.65
October	7,454	265	2.37	66.84	5.58	154.2	389,312	377,140	3.54	3.66	97.1	2.63
November	7,084	252	2.52	70.93	5.66	107.1	342,138	331,585	3.64	3.76	96.6	2.66
December	8,088	287	2.17	60.99	5.74	123.5	402,754	389,987	3.71	3.83	95.5	2.74
Year 2018												
January	7,009	248	2.38	67.41	5.31	83.4	386,450	374,413	5.13	5.29	88.5	3.29
February	7,769	277	2.43	68.09	5.49	117.9	330,518	320,418	3.81	3.93	89.1	2.76
March	7,841	281	2.54	70.89	5.54	141.5	360,699	349,214	3.48	3.60	89.3	2.61
April	6,564	232	2.56	72.38	6.09	119.0	342,450	332,235	3.30	3.40	89.2	2.60
May	4,344	152	2.41	68.58	6.09	108.3	400,819	388,233	3.24	3.35	84.5	2.60
June	7,382	260	2.73	77.61	5.97	96.2	464,827	450,427	3.27	3.38	87.6	2.63
July	8,147	287	2.73	77.48	5.73	100.4	558,184	541,016	3.29	3.39	84.2	2.66
August	8,183	288	2.82	80.03	5.67	105.4	538,581	522,123	3.34	3.45	85.2	2.65
Sept	7,493	263	3.05	86.74	5.59	101.2	476,033	460,962	3.28	3.39	85.4	2.65
October	5,415	191	2.55	72.24	5.80	120.4	417,512	404,765	3.56	3.68	87.3	2.70
Year to Date												
2016	83,818	2,976	1.41	39.71	5.35	101.5	4,387,305	4,243,119	3.06	3.16	97.0	2.51
2017	75,309	2,684	2.11	59.24	5.52	118.1	4,049,491	3,919,254	3.61	3.72	97.0	2.67
2018	70,146	2,479	2.63	74.54	5.71	107.1	4,276,075	4,143,807	3.54	3.65	86.7	2.71
Rolling 12 Months Ending in October												
2017	91,197	3,247	2.11	59.29	5.53	117.0	4,737,523	4,583,673	3.63	3.75	97.0	2.67
2018	85,318	3,018	2.58	72.95	5.70	108.5	5,020,967	4,865,380	3.56	3.67	88.0	2.71

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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 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2008 - October 2018

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
2008	5,395,142	281,258	2.03	38.98	1.04	100.4	82,124	13,657	16.30	98.03	0.41	94.4
2009	4,563,080	240,687	2.11	39.94	1.06	101.1	68,030	11,408	10.02	59.76	0.37	102.0
2010	4,555,898	243,585	2.20	41.15	1.21	96.0	49,598	8,420	14.80	87.19	0.35	89.9
2011	4,292,284	233,295	2.28	41.95	1.25	95.9	41,599	7,096	20.30	119.01	0.50	106.9
2012	4,036,436	218,341	2.21	40.92	1.42	104.9	23,922	4,073	22.34	131.28	0.44	79.8
2013	4,032,431	217,572	2.20	40.95	1.48	99.1	43,432	7,205	19.71	118.88	0.45	110.1
2014	4,243,949	226,600	2.25	42.20	1.61	100.1	71,774	11,980	19.90	119.36	0.45	101.0
2015	3,731,508	198,982	2.10	39.39	1.66	100.5	55,248	9,189	11.69	70.36	0.46	86.5
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	3,056,215	165,567	1.85	34.19	1.64	93.1	24,704	4,190	12.67	74.73	0.46	73.8
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	7.49	43.48	0.47	66.8
April	178,203	9,323	1.99	38.00	1.97	90.2	1,473	252	8.28	48.34	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	2,652	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	10.76	64.01	0.50	65.7
Year 2017												
January	297,849	16,042	1.92	35.75	1.59	96.7	2,862	488	13.96	82.04	0.47	103.9
February	254,381	13,690	1.88	34.92	1.59	110.9	1,514	254	11.89	70.84	0.50	70.2
March	251,712	13,439	1.88	35.27	1.75	103.1	1,436	247	11.97	69.71	0.44	91.2
April	235,324	12,633	1.85	34.48	1.66	99.2	1,436	242	12.28	72.85	0.44	83.2
May	238,355	12,976	1.86	34.11	1.67	97.1	1,790	306	11.55	67.69	0.45	79.3
June	239,687	13,070	1.86	34.15	1.67	87.3	1,559	267	10.88	63.53	0.42	64.2
July	257,789	14,218	1.85	33.64	1.55	80.5	1,775	303	10.73	62.88	0.48	79.4
August	279,845	15,249	1.83	33.52	1.64	91.5	1,702	289	11.16	65.68	0.43	72.3
Sept	258,366	13,963	1.82	33.65	1.63	92.0	1,543	267	11.35	65.70	0.42	68.5
October	250,339	13,545	1.83	33.87	1.60	99.0	2,399	406	11.71	69.17	0.50	121.1
November	243,578	13,224	1.79	33.00	1.64	88.3	2,544	434	13.15	77.15	0.56	113.8
December	248,991	13,519	1.83	33.70	1.68	81.5	4,145	688	15.82	95.35	0.43	43.1
Year 2018												
January	246,150	13,243	2.00	37.16	1.60	79.5	16,721	2,787	13.51	81.73	0.48	60.0
February	197,472	10,603	1.94	36.08	1.58	91.3	2,735	465	13.30	78.46	0.44	202.6
March	225,377	11,669	1.85	35.75	1.83	97.6	2,014	345	14.02	81.94	0.43	111.2
April	199,704	10,574	1.88	35.52	1.61	105.1	1,236	210	14.27	83.89	0.44	58.2
May	219,931	11,454	1.87	36.00	1.78	94.7	2,311	389	14.24	85.04	0.48	88.7
June	223,656	11,737	1.85	35.21	1.84	87.4	2,011	344	16.11	94.38	0.43	79.1
July	232,451	12,416	1.88	35.17	1.73	80.8	1,587	270	15.97	93.81	0.45	60.1
August	256,223	13,648	1.87	35.05	1.68	87.0	656	111	15.91	93.62	0.31	24.1
Sept	232,368	12,512	1.82	33.92	1.56	92.7	1,887	318	15.00	88.95	0.39	82.8
October	270,387	14,235	1.89	35.93	1.73	111.7	2,723	464	15.61	91.70	0.40	123.8
Year to Date												
2016	2,473,551	133,426	1.93	35.83	1.77	89.6	21,121	3,594	9.73	57.27	0.47	73.0
2017	2,563,646	138,823	1.86	34.35	1.63	94.9	18,016	3,069	11.88	69.75	0.46	82.9
2018	2,303,720	122,091	1.88	35.58	1.70	91.7	33,882	5,702	14.24	84.90	0.45	70.5
Rolling 12 Months Ending in October												
2017	3,137,453	170,045	1.87	34.49	1.62	96.2	22,871	3,885	11.65	68.60	0.46	83.5
2018	2,796,289	148,834	1.87	35.18	1.69	90.4	40,570	6,824	14.27	85.18	0.46	67.7

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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 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2008 - October 2018 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
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	3.52
2015	14,550	524	2.45	68.22	5.26	67.3	4,683,291	4,530,195	2.94	3.04	93.2	2.57
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	2.29
2017	0	0	--	--	--	0.0	4,346,156	4,201,573	3.08	3.19	94.0	2.54
Year 2016												
January	1,305	49	2.50	66.52	5.70	182.6	366,954	353,940	2.80	2.91	93.1	2.41
February	1,314	47	2.50	69.23	5.44	97.1	322,866	312,018	2.43	2.52	93.5	2.20
March	1,337	48	2.50	69.56	5.37	65.3	353,542	341,974	1.89	1.95	94.0	1.97
April	1,203	44	2.50	68.64	5.30	88.5	345,599	334,192	2.07	2.14	94.3	2.06
May	506	18	2.50	70.60	5.28	30.6	384,972	373,040	2.04	2.11	94.6	2.10
June	348	12	2.50	70.36	5.32	20.5	457,044	442,942	2.41	2.49	94.4	2.22
July	223	8	2.50	70.91	5.67	12.1	552,956	535,139	2.66	2.75	94.4	2.38
August	1,510	55	2.50	68.75	5.24	77.3	569,120	549,584	2.62	2.71	94.3	2.34
Sept	1,483	53	2.50	69.56	5.43	90.7	448,820	433,556	2.61	2.70	94.1	2.32
October	1,549	56	2.50	68.82	5.59	78.5	362,466	350,675	2.60	2.69	94.0	2.28
November	1,294	47	2.50	69.55	5.43	83.4	313,867	304,227	2.59	2.67	93.5	2.27
December	1,501	55	2.50	68.05	5.50	84.2	313,521	303,233	3.83	3.95	93.6	2.82
Year 2017												
January	0	0	--	--	--	0.0	308,232	297,759	3.99	4.13	93.5	2.92
February	0	0	--	--	--	0.0	266,747	257,955	3.34	3.45	94.3	2.58
March	0	0	--	--	--	0.0	308,990	298,914	3.22	3.33	94.1	2.58
April	0	0	--	--	--	0.0	284,267	275,005	3.20	3.31	94.1	2.55
May	0	0	--	--	--	0.0	315,859	305,704	3.21	3.31	94.8	2.58
June	0	0	--	--	--	0.0	401,526	388,362	2.93	3.02	94.2	2.49
July	0	0	--	--	--	0.0	510,414	493,178	2.88	2.98	93.8	2.50
August	0	0	--	--	--	0.0	490,671	474,207	2.74	2.84	94.5	2.37
Sept	0	0	--	--	--	0.0	411,228	396,942	2.66	2.75	93.8	2.30
October	0	0	--	--	--	0.0	370,640	358,457	2.60	2.69	93.3	2.29
November	0	0	--	--	--	0.0	310,865	300,737	3.03	3.13	93.2	2.47
December	0	0	--	--	--	0.0	366,717	354,352	3.64	3.77	94.0	2.91
Year 2018												
January	0	0	--	--	--	0.0	323,796	313,096	5.25	5.43	86.7	3.95
February	0	0	--	--	--	0.0	297,893	288,320	3.36	3.48	84.5	2.78
March	0	0	--	--	--	0.0	328,275	317,199	2.86	2.96	87.0	2.44
April	0	0	--	--	--	0.0	303,547	293,740	2.94	3.04	87.7	2.49
May	0	0	--	--	--	0.0	351,345	340,277	2.77	2.86	86.5	2.43
June	0	0	--	--	--	0.0	397,507	384,422	2.87	2.96	87.7	2.49
July	0	0	--	--	--	0.0	530,692	513,624	3.34	3.45	87.0	2.85
August	0	0	--	--	--	0.0	530,208	513,315	3.21	3.32	87.4	2.72
Sept	0	0	--	--	--	0.0	459,798	444,660	2.88	2.98	88.1	2.51
October	0	0	--	--	--	0.0	395,265	382,024	3.16	3.27	87.8	2.64
Year to Date												
2016	10,778	391	2.50	68.92	5.43	67.0	4,164,340	4,027,058	2.44	2.52	94.1	2.25
2017	0	0	--	--	--	0.0	3,668,573	3,546,484	3.03	3.13	94.0	2.51
2018	0	0	--	--	--	0.0	3,918,326	3,790,678	3.25	3.36	87.1	2.73
Rolling 12 Months Ending in October												
2017	2,795	102	2.50	68.74	5.47	15.0	4,295,962	4,153,944	3.05	3.15	94.0	2.51
2018	0	0	--	--	--	0.0	4,595,908	4,445,767	3.26	3.37	88.0	2.73

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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.
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, 2008 - October 2018

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
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	3.12	70.30	2.50	17.1	0	0	--	--	--	0.0
2015	2,439	109	2.85	63.90	2.55	13.6	0	0	--	--	--	0.0
2016	1,288	57	2.69	60.89	3.03	8.3	0	0	--	--	--	0.0
2017	548	24	2.78	63.31	2.99	3.9	0	0	--	--	--	0.0
Year 2016												
January	139	6	2.70	61.16	2.87	8.1	0	0	--	--	--	0.0
February	124	5	2.70	61.18	2.84	7.2	0	0	--	--	--	0.0
March	163	7	2.70	61.02	3.03	9.7	0	0	--	--	--	0.0
April	9	0	2.65	60.00	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	2.68	60.89	3.09	8.2	0	0	--	--	--	0.0
Sept	153	7	2.68	60.94	3.14	13.5	0	0	--	--	--	0.0
October	159	7	2.68	60.76	3.15	14.1	0	0	--	--	--	0.0
November	237	10	2.68	60.68	3.04	17.6	0	0	--	--	--	0.0
December	214	9	2.68	60.81	3.05	12.5	0	0	--	--	--	0.0
Year 2017												
January	111	5	2.77	62.82	2.99	6.9	0	0	--	--	--	0.0
February	91	4	2.77	63.46	2.95	6.9	0	0	--	--	--	0.0
March	104	5	2.77	63.24	3.02	7.0	0	0	--	--	--	0.0
April	1	0	2.77	63.60	2.96	0.1	0	0	--	--	--	0.0
May	11	0	2.77	63.54	3.23	1.2	0	0	--	--	--	0.0
June	17	1	2.77	63.65	3.02	1.8	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	4	0	2.77	63.24	2.77	0.4	0	0	--	--	--	0.0
Sept	72	3	2.77	63.24	2.96	6.9	0	0	--	--	--	0.0
October	35	2	2.79	64.50	2.96	3.6	0	0	--	--	--	0.0
November	13	1	2.79	63.70	3.04	1.1	0	0	--	--	--	0.0
December	89	4	2.79	63.31	3.01	6.0	0	0	--	--	--	0.0
Year 2018												
January	95	4	2.92	66.58	3.11	6.0	0	0	--	--	--	0.0
February	31	1	2.92	66.05	3.19	2.5	0	0	--	--	--	0.0
March	5	0	2.92	66.20	3.16	0.4	0	0	--	--	--	0.0
April	0	0	--	--	--	0.0	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	0	0	--	--	--	0.0	0	0	--	--	--	0.0
Sept	0	0	--	--	--	0.0	0	0	--	--	--	0.0
October	52	2	2.94	66.53	2.87	5.4	0	0	--	--	--	0.0
Year to Date												
2016	837	37	2.69	60.98	3.02	6.7	0	0	--	--	--	0.0
2017	446	20	2.77	63.30	2.99	4.0	0	0	--	--	--	0.0
2018	182	8	2.93	66.46	3.06	1.6	0	0	--	--	--	0.0
Rolling 12 Months Ending in October												
2017	896	39	2.73	62.01	3.02	6.3	0	0	--	--	--	0.0
2018	284	13	2.88	65.35	3.04	2.1	0	0	--	--	--	0.0

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NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
Beginning in January 2013, the threshold for reporting fuel receipts data was changed from 50 megawatts to 200 megawatts of nameplate capacity for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. In addition, the requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The following caveats for each fuel type should be noted:
COAL - includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas. Prior to 2011, synthesis gas was included in the category of Other Gases.
PETROLEUM LIQUIDS - includes distillate fuel oil and residual fuel oil. Prior to 2013, petroleum liquids included distillate fuel oil, residual fuel oil, kerosene, jet fuel, waste oil, and, beginning in 2011, propane. Prior to 2011, propane was included in the category of Other Gases.

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- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2008 - October 2018 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
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	5.42	5.47	4.9	4.47
2015	0	0	--	--	--	0.0	6,499	6,371	4.11	4.19	5.5	3.76
2016	0	0	--	--	--	0.0	8,005	7,766	3.85	3.97	6.1	3.69
2017	0	0	--	--	--	0.0	7,841	7,593	3.82	3.95	4.9	3.75
Year 2016												
January	0	0	--	--	--	0.0	1,241	1,203	3.68	3.79	11.3	3.58
February	0	0	--	--	--	0.0	488	477	3.85	3.94	4.9	3.62
March	0	0	--	--	--	0.0	620	610	3.86	3.93	6.2	3.62
April	0	0	--	--	--	0.0	578	567	3.82	3.89	6.1	3.80
May	0	0	--	--	--	0.0	599	587	3.82	3.89	6.1	3.82
June	0	0	--	--	--	0.0	599	585	3.82	3.91	5.3	3.82
July	0	0	--	--	--	0.0	691	667	3.76	3.89	5.0	3.76
August	0	0	--	--	--	0.0	802	765	3.80	3.98	5.6	3.68
Sept	0	0	--	--	--	0.0	610	591	3.92	4.05	5.3	3.68
October	0	0	--	--	--	0.0	598	575	3.98	4.13	5.9	3.70
November	0	0	--	--	--	0.0	613	589	4.09	4.26	6.8	3.70
December	0	0	--	--	--	0.0	568	549	4.05	4.18	5.3	3.67
Year 2017												
January	0	0	--	--	--	0.0	662	639	4.02	4.17	4.5	3.84
February	0	0	--	--	--	0.0	646	624	4.01	4.15	5.2	3.86
March	0	0	--	--	--	0.0	680	662	3.96	4.06	5.4	3.80
April	0	0	--	--	--	0.0	502	490	3.90	3.99	4.7	3.89
May	0	0	--	--	--	0.0	497	483	3.92	4.04	4.4	3.90
June	0	0	--	--	--	0.0	615	595	3.82	3.95	4.6	3.79
July	0	0	--	--	--	0.0	636	613	3.64	3.77	4.1	3.64
August	0	0	--	--	--	0.0	809	778	3.70	3.85	5.3	3.70
Sept	0	0	--	--	--	0.0	707	685	3.72	3.84	5.1	3.63
October	0	0	--	--	--	0.0	605	588	3.77	3.88	4.6	3.72
November	0	0	--	--	--	0.0	749	725	3.72	3.84	6.0	3.70
December	0	0	--	--	--	0.0	734	711	3.77	3.89	5.2	3.67
Year 2018												
January	0	0	--	--	--	0.0	844	818	3.63	3.74	1.7	3.56
February	0	0	--	--	--	0.0	709	688	3.72	3.84	1.6	3.69
March	0	0	--	--	--	0.0	768	746	3.59	3.69	1.7	3.58
April	0	0	--	--	--	0.0	732	713	3.49	3.58	1.7	3.49
May	0	0	--	--	--	0.0	776	758	3.47	3.55	1.7	3.47
June	0	0	--	--	--	0.0	670	650	3.57	3.67	1.4	3.57
July	0	0	--	--	--	0.0	790	760	3.39	3.52	1.6	3.39
August	0	0	--	--	--	0.0	786	764	3.42	3.52	1.6	3.42
Sept	0	0	--	--	--	0.0	744	723	3.38	3.48	1.6	3.38
October	0	0	--	--	--	0.0	792	770	3.36	3.45	6.2	3.33
Year to Date												
2016	0	0	--	--	--	0.0	6,825	6,628	3.81	3.93	6.1	3.69
2017	0	0	--	--	--	0.0	6,358	6,156	3.84	3.97	4.8	3.77
2018	0	0	--	--	--	0.0	7,611	7,391	3.50	3.60	1.7	3.49
Rolling 12 Months Ending in October												
2017	0	0	--	--	--	0.0	7,538	7,294	3.88	4.01	4.9	3.75
2018	0	0	--	--	--	0.0	9,094	8,827	3.54	3.64	2.0	3.52

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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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- See the Technical Notes for fuel conversion factors.
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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, 2008 - October 2018

	Coal						Petroleum Liquids					
	Receipts		Average Cost				Receipts		Average Cost			
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMBtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Barrels)	(Dollars per MMBtu)	(Dollars per Barrel)	Average Sulfur Percent by Weight	Percentage of Consumption
Annual Totals												
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	2.97	64.15	1.33	68.4	2,290	373	17.91	109.99	1.43	15.6
2015	263,630	12,132	2.72	59.17	1.35	71.4	2,359	385	13.45	82.47	1.42	16.9
2016	210,749	9,859	2.67	57.01	1.30	67.0	2,541	412	10.51	64.79	1.27	18.3
2017	192,637	9,178	2.49	52.29	1.35	70.7	1,850	297	11.18	69.57	1.42	15.2
Year 2016												
January	19,357	897	2.69	58.07	1.36	64.2	237	38	11.34	71.47	1.49	18.7
February	17,418	814	2.68	57.44	1.42	63.5	342	55	8.70	53.76	1.16	19.8
March	19,181	888	2.77	59.80	1.29	69.7	205	33	8.74	54.10	1.18	18.5
April	16,048	739	2.69	58.41	1.43	68.7	222	36	9.38	57.17	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	2.64	55.84	1.16	71.9	119	19	11.84	73.14	1.11	12.4
Sept	16,052	753	2.67	56.87	1.20	65.1	162	27	11.67	71.25	1.12	16.5
October	18,491	879	2.64	55.55	1.25	78.1	297	48	10.34	63.78	1.20	25.7
November	14,936	701	2.62	55.77	1.27	64.1	283	47	10.57	63.80	1.30	30.7
December	16,067	759	2.61	55.34	1.33	59.3	172	28	13.49	83.67	1.12	18.0
Year 2017												
January	15,758	742	2.51	53.37	1.38	58.7	128	21	11.64	72.27	1.06	12.8
February	15,865	744	2.57	54.74	1.18	69.1	121	19	11.56	72.24	1.36	15.1
March	17,861	858	2.48	51.66	1.34	75.2	178	29	10.66	66.36	1.22	18.7
April	16,089	759	2.62	55.59	1.23	75.3	160	26	11.82	74.12	1.27	16.7
May	16,329	796	2.44	50.13	1.16	76.3	155	25	11.19	69.26	1.21	17.7
June	15,911	757	2.41	50.55	1.37	72.5	142	23	10.34	64.95	1.11	17.9
July	15,852	763	2.46	51.07	1.30	73.3	95	15	10.75	66.88	1.30	12.4
August	16,644	784	2.51	53.36	1.36	74.7	110	18	10.55	65.94	1.55	14.1
Sept	14,897	715	2.52	52.38	1.17	72.2	151	24	11.07	69.03	1.51	17.3
October	15,687	741	2.52	53.40	1.36	67.5	149	24	11.43	71.09	1.58	16.1
November	15,335	734	2.46	51.43	1.43	68.2	199	32	11.67	72.03	1.71	13.2
December	16,408	785	2.40	50.09	1.89	68.9	263	42	11.14	69.14	1.79	13.5
Year 2018												
January	15,278	735	2.47	51.33	1.12	59.1	408	65	12.64	79.32	1.32	12.3
February	13,828	662	2.49	52.04	1.26	59.6	187	30	11.38	71.32	1.20	19.7
March	15,083	722	2.52	52.66	1.24	63.4	234	38	12.59	78.52	1.32	22.4
April	13,037	622	2.53	53.03	1.29	61.3	153	24	13.24	83.77	1.23	16.2
May	14,112	684	2.53	52.15	1.18	65.7	149	24	14.33	87.27	1.47	14.5
June	14,097	679	2.50	51.83	1.23	68.7	107	17	13.54	84.39	1.48	7.5
July	14,451	703	2.42	49.82	1.26	72.1	138	22	14.64	89.87	1.42	12.1
August	13,393	643	2.50	52.09	1.23	68.2	135	22	14.45	89.97	1.39	13.1
Sept	12,124	578	2.55	53.48	1.28	59.1	155	25	14.38	89.73	1.12	14.4
October	11,903	574	2.47	51.33	1.30	61.5	180	29	14.50	91.01	1.37	17.0
Year to Date												
2016	179,745	8,399	2.68	57.26	1.30	68.0	2,086	338	10.26	63.38	1.28	17.3
2017	160,894	7,659	2.50	52.60	1.29	71.2	1,388	223	11.11	69.29	1.31	15.9
2018	137,306	6,601	2.50	51.94	1.24	63.7	1,845	296	13.35	83.31	1.31	14.2
Rolling 12 Months Ending in October												
2017	191,897	9,119	2.52	53.07	1.29	69.4	1,842	297	11.25	69.77	1.29	17.4
2018	169,050	8,120	2.48	51.72	1.32	64.5	2,307	370	12.96	80.71	1.41	14.0

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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 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2008 - October 2018 (continued)

	Petroleum Coke						Natural Gas					All Fossil Fuels
	Receipts		Average Cost				Receipts		Average Cost			Average Cost
Period	(Billion Btu)	(Thousand Tons)	(Dollars per MMbtu)	(Dollars per Ton)	Average Sulfur Percent by Weight	Percentage of Consumption	(Billion Btu)	(Thousand Mcf)	(Dollars per MMBtu)	(Dollars per Mcf)	Percentage of Consumption	(Dollars per MMBtu)
Annual Totals												
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	2.56	69.67	5.83	23.2	742,347	718,360	4.54	4.69	62.7	4.12
2015	8,189	304	1.73	46.72	5.50	24.1	765,964	740,975	2.83	2.93	60.6	2.82
2016	3,664	135	2.00	54.12	5.84	11.2	744,034	721,358	2.65	2.74	59.6	2.68
2017	2,356	85	1.59	44.08	5.84	8.1	803,435	778,741	3.18	3.28	62.0	3.06
Year 2016												
January	400	15	2.18	59.67	5.94	15.3	63,059	61,034	2.47	2.55	59.0	2.55
February	122	4	1.77	49.53	6.10	4.3	56,120	54,342	2.28	2.35	57.2	2.40
March	574	21	1.92	52.02	5.88	23.8	60,020	58,279	1.96	2.01	58.9	2.17
April	669	25	1.97	53.48	5.81	31.0	60,005	58,224	2.21	2.28	61.3	2.33
May	206	8	2.00	52.87	5.64	7.0	59,608	57,927	2.15	2.21	59.3	2.28
June	222	8	1.89	53.54	5.94	7.0	60,985	59,247	2.43	2.50	58.7	2.50
July	222	8	1.88	53.32	5.94	7.0	64,456	62,488	2.93	3.02	58.3	2.87
August	217	8	2.04	55.00	5.81	7.2	64,784	62,548	2.87	2.97	57.7	2.83
Sept	200	8	2.11	54.50	5.64	9.6	61,346	59,335	3.01	3.11	58.7	2.95
October	207	8	2.06	54.37	5.66	7.9	62,185	60,320	3.08	3.18	60.7	3.01
November	200	8	2.10	54.36	5.47	7.0	64,265	62,438	2.81	2.89	63.4	2.80
December	427	16	2.01	54.48	5.99	15.4	67,201	65,176	3.49	3.60	62.7	3.34
Year 2017												
January	0	0	--	--	--	0.0	69,093	66,857	3.62	3.75	62.4	3.43
February	0	0	--	--	--	0.0	66,939	64,865	3.19	3.29	67.1	3.08
March	0	0	--	--	--	0.0	69,909	67,773	2.90	3.00	65.7	2.83
April	0	0	--	--	--	0.0	66,465	64,429	3.26	3.36	65.2	3.15
May	0	0	--	--	--	0.0	66,784	64,714	3.30	3.41	63.8	3.15
June	271	9	1.25	35.84	5.75	9.5	66,331	64,299	3.26	3.36	61.6	3.10
July	253	9	1.25	34.50	5.85	9.4	67,662	65,619	3.21	3.31	58.6	3.07
August	296	11	1.25	34.50	5.85	10.9	65,688	63,679	3.08	3.17	58.7	2.97
Sept	257	9	1.77	48.91	5.85	11.7	62,978	61,019	3.10	3.20	59.4	3.00
October	893	32	1.77	48.91	5.85	35.3	63,058	61,209	3.08	3.17	58.8	2.97
November	386	14	1.77	48.91	5.85	16.1	66,895	64,843	3.01	3.11	62.6	2.93
December	0	0	--	--	--	0.0	71,633	69,435	3.11	3.21	60.6	3.00
Year 2018												
January	0	0	--	--	--	0.0	67,916	65,839	3.57	3.69	57.3	3.42
February	0	0	--	--	--	0.0	59,419	57,646	3.42	3.52	56.6	3.26
March	0	0	--	--	--	0.0	59,663	57,973	2.85	2.93	54.4	2.81
April	0	0	--	--	--	0.0	60,223	58,528	2.92	3.00	56.1	2.87
May	0	0	--	--	--	0.0	61,846	60,048	2.98	3.07	57.7	2.92
June	0	0	--	--	--	0.0	64,149	62,365	3.13	3.22	58.4	3.03
July	160	6	1.70	45.10	5.83	7.3	66,384	64,680	3.02	3.10	57.7	2.93
August	260	10	1.78	46.99	5.55	12.5	67,289	65,321	3.11	3.21	57.5	3.03
Sept	664	25	1.78	47.54	6.02	30.8	66,074	64,330	3.11	3.19	59.4	3.04
October	477	17	1.76	48.96	5.45	21.3	64,068	62,421	3.40	3.49	58.2	3.27
Year to Date												
2016	3,037	112	1.99	54.05	5.84	11.3	612,568	593,745	2.55	2.63	59.0	2.59
2017	1,971	71	1.55	43.13	5.84	8.0	664,907	644,463	3.20	3.30	62.1	3.08
2018	1,562	58	1.77	47.61	5.75	7.7	637,032	619,151	3.16	3.25	57.3	3.06
Rolling 12 Months Ending in October												
2017	2,597	95	1.67	45.94	5.83	8.6	796,373	772,076	3.19	3.30	62.2	3.08
2018	1,947	72	1.77	47.86	5.77	7.8	775,560	753,430	3.14	3.23	58.0	3.04

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 2017 and prior years are final. Values for 2018 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been a shift in the continuity of Chapter 4 tables due to changes in the sample design of Form EIA-923 and the imputation process.
- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, October 2018 and 2017
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	2	7	-66.0%	0	0	2	7	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	2	7	-66.0%	0	0	2	7	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	1,681	1,575	6.8%	0	26	1,670	1,530	0	0	11	19
New Jersey	49	57	-13.0%	0	0	49	57	0	0	0	0
New York	0	8	-100.0%	0	0	0	0	0	0	0	8
Pennsylvania	1,632	1,510	8.1%	0	26	1,621	1,473	0	0	11	11
East North Central	12,048	11,146	8.1%	6,690	6,851	5,189	4,084	0	0	169	211
Illinois	3,805	3,161	20.0%	708	615	2,941	2,359	0	0	156	188
Indiana	2,559	2,410	6.2%	2,391	2,274	167	135	0	0	0	0
Michigan	2,041	2,073	-1.5%	2,023	2,055	18	18	0	0	0	0
Ohio	2,301	2,091	10.0%	239	519	2,062	1,572	0	0	0	0
Wisconsin	1,342	1,412	-4.9%	1,329	1,388	0	0	0	0	13	23
West North Central	10,119	9,841	2.8%	9,882	9,586	0	0	2	2	235	253
Iowa	1,614	1,468	9.9%	1,433	1,278	0	0	0	0	181	190
Kansas	1,261	1,171	7.7%	1,261	1,171	0	0	0	0	0	0
Minnesota	1,364	1,050	30.0%	1,364	1,050	0	0	0	0	0	0
Missouri	2,741	3,113	-12.0%	2,739	3,111	0	0	2	2	0	0
Nebraska	1,186	1,038	14.0%	1,132	975	0	0	0	0	54	63
North Dakota	1,910	1,944	-1.8%	1,910	1,944	0	0	0	0	0	0
South Dakota	43	57	-25.0%	43	57	0	0	0	0	0	0
South Atlantic	7,144	7,102	0.6%	6,153	6,111	930	897	0	0	61	94
Delaware	23	0	--	0	0	23	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,118	1,295	-14.0%	1,108	1,285	0	0	0	0	10	10
Georgia	1,448	1,532	-5.5%	1,444	1,516	0	0	0	0	3	16
Maryland	419	350	20.0%	0	0	407	334	0	0	13	16
North Carolina	820	939	-13.0%	798	915	2	4	0	0	20	21
South Carolina	582	501	16.0%	582	494	0	0	0	0	0	7
Virginia	271	171	58.0%	190	109	66	38	0	0	15	24
West Virginia	2,463	2,313	6.5%	2,031	1,793	432	520	0	0	0	0
East South Central	4,465	4,211	6.0%	4,179	3,984	224	155	0	0	62	71
Alabama	1,062	1,249	-15.0%	1,062	1,249	0	0	0	0	0	0
Kentucky	2,715	2,267	20.0%	2,715	2,267	0	0	0	0	0	0
Mississippi	387	262	48.0%	163	107	224	155	0	0	0	0
Tennessee	301	433	-30.0%	239	361	0	0	0	0	62	71
West South Central	9,178	10,528	-13.0%	4,527	4,981	4,648	5,530	0	0	3	18
Arkansas	1,595	1,499	6.4%	1,298	1,249	294	247	0	0	3	3
Louisiana	599	671	-11.0%	436	489	164	182	0	0	0	0
Oklahoma	475	1,152	-59.0%	360	1,051	115	86	0	0	0	15
Texas	6,509	7,206	-9.7%	2,433	2,191	4,076	5,015	0	0	0	0
Mountain	6,918	7,349	-5.9%	5,926	6,467	992	863	0	0	0	20
Arizona	1,159	1,526	-24.0%	1,159	1,526	0	0	0	0	0	0
Colorado	1,143	1,586	-28.0%	1,143	1,586	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	944	756	25.0%	26	14	918	742	0	0	0	0
Nevada	95	46	107.0%	49	0	46	46	0	0	0	0
New Mexico	702	757	-7.3%	702	757	0	0	0	0	0	0
Utah	796	962	-17.0%	769	915	27	28	0	0	0	20
Wyoming	2,079	1,716	21.0%	2,078	1,669	1	47	0	0	0	0
Pacific Contiguous	687	623	10.0%	136	152	519	416	0	0	33	55
California	33	55	-40.0%	0	0	0	0	0	0	33	55
Oregon	136	152	-11.0%	136	152	0	0	0	0	0	0
Washington	519	416	25.0%	0	0	519	416	0	0	0	0
Pacific Noncontiguous	81	80	0.9%	20	17	61	63	0	0	0	0
Alaska	20	17	14.0%	20	17	0	0	0	0	0	0
Hawaii	61	63	-2.6%	0	0	61	63	0	0	0	0
U.S. Total	52,323	52,462	-0.3%	37,512	38,175	14,235	13,545	2	2	574	741

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 2017 are final. Values for 2018 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

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

Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	214	184	16.0%	45	45	169	140	0	0	0	0
Connecticut	105	0	--	0	0	105	0	0	0	0	0
Maine	49	53	-8.0%	0	0	49	53	0	0	0	0
Massachusetts	0	87	-100.0%	0	0	0	87	0	0	0	0
New Hampshire	45	45	0.7%	45	45	0	0	0	0	0	0
Rhode Island	15	0	--	0	0	15	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	16,030	19,737	-19.0%	0	119	15,945	19,364	0	0	85	254
New Jersey	475	537	-12.0%	0	0	475	537	0	0	0	0
New York	271	252	7.5%	0	0	262	97	0	0	9	155
Pennsylvania	15,284	18,948	-19.0%	0	119	15,208	18,730	0	0	76	99
East North Central	111,299	115,473	-3.6%	65,387	70,497	44,297	42,942	0	0	1,615	2,033
Illinois	35,092	33,673	4.2%	6,534	6,537	27,013	25,303	0	0	1,545	1,833
Indiana	24,813	23,796	4.3%	23,131	22,562	1,682	1,234	0	0	0	0
Michigan	17,399	20,204	-14.0%	17,186	19,987	209	209	0	0	4	8
Ohio	18,783	21,714	-13.0%	3,391	5,517	15,392	16,197	0	0	0	0
Wisconsin	15,211	16,086	-5.4%	15,145	15,894	0	0	0	0	66	192
West North Central	94,635	96,211	-1.6%	91,970	93,457	0	0	8	20	2,658	2,734
Iowa	12,473	12,528	-0.4%	10,591	10,736	0	0	0	0	1,883	1,793
Kansas	10,252	10,014	2.4%	10,252	10,014	0	0	0	0	0	0
Minnesota	10,150	10,475	-3.1%	10,031	10,165	0	0	0	0	119	310
Missouri	29,662	31,205	-4.9%	29,654	31,185	0	0	8	20	0	0
Nebraska	10,602	11,452	-7.4%	9,946	10,821	0	0	0	0	656	632
North Dakota	20,227	19,465	3.9%	20,227	19,465	0	0	0	0	0	0
South Dakota	1,269	1,071	18.0%	1,269	1,071	0	0	0	0	0	0
South Atlantic	65,328	75,404	-13.0%	55,857	65,752	8,727	8,798	0	0	745	855
Delaware	23	200	-88.0%	0	0	23	200	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	9,728	12,995	-25.0%	9,659	12,834	0	26	0	0	69	136
Georgia	12,227	14,604	-16.0%	12,117	14,510	0	0	0	0	111	94
Maryland	3,742	3,176	18.0%	0	0	3,592	3,015	0	0	150	161
North Carolina	9,579	11,487	-17.0%	9,315	11,163	56	75	0	0	209	249
South Carolina	4,859	5,545	-12.0%	4,849	5,519	0	0	0	0	11	26
Virginia	3,819	4,735	-19.0%	3,171	4,065	452	482	0	0	195	188
West Virginia	21,349	22,662	-5.8%	16,745	17,661	4,604	5,001	0	0	0	0
East South Central	47,143	50,892	-7.4%	43,997	48,071	2,405	2,023	0	0	741	798
Alabama	12,542	13,305	-5.7%	12,542	13,305	0	0	0	0	0	0
Kentucky	26,201	27,216	-3.7%	26,201	27,216	0	0	0	0	0	0
Mississippi	3,755	3,263	15.0%	1,350	1,240	2,405	2,023	0	0	0	0
Tennessee	4,646	7,108	-35.0%	3,905	6,310	0	0	0	0	741	798
West South Central	86,614	101,010	-14.0%	46,473	46,467	39,896	54,184	0	0	245	358
Arkansas	13,713	11,430	20.0%	11,362	10,175	2,286	1,200	0	0	65	55
Louisiana	5,950	6,863	-13.0%	3,811	4,223	2,139	2,640	0	0	0	0
Oklahoma	7,504	9,068	-17.0%	6,419	7,899	905	866	0	0	180	303
Texas	59,446	73,649	-19.0%	24,881	24,171	34,565	49,478	0	0	0	0
Mountain	66,450	74,981	-11.0%	58,810	66,786	7,639	8,085	0	0	0	111
Arizona	13,607	13,781	-1.3%	13,607	13,781	0	0	0	0	0	0
Colorado	11,880	13,629	-13.0%	11,880	13,629	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	6,641	7,034	-5.6%	189	215	6,451	6,819	0	0	0	0
Nevada	891	668	34.0%	427	182	464	486	0	0	0	0
New Mexico	5,908	9,061	-35.0%	5,908	9,061	0	0	0	0	0	0
Utah	9,175	10,042	-8.6%	8,839	9,594	336	337	0	0	0	111
Wyoming	18,347	20,766	-12.0%	17,960	20,323	388	443	0	0	0	0
Pacific Contiguous	3,314	3,848	-14.0%	397	591	2,404	2,741	0	0	513	516
California	513	516	-0.6%	0	0	0	0	0	0	513	516
Oregon	397	591	-33.0%	397	591	0	0	0	0	0	0
Washington	2,404	2,741	-12.0%	0	0	2,404	2,741	0	0	0	0
Pacific Noncontiguous	798	686	16.0%	189	139	609	547	0	0	0	0
Alaska	189	139	36.0%	189	139	0	0	0	0	0	0
Hawaii	609	547	11.0%	0	0	609	547	0	0	0	0
U.S. Total	491,825	538,426	-8.7%	363,125	391,924	122,091	138,823	8	20	6,601	7,659

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Notes:
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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and coal-derived synthesis gas.

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

Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, October 2018 and 2017
(Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	30	59	-50.0%	5	2	24	57	0	0	0	0
Connecticut	0	0	-46.0%	0	0	0	0	0	0	0	0
Maine	4	3	36.0%	0	0	4	3	0	0	0	0
Massachusetts	5	52	-90.0%	5	1	0	51	0	0	0	0
New Hampshire	20	1	NM	0	1	20	0	0	0	0	0
Rhode Island	0	3	-100.0%	0	0	0	3	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	141	45	210.0%	0	0	135	36	0	0	6	9
New Jersey	1	1	-58.0%	0	0	1	1	0	0	0	0
New York	43	11	303.0%	0	0	43	8	0	0	0	2
Pennsylvania	97	33	190.0%	0	0	91	27	0	0	6	7
East North Central	78	80	-2.6%	37	42	37	36	0	0	4	2
Illinois	10	8	13.0%	1	1	9	8	0	0	0	0
Indiana	18	20	-11.0%	18	20	0	0	0	0	0	0
Michigan	11	10	7.8%	10	10	0	0	0	0	1	0
Ohio	33	38	-12.0%	2	7	28	29	0	0	3	2
Wisconsin	7	4	68.0%	7	4	0	0	0	0	0	0
West North Central	41	40	3.3%	41	40	0	0	0	0	0	0
Iowa	11	9	26.0%	11	9	0	0	0	0	0	0
Kansas	10	10	3.7%	10	10	0	0	0	0	0	0
Minnesota	7	6	19.0%	7	6	0	0	0	0	0	0
Missouri	10	15	-34.0%	10	15	0	0	0	0	0	0
Nebraska	0	1	-100.0%	0	1	0	0	0	0	0	0
North Dakota	2	0	--	2	0	0	0	0	0	0	0
South Dakota	1	0	--	1	0	0	0	0	0	0	0
South Atlantic	191	221	-14.0%	101	116	72	92	0	0	18	12
Delaware	0	2	-100.0%	0	0	0	2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	31	23	38.0%	28	20	0	0	0	0	3	3
Georgia	15	18	-16.0%	13	12	0	1	0	0	2	6
Maryland	35	47	-26.0%	0	0	35	47	0	0	0	0
North Carolina	17	34	-48.0%	9	29	0	2	0	0	8	3
South Carolina	12	7	86.0%	9	7	0	0	0	0	3	0
Virginia	46	71	-36.0%	14	30	30	40	0	0	1	0
West Virginia	33	20	70.0%	27	20	7	0	0	0	0	0
East South Central	32	31	3.0%	31	28	0	2	0	0	1	1
Alabama	2	5	-57.0%	2	3	0	2	0	0	0	0
Kentucky	13	18	-27.0%	13	18	0	0	0	0	0	0
Mississippi	6	0	NM	6	0	0	0	0	0	0	0
Tennessee	11	8	41.0%	10	7	0	0	0	0	1	1
West South Central	8	10	-24.0%	8	6	0	4	0	0	0	0
Arkansas	4	7	-47.0%	4	3	0	3	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	1	63.0%	1	1	0	0	0	0	0	0
Texas	3	2	12.0%	3	1	0	1	0	0	0	0
Mountain	16	18	-11.0%	13	17	3	1	0	0	0	0
Arizona	6	8	-24.0%	6	8	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	2	0	--	0	0	2	0	0	0	0	0
Nevada	1	1	27.0%	0	0	1	1	0	0	0	0
New Mexico	2	6	-64.0%	2	6	0	0	0	0	0	0
Utah	3	3	-4.7%	2	3	1	0	0	0	0	0
Wyoming	3	1	181.0%	3	1	0	0	0	0	0	0
Pacific Contiguous	1	1	21.0%	0	0	1	1	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	1	21.0%	0	0	1	1	0	0	0	0
Pacific Noncontiguous	897	749	20.0%	706	573	192	176	0	0	0	0
Alaska	2	0	NM	2	0	0	0	0	0	0	0
Hawaii	896	749	20.0%	704	573	192	176	0	0	0	0
U.S. Total	1,435	1,255	14.0%	942	825	464	406	0	0	29	24

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

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

Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	1,177	275	327.0%	122	15	1,055	260	0	0	0	0
Connecticut	187	23	715.0%	0	0	187	23	0	0	0	0
Maine	260	92	181.0%	0	0	260	92	0	0	0	0
Massachusetts	426	136	214.0%	17	5	409	130	0	0	0	0
New Hampshire	204	10	NM	105	10	100	0	0	0	0	0
Rhode Island	100	14	591.0%	0	0	100	14	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,028	675	349.0%	839	185	2,111	414	0	0	78	75
New Jersey	218	12	NM	0	0	218	12	0	0	0	0
New York	2,020	316	538.0%	839	185	1,164	111	0	0	17	20
Pennsylvania	791	346	129.0%	0	0	729	291	0	0	61	55
East North Central	683	703	-2.9%	369	410	288	271	0	0	26	22
Illinois	74	102	-27.0%	4	4	70	98	0	0	0	0
Indiana	171	168	1.4%	170	168	1	0	0	0	0	0
Michigan	125	117	6.9%	118	108	0	0	0	0	7	9
Ohio	264	272	-2.8%	39	86	207	173	0	0	19	12
Wisconsin	49	44	10.0%	38	44	11	0	0	0	0	0
West North Central	400	341	17.0%	400	341	0	0	0	0	0	0
Iowa	102	80	27.0%	102	80	0	0	0	0	0	0
Kansas	79	81	-1.8%	79	81	0	0	0	0	0	0
Minnesota	28	39	-28.0%	28	39	0	0	0	0	0	0
Missouri	127	74	71.0%	127	74	0	0	0	0	0	0
Nebraska	5	4	18.0%	5	4	0	0	0	0	0	0
North Dakota	54	58	-7.5%	54	58	0	0	0	0	0	0
South Dakota	6	5	13.0%	6	5	0	0	0	0	0	0
South Atlantic	3,206	2,687	19.0%	2,234	2,230	783	336	0	0	188	120
Delaware	85	15	464.0%	0	0	85	15	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	389	1,367	-72.0%	351	1,337	0	0	0	0	38	30
Georgia	217	180	21.0%	153	132	25	14	0	0	39	34
Maryland	446	190	134.0%	0	0	446	190	0	0	0	0
North Carolina	725	263	176.0%	678	221	0	14	0	0	47	28
South Carolina	295	123	140.0%	213	108	43	0	0	0	40	16
Virginia	808	384	110.0%	627	268	157	103	0	0	25	13
West Virginia	241	164	47.0%	214	164	27	0	0	0	0	0
East South Central	423	302	40.0%	362	290	58	6	0	0	3	6
Alabama	120	40	199.0%	61	34	58	6	0	0	0	0
Kentucky	112	138	-19.0%	112	138	0	0	0	0	0	0
Mississippi	30	12	139.0%	30	12	0	0	0	0	0	0
Tennessee	162	112	45.0%	159	106	0	0	0	0	3	6
West South Central	141	184	-23.0%	109	89	31	95	0	0	0	0
Arkansas	44	72	-39.0%	33	27	11	45	0	0	0	0
Louisiana	7	0	--	7	0	0	0	0	0	0	0
Oklahoma	23	5	330.0%	23	5	0	0	0	0	0	0
Texas	66	106	-37.0%	46	57	20	49	0	0	0	0
Mountain	238	280	-15.0%	208	255	30	25	0	0	0	0
Arizona	77	64	20.0%	77	64	0	0	0	0	0	0
Colorado	5	3	65.0%	5	3	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	23	16	45.0%	0	0	23	16	0	0	0	0
Nevada	17	17	1.2%	12	11	5	6	0	0	0	0
New Mexico	24	58	-58.0%	24	58	0	0	0	0	0	0
Utah	50	53	-6.9%	48	50	2	3	0	0	0	0
Wyoming	41	68	-39.0%	41	68	0	0	0	0	0	0
Pacific Contiguous	11	29	-62.0%	0	14	11	15	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	14	-100.0%	0	14	0	0	0	0	0	0
Washington	11	15	-28.0%	0	0	11	15	0	0	0	0
Pacific Noncontiguous	7,200	7,257	-0.8%	5,865	5,611	1,335	1,646	0	0	0	0
Alaska	11	1	874.0%	11	1	0	0	0	0	0	0
Hawaii	7,189	7,256	-0.9%	5,854	5,610	1,335	1,646	0	0	0	0
U.S. Total	16,507	12,732	30.0%	10,509	9,441	5,702	3,069	0	0	296	223

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

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

Table 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State, October 2018 and 2017
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
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	39	48	-18.0%	39	48	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	34	39	-14.0%	34	39	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	5	8	-41.0%	5	8	0	0	0	0	0	0
West North Central	17	32	-47.0%	0	0	0	0	0	0	17	32
Iowa	17	32	-47.0%	0	0	0	0	0	0	17	32
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	71	-100.0%	0	71	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	71	-100.0%	0	71	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	152	146	4.2%	152	146	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	152	146	4.2%	152	146	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	208	297	-30.0%	191	265	0	0	0	0	17	32

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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 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 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	477	455	4.8%	477	455	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	426	413	3.1%	426	413	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	51	42	22.0%	51	42	0	0	0	0	0	0
West North Central	58	71	-18.0%	0	0	0	0	0	0	58	71
Iowa	58	71	-18.0%	0	0	0	0	0	0	58	71
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	695	555	25.0%	695	555	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	695	555	25.0%	695	555	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	117	-100.0%	0	117	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	117	-100.0%	0	117	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	1,307	1,557	-16.0%	1,307	1,557	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,307	1,557	-16.0%	1,307	1,557	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	2,537	2,756	-7.9%	2,479	2,684	0	0	0	0	58	71

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

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

Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State, October 2018 and 2017
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	27,360	30,577	-11.0%	2	261	27,358	30,316	0	0	0	0
Connecticut	10,873	8,988	21.0%	0	0	10,873	8,988	0	0	0	0
Maine	1,501	1,038	45.0%	0	0	1,501	1,038	0	0	0	0
Massachusetts	7,940	13,170	-40.0%	0	207	7,940	12,963	0	0	0	0
New Hampshire	3,205	1,668	92.0%	2	54	3,203	1,614	0	0	0	0
Rhode Island	3,841	5,714	-33.0%	0	0	3,841	5,714	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	94,662	98,249	-3.7%	4,279	4,491	89,567	93,282	0	0	816	476
New Jersey	20,343	21,935	-7.3%	0	0	20,343	21,935	0	0	0	0
New York	28,312	25,779	9.8%	4,279	4,491	23,417	20,995	0	0	616	294
Pennsylvania	46,007	50,535	-9.0%	0	0	45,807	50,352	0	0	200	183
East North Central	66,467	59,137	12.0%	21,016	19,308	43,601	38,309	571	408	1,279	1,111
Illinois	4,043	7,674	-47.0%	34	267	4,006	7,403	0	0	3	5
Indiana	12,247	9,408	30.0%	4,663	4,163	7,584	5,246	0	0	0	0
Michigan	16,418	17,406	-5.7%	4,027	4,349	11,272	12,149	571	408	548	500
Ohio	24,727	14,814	67.0%	4,332	1,600	19,856	12,868	0	0	539	346
Wisconsin	9,033	9,835	-8.2%	7,960	8,930	884	644	0	0	188	261
West North Central	12,657	12,696	-0.3%	10,787	10,731	1,141	1,302	199	179	529	484
Iowa	5,152	4,878	5.6%	4,623	4,395	0	0	0	0	529	483
Kansas	1,327	1,869	-29.0%	1,327	1,869	0	0	0	0	0	0
Minnesota	1,331	2,435	-45.0%	1,154	1,602	176	832	1	0	0	1
Missouri	4,422	2,510	76.0%	3,259	1,861	965	469	198	179	0	0
Nebraska	259	391	-34.0%	259	391	0	0	0	0	0	0
North Dakota	165	330	-50.0%	165	330	0	0	0	0	0	0
South Dakota	0	284	-100.0%	0	284	0	0	0	0	0	0
South Atlantic	219,169	198,799	10.0%	173,469	163,755	42,496	32,008	0	0	3,205	3,036
Delaware	3,436	3,260	5.4%	0	0	3,436	3,260	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	112,968	105,080	7.5%	107,918	101,368	4,644	3,505	0	0	406	207
Georgia	26,947	29,859	-9.8%	19,592	21,283	6,746	7,914	0	0	609	662
Maryland	10,123	2,968	241.0%	1,657	0	8,187	2,729	0	0	279	239
North Carolina	27,514	21,656	27.0%	22,338	18,290	4,953	3,097	0	0	223	269
South Carolina	16,158	12,401	30.0%	12,013	9,587	4,055	2,640	0	0	90	174
Virginia	20,116	20,767	-3.1%	9,772	13,027	9,379	6,978	0	0	964	763
West Virginia	1,907	2,807	-32.0%	179	200	1,096	1,885	0	0	632	722
East South Central	76,268	65,940	16.0%	51,122	45,874	23,801	18,941	0	0	1,345	1,125
Alabama	33,763	29,711	14.0%	12,044	12,380	21,719	17,331	0	0	0	0
Kentucky	8,767	3,696	137.0%	8,213	3,176	554	520	0	0	0	0
Mississippi	24,310	25,359	-4.1%	22,782	24,269	1,528	1,090	0	0	0	0
Tennessee	9,428	7,174	31.0%	8,083	6,049	0	0	0	0	1,345	1,125
West South Central	222,329	206,597	7.6%	72,647	64,035	96,835	89,670	0	0	52,846	52,892
Arkansas	13,066	10,253	27.0%	11,640	9,139	1,226	917	0	0	200	196
Louisiana	41,299	45,327	-8.9%	22,631	23,107	2,183	3,062	0	0	16,485	19,158
Oklahoma	20,498	16,843	22.0%	14,774	10,304	5,075	6,232	0	0	649	307
Texas	147,466	134,173	9.9%	23,602	21,484	88,351	79,458	0	0	35,512	33,231
Mountain	63,012	51,375	23.0%	47,074	40,017	15,894	11,290	0	0	44	68
Arizona	28,703	21,502	33.0%	17,053	13,357	11,651	8,145	0	0	0	0
Colorado	8,851	5,871	51.0%	7,136	4,997	1,714	874	0	0	0	0
Idaho	0	1,206	-100.0%	0	261	0	946	0	0	0	0
Montana	167	242	-31.0%	167	240	0	3	0	0	0	0
Nevada	13,555	15,120	-10.0%	13,555	15,120	0	0	0	0	0	0
New Mexico	5,984	5,648	6.0%	3,455	4,326	2,529	1,322	0	0	0	0
Utah	5,604	1,715	227.0%	5,561	1,647	0	0	0	0	44	68
Wyoming	148	70	111.0%	148	70	0	0	0	0	0	0
Pacific Contiguous	68,017	72,684	-6.4%	24,328	27,327	41,331	43,340	0	0	2,357	2,017
California	55,219	53,120	4.0%	19,081	17,018	33,781	34,084	0	0	2,357	2,017
Oregon	9,566	10,914	-12.0%	2,931	4,776	6,635	6,138	0	0	0	0
Washington	3,232	8,650	-63.0%	2,316	5,533	915	3,117	0	0	0	0
Pacific Noncontiguous	40	1,340	-97.0%	40	1,340	0	0	0	0	0	0
Alaska	40	1,340	-97.0%	40	1,340	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	849,980	797,394	6.6%	404,765	377,140	382,024	358,457	770	588	62,421	61,209

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

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

Table 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	263,372	299,313	-12.0%	923	1,398	262,449	297,915	0	0	0	0
Connecticut	103,020	83,990	23.0%	0	0	103,020	83,990	0	0	0	0
Maine	9,529	13,192	-28.0%	0	0	9,529	13,192	0	0	0	0
Massachusetts	102,270	136,802	-25.0%	531	1,014	101,739	135,788	0	0	0	0
New Hampshire	19,709	22,727	-13.0%	392	383	19,317	22,344	0	0	0	0
Rhode Island	28,844	42,601	-32.0%	0	0	28,844	42,601	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	942,341	959,891	-1.8%	75,553	70,074	858,049	886,381	0	0	8,739	3,436
New Jersey	216,324	231,787	-6.7%	0	0	216,324	231,787	0	0	0	0
New York	297,905	300,851	-1.0%	75,553	70,074	216,028	229,116	0	0	6,324	1,661
Pennsylvania	428,112	427,254	0.2%	0	0	425,696	425,479	0	0	2,416	1,775
East North Central	712,929	598,552	19.0%	250,776	211,496	444,545	370,559	5,617	4,810	11,991	11,687
Illinois	63,471	92,240	-31.0%	6,219	7,080	57,222	85,117	0	0	30	43
Indiana	133,207	98,375	35.0%	56,484	43,749	76,724	54,626	0	0	0	0
Michigan	198,850	165,325	20.0%	59,347	48,106	128,719	107,556	5,617	4,810	5,167	4,853
Ohio	224,532	160,828	40.0%	47,840	41,993	172,080	114,863	0	0	4,612	3,972
Wisconsin	92,868	81,785	14.0%	80,886	70,569	9,799	8,397	0	0	2,182	2,819
West North Central	144,342	141,910	1.7%	124,475	122,763	13,721	14,380	1,774	1,346	4,373	3,421
Iowa	55,586	37,925	47.0%	51,283	34,616	0	0	0	0	4,302	3,309
Kansas	17,972	15,161	19.0%	17,972	15,161	0	0	0	0	0	0
Minnesota	30,031	39,136	-23.0%	28,876	32,276	1,076	6,743	9	5	70	112
Missouri	37,951	34,224	11.0%	23,542	25,247	12,645	7,636	1,765	1,341	0	0
Nebraska	2,096	5,427	-61.0%	2,096	5,427	0	0	0	0	0	0
North Dakota	705	6,072	-88.0%	705	6,072	0	0	0	0	0	0
South Dakota	0	3,965	-100.0%	0	3,965	0	0	0	0	0	0
South Atlantic	2,126,325	2,005,279	6.0%	1,724,156	1,649,351	372,449	327,386	0	0	29,720	28,542
Delaware	28,060	38,261	-27.0%	0	0	28,060	38,261	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,037,456	990,128	4.8%	992,638	953,177	41,355	35,130	0	0	3,464	1,820
Georgia	281,968	317,873	-11.0%	211,685	234,882	63,030	75,518	0	0	7,253	7,473
Maryland	77,576	36,861	110.0%	17,891	0	57,319	34,904	0	0	2,367	1,957
North Carolina	264,113	229,211	15.0%	229,764	194,746	32,095	32,921	0	0	2,254	1,544
South Carolina	142,748	110,574	29.0%	106,411	95,284	35,582	14,324	0	0	755	966
Virginia	280,720	266,249	5.4%	164,039	169,709	108,320	88,588	0	0	8,360	7,951
West Virginia	13,684	16,123	-15.0%	1,729	1,552	6,689	7,739	0	0	5,266	6,831
East South Central	824,606	738,989	12.0%	549,974	504,598	258,834	219,499	0	0	15,798	14,892
Alabama	332,731	307,139	8.3%	108,412	112,626	224,319	194,513	0	0	0	0
Kentucky	91,712	65,146	41.0%	84,959	61,593	6,753	3,554	0	0	0	0
Mississippi	307,561	288,163	6.7%	279,799	266,731	27,762	21,432	0	0	0	0
Tennessee	92,601	78,541	18.0%	76,804	63,648	0	0	0	0	15,798	14,892
West South Central	2,361,342	2,238,256	5.5%	706,317	674,186	1,130,768	1,007,729	0	0	524,257	556,342
Arkansas	114,572	107,554	6.5%	101,485	95,903	11,064	10,031	0	0	2,024	1,620
Louisiana	396,852	452,955	-12.0%	201,693	203,434	29,322	30,121	0	0	165,837	219,399
Oklahoma	252,974	196,448	29.0%	151,684	123,163	97,432	71,460	0	0	3,858	1,824
Texas	1,596,943	1,481,299	7.8%	251,455	251,685	992,950	896,116	0	0	352,538	333,498
Mountain	609,753	531,364	15.0%	499,035	434,890	110,204	95,841	0	0	514	633
Arizona	232,197	195,397	19.0%	161,580	137,219	70,617	58,177	0	0	0	0
Colorado	98,186	75,933	29.0%	83,106	64,276	15,079	11,657	0	0	0	0
Idaho	4,825	13,845	-65.0%	4,825	7,172	0	6,673	0	0	0	0
Montana	2,174	2,654	-18.0%	2,174	2,639	0	15	0	0	0	0
Nevada	156,579	152,562	2.6%	156,579	152,562	0	0	0	0	0	0
New Mexico	68,781	58,504	18.0%	44,284	39,199	24,498	19,305	0	0	0	0
Utah	45,795	31,476	45.0%	45,282	30,843	0	0	0	0	514	633
Wyoming	1,216	992	22.0%	1,205	979	10	13	0	0	0	0
Pacific Contiguous	575,122	590,310	-2.6%	211,703	238,005	339,660	326,795	0	0	23,760	25,510
California	457,162	465,943	-1.9%	157,350	171,373	276,052	269,060	0	0	23,760	25,510
Oregon	77,052	72,181	6.7%	30,282	34,516	46,769	37,664	0	0	0	0
Washington	40,909	52,186	-22.0%	24,070	32,116	16,839	20,071	0	0	0	0
Pacific Noncontiguous	896	12,493	-93.0%	896	12,493	0	0	0	0	0	0
Alaska	896	12,493	-93.0%	896	12,493	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,561,028	8,116,356	5.5%	4,143,807	3,919,254	3,790,678	3,546,484	7,391	6,156	619,151	644,463

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

Table 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State, October 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.10	W	W	--	1.66	2.10	W
New Jersey	W	W	W	--	--	W	W
New York	--	--	--	--	--	--	--
Pennsylvania	W	1.87	W	--	1.66	W	1.87
East North Central	2.01	1.99	1.0%	2.12	2.07	1.86	1.86
Illinois	1.88	W	W	1.94	1.87	1.86	W
Indiana	W	W	W	2.11	2.09	W	W
Michigan	W	W	W	2.15	2.15	W	W
Ohio	W	1.91	W	1.70	1.74	W	1.96
Wisconsin	2.33	2.14	8.9%	2.33	2.14	--	--
West North Central	1.68	1.69	-0.6%	1.68	1.69	--	--
Iowa	1.55	1.57	-1.3%	1.55	1.57	--	--
Kansas	1.73	1.66	4.2%	1.73	1.66	--	--
Minnesota	2.22	1.98	12.0%	2.22	1.98	--	--
Missouri	1.77	1.89	-6.3%	1.77	1.89	--	--
Nebraska	1.22	1.35	-9.6%	1.22	1.35	--	--
North Dakota	1.47	1.42	3.5%	1.47	1.42	--	--
South Dakota	1.70	2.06	-17.0%	1.70	2.06	--	--
South Atlantic	2.62	2.69	-2.6%	2.65	2.73	2.40	2.41
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.79	3.03	-7.9%	2.79	3.03	--	--
Georgia	2.70	2.75	-1.8%	2.70	2.75	--	--
Maryland	2.54	W	W	--	--	2.54	W
North Carolina	W	W	W	3.21	2.97	W	W
South Carolina	3.30	3.33	-0.9%	3.30	3.33	--	--
Virginia	W	W	W	2.85	2.84	W	W
West Virginia	W	2.22	W	2.14	2.22	W	2.21
East South Central	W	W	W	2.07	2.09	W	W
Alabama	2.25	2.14	5.1%	2.25	2.14	--	--
Kentucky	1.95	2.01	-3.0%	1.95	2.01	--	--
Mississippi	W	W	W	2.83	2.33	W	W
Tennessee	2.21	2.44	-9.4%	2.21	2.44	--	--
West South Central	1.90	1.81	5.0%	2.12	2.01	1.66	1.61
Arkansas	W	W	W	2.01	1.94	W	W
Louisiana	W	W	W	3.23	3.02	W	W
Oklahoma	W	W	W	1.80	1.75	W	W
Texas	1.77	1.70	4.1%	2.03	1.96	1.60	1.58
Mountain	W	W	W	1.97	1.93	W	W
Arizona	2.41	2.25	7.1%	2.41	2.25	--	--
Colorado	1.52	1.73	-12.0%	1.52	1.73	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.99	1.90	W	W
Nevada	W	W	W	3.24	--	W	W
New Mexico	2.68	1.86	44.0%	2.68	1.86	--	--
Utah	1.94	1.93	0.5%	1.94	1.93	--	--
Wyoming	W	W	W	1.69	1.83	W	W
Pacific Contiguous	W	W	W	2.34	2.31	W	W
California	--	--	--	--	--	--	--
Oregon	2.34	2.31	1.3%	2.34	2.31	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.21	2.88	W	W
Alaska	3.21	2.88	11.0%	3.21	2.88	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.04	2.02	1.0%	2.10	2.09	1.89	1.83

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

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

Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	4.30	W	W	3.61	4.34	4.50	W
Connecticut	W	--	W	--	--	W	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	W	W	--	--	--	W
New Hampshire	3.61	4.34	-17.0%	3.61	4.34	--	--
Rhode Island	W	--	W	--	--	W	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.22	1.93	15.0%	--	1.66	2.22	1.93
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	2.16	1.87	16.0%	--	1.66	2.16	1.87
East North Central	1.98	2.02	-2.0%	2.10	2.11	1.81	1.89
Illinois	1.76	W	W	1.87	1.85	1.73	W
Indiana	W	W	W	2.11	2.16	W	W
Michigan	W	W	W	2.12	2.16	W	W
Ohio	W	1.93	W	1.76	1.73	W	1.99
Wisconsin	2.28	2.24	1.8%	2.28	2.24	--	--
West North Central	1.71	1.75	-2.3%	1.71	1.75	--	--
Iowa	1.65	1.67	-1.2%	1.65	1.67	--	--
Kansas	1.70	1.71	-0.6%	1.70	1.71	--	--
Minnesota	2.18	2.09	4.3%	2.18	2.09	--	--
Missouri	1.81	1.87	-3.2%	1.81	1.87	--	--
Nebraska	1.25	1.37	-8.8%	1.25	1.37	--	--
North Dakota	1.52	1.60	-5.0%	1.52	1.60	--	--
South Dakota	1.90	2.25	-16.0%	1.90	2.25	--	--
South Atlantic	2.63	2.69	-2.2%	2.69	2.72	2.29	2.48
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	2.86	W	W	2.86	2.95	--	W
Georgia	2.76	2.76	0.0%	2.76	2.76	--	--
Maryland	2.54	2.70	-5.9%	--	--	2.54	2.70
North Carolina	W	2.97	W	3.12	2.96	W	3.69
South Carolina	3.32	3.29	0.9%	3.32	3.29	--	--
Virginia	W	W	W	2.68	2.76	W	W
West Virginia	W	2.20	W	2.14	2.21	W	2.16
East South Central	W	W	W	2.08	2.09	W	W
Alabama	2.28	2.18	4.6%	2.28	2.18	--	--
Kentucky	1.96	1.99	-1.5%	1.96	1.99	--	--
Mississippi	W	W	W	2.66	2.69	W	W
Tennessee	2.15	2.29	-6.1%	2.15	2.29	--	--
West South Central	1.86	1.83	1.6%	2.03	2.07	1.65	1.62
Arkansas	W	W	W	1.96	2.05	W	W
Louisiana	W	W	W	2.71	2.41	W	W
Oklahoma	W	W	W	1.77	1.84	W	W
Texas	1.77	1.75	1.1%	2.02	2.09	1.59	1.58
Mountain	W	W	W	2.02	1.90	W	W
Arizona	2.44	2.24	8.9%	2.44	2.24	--	--
Colorado	1.65	1.77	-6.8%	1.65	1.77	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	2.04	1.76	W	W
Nevada	W	W	W	2.99	3.08	W	W
New Mexico	2.48	1.97	26.0%	2.48	1.97	--	--
Utah	2.03	1.96	3.6%	2.03	1.96	--	--
Wyoming	W	W	W	1.74	1.65	W	W
Pacific Contiguous	W	W	W	2.30	2.31	W	W
California	--	--	--	--	--	--	--
Oregon	2.30	2.31	-0.4%	2.30	2.31	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.31	3.04	W	W
Alaska	3.31	3.04	8.9%	3.31	3.04	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.05	2.05	0.0%	2.10	2.12	1.88	1.86

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

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

Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, October 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017
New England	W	W	W	16.19	12.83	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	16.43	11.75	W	W
New Hampshire	W	14.58	W	9.50	14.58	W	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	W	W	--	16.52	W	W
New Jersey	W	W	W	--	--	W	W
New York	W	18.82	W	--	16.52	W	18.94
Pennsylvania	W	14.32	W	--	--	W	14.32
East North Central	18.50	14.89	24.0%	18.00	14.88	19.00	14.90
Illinois	18.43	16.14	14.0%	18.41	15.35	18.43	16.23
Indiana	17.98	14.69	22.0%	17.98	14.69	--	--
Michigan	17.83	14.59	22.0%	17.83	14.59	--	--
Ohio	19.13	14.89	28.0%	18.45	15.99	19.19	14.62
Wisconsin	18.11	14.53	25.0%	18.11	14.53	--	--
West North Central	18.03	14.20	27.0%	18.03	14.20	--	--
Iowa	18.12	14.17	28.0%	18.12	14.17	--	--
Kansas	18.69	14.15	32.0%	18.69	14.15	--	--
Minnesota	16.52	14.26	16.0%	16.52	14.26	--	--
Missouri	18.14	14.23	27.0%	18.14	14.23	--	--
Nebraska	--	14.15	--	--	14.15	--	--
North Dakota	18.26	--	--	18.26	--	--	--
South Dakota	18.73	--	--	18.73	--	--	--
South Atlantic	16.61	W	W	17.90	13.33	14.81	W
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	18.06	12.14	49.0%	18.06	12.14	--	--
Georgia	17.40	W	W	17.40	13.32	--	W
Maryland	W	11.76	W	--	--	W	11.76
North Carolina	17.84	W	W	17.84	13.57	--	W
South Carolina	17.86	13.81	29.0%	17.86	13.81	--	--
Virginia	W	W	W	16.71	12.82	W	W
West Virginia	W	14.87	W	18.65	14.87	W	--
East South Central	17.30	W	W	17.30	14.03	--	W
Alabama	17.58	W	W	17.58	13.38	--	W
Kentucky	17.21	14.25	21.0%	17.21	14.25	--	--
Mississippi	17.12	13.17	30.0%	17.12	13.17	--	--
Tennessee	17.45	13.74	27.0%	17.45	13.74	--	--
West South Central	17.96	W	W	17.96	13.95	--	W
Arkansas	18.06	W	W	18.06	14.03	--	W
Louisiana	--	--	--	--	--	--	--
Oklahoma	18.06	14.85	22.0%	18.06	14.85	--	--
Texas	17.78	W	W	17.78	13.26	--	W
Mountain	19.54	W	W	19.83	15.90	18.25	W
Arizona	19.21	14.81	30.0%	19.21	14.81	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	--	W	--	--	W	--
Nevada	W	W	W	19.43	--	W	W
New Mexico	24.58	17.13	43.0%	24.58	17.13	--	--
Utah	W	W	W	21.30	17.21	W	W
Wyoming	16.63	13.88	20.0%	16.63	13.88	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	14.92	11.25	W	W
Alaska	18.21	12.26	49.0%	18.21	12.26	--	--
Hawaii	W	W	W	14.91	11.25	W	W
U.S. Total	15.63	11.94	31.0%	15.64	12.05	15.61	11.71

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

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

Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	W	W	W	11.64	14.01	W	W
Connecticut	16.96	13.24	28.0%	--	--	16.96	13.24
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	15.43	14.01	W	W
New Hampshire	W	14.02	W	11.06	14.02	W	--
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	13.70	W	W	12.28	9.40	14.41	W
New Jersey	15.08	W	W	--	--	15.08	W
New York	13.13	12.97	1.2%	12.28	9.40	13.80	19.03
Pennsylvania	15.61	12.64	23.0%	--	--	15.61	12.64
East North Central	16.57	12.90	28.0%	16.54	12.75	16.62	13.13
Illinois	W	14.01	W	16.57	12.77	W	14.07
Indiana	W	12.61	W	16.52	12.61	W	--
Michigan	16.10	12.46	29.0%	16.10	12.46	--	--
Ohio	16.59	13.02	27.0%	16.56	13.64	16.60	12.71
Wisconsin	17.91	12.30	46.0%	17.91	12.30	--	--
West North Central	16.43	12.57	31.0%	16.43	12.57	--	--
Iowa	16.43	12.72	29.0%	16.43	12.72	--	--
Kansas	16.62	12.60	32.0%	16.62	12.60	--	--
Minnesota	16.59	12.66	31.0%	16.59	12.66	--	--
Missouri	16.31	12.73	28.0%	16.31	12.73	--	--
Nebraska	16.38	12.31	33.0%	16.38	12.31	--	--
North Dakota	16.27	12.15	34.0%	16.27	12.15	--	--
South Dakota	17.49	11.98	46.0%	17.49	11.98	--	--
South Atlantic	14.54	W	W	14.65	12.36	14.19	W
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	16.33	12.36	32.0%	16.33	12.36	--	--
Georgia	W	11.78	W	15.71	11.97	W	9.55
Maryland	14.51	11.17	30.0%	--	--	14.51	11.17
North Carolina	17.02	W	W	17.02	12.36	--	W
South Carolina	16.87	12.58	34.0%	16.87	12.58	--	--
Virginia	10.33	W	W	9.98	12.05	11.86	W
West Virginia	W	12.99	W	16.87	12.99	W	--
East South Central	W	W	W	16.27	12.21	W	W
Alabama	W	W	W	16.37	12.84	W	W
Kentucky	16.09	12.33	30.0%	16.09	12.33	--	--
Mississippi	16.02	11.80	36.0%	16.02	11.80	--	--
Tennessee	16.40	11.91	38.0%	16.40	11.91	--	--
West South Central	16.21	12.36	31.0%	16.23	12.13	16.13	12.58
Arkansas	W	W	W	16.52	12.30	W	W
Louisiana	15.04	--	--	15.04	--	--	--
Oklahoma	16.13	13.48	20.0%	16.13	13.48	--	--
Texas	W	W	W	16.25	11.92	W	W
Mountain	W	13.72	W	18.18	13.74	W	13.48
Arizona	16.81	13.44	25.0%	16.81	13.44	--	--
Colorado	17.43	13.60	28.0%	17.43	13.60	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	18.59	12.34	W	W
New Mexico	19.34	13.64	42.0%	19.34	13.64	--	--
Utah	W	W	W	19.30	14.32	W	W
Wyoming	18.72	13.91	35.0%	18.72	13.91	--	--
Pacific Contiguous	W	W	W	--	12.71	W	W
California	--	--	--	--	--	--	--
Oregon	--	12.71	--	--	12.71	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	13.74	10.80	W	W
Alaska	17.67	15.47	14.0%	17.67	15.47	--	--
Hawaii	W	W	W	13.73	10.80	W	W
U.S. Total	14.19	11.52	23.0%	14.16	11.40	14.24	11.88

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

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

Table 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, October 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.38	1.53	-9.8%	1.38	1.53	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.32	1.47	-10.0%	1.32	1.47	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.83	1.79	2.2%	1.83	1.79	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	--	2.86	--	--	2.86	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	--	2.86	--	--	2.86	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.83	2.40	18.0%	2.83	2.40	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.83	2.40	18.0%	2.83	2.40	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.55	2.37	7.6%	2.55	2.37	--	--

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

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

Table 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.51	1.49	1.3%	1.51	1.49	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.48	1.46	1.4%	1.48	1.46	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.78	1.79	-0.6%	1.78	1.79	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.20	2.59	24.0%	3.20	2.59	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	3.20	2.59	24.0%	3.20	2.59	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	1.50	--	--	1.50	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	1.50	--	--	1.50	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.72	2.16	26.0%	2.72	2.16	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.72	2.16	26.0%	2.72	2.16	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.63	2.11	25.0%	2.63	2.11	--	--

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

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

Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, October 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018	October 2017	Percentage Change	October 2018	October 2017	October 2018	October 2017
New England	W	W	W	6.00	3.35	W	W
Connecticut	3.57	2.84	26.0%	--	--	3.57	2.84
Maine	W	W	W	--	--	W	W
Massachusetts	W	3.25	W	--	3.21	W	3.26
New Hampshire	W	W	W	6.00	3.85	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.79	1.69	65.0%	3.22	2.38	2.76	1.65
New Jersey	2.68	1.49	80.0%	--	--	2.68	1.49
New York	3.10	2.32	34.0%	3.22	2.38	3.08	2.30
Pennsylvania	2.65	1.46	82.0%	--	--	2.65	1.46
East North Central	3.33	2.94	13.0%	3.47	3.09	3.26	2.86
Illinois	3.48	W	W	3.32	3.95	3.48	W
Indiana	3.37	W	W	3.62	3.13	3.23	W
Michigan	3.54	3.03	17.0%	3.99	3.20	3.38	2.97
Ohio	3.17	2.75	15.0%	3.17	2.97	3.17	2.73
Wisconsin	3.28	3.03	8.3%	3.28	3.03	--	--
West North Central	W	W	W	3.29	3.06	W	W
Iowa	2.98	2.47	21.0%	2.98	2.47	--	--
Kansas	4.02	3.25	24.0%	4.02	3.25	--	--
Minnesota	W	W	W	4.11	3.88	W	W
Missouri	W	W	W	3.05	2.94	W	W
Nebraska	3.88	3.85	0.8%	3.88	3.85	--	--
North Dakota	4.63	5.98	-23.0%	4.63	5.98	--	--
South Dakota	--	2.69	--	--	2.69	--	--
South Atlantic	3.94	3.88	1.5%	4.05	4.03	3.29	2.82
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.26	4.40	W	W
Georgia	W	3.40	W	3.81	3.52	W	3.09
Maryland	3.28	3.05	7.5%	3.53	--	3.23	3.05
North Carolina	W	W	W	3.61	3.85	W	W
South Carolina	W	W	W	3.68	3.34	W	W
Virginia	3.51	W	W	3.79	2.81	3.11	W
West Virginia	W	1.46	W	3.16	2.65	W	1.33
East South Central	3.41	3.11	9.6%	3.39	3.11	3.47	3.11
Alabama	W	W	W	3.38	3.12	W	W
Kentucky	W	W	W	3.67	3.88	W	W
Mississippi	W	W	W	3.33	3.05	W	W
Tennessee	3.31	2.88	15.0%	3.31	2.88	--	--
West South Central	3.19	3.05	4.6%	3.11	3.13	3.26	2.98
Arkansas	W	W	W	3.30	3.09	W	W
Louisiana	W	W	W	3.45	3.14	W	W
Oklahoma	W	W	W	2.63	3.00	W	W
Texas	3.20	3.05	4.9%	3.00	3.20	3.27	3.00
Mountain	2.75	3.17	-13.0%	2.74	3.17	2.79	3.13
Arizona	W	W	W	2.53	3.29	W	W
Colorado	W	W	W	3.23	3.26	W	W
Idaho	--	3.01	--	--	3.01	--	--
Montana	0.97	W	W	0.97	0.69	--	W
Nevada	2.85	3.04	-6.3%	2.85	3.04	--	--
New Mexico	2.25	3.20	-30.0%	2.25	3.20	--	--
Utah	2.77	3.43	-19.0%	2.77	3.43	--	--
Wyoming	W	W	W	3.31	4.33	W	W
Pacific Contiguous	3.55	3.31	7.3%	3.69	3.45	3.42	3.16
California	3.67	3.61	1.7%	3.87	3.97	3.50	3.32
Oregon	W	W	W	2.45	2.25	W	W
Washington	W	W	W	3.90	3.00	W	W
Pacific Noncontiguous	7.72	7.08	9.0%	7.72	7.08	--	--
Alaska	7.72	7.08	9.0%	7.72	7.08	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.39	3.14	8.0%	3.56	3.54	3.16	2.60

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 2017 are final. Values for 2018 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

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

Table 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) October 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	October 2018 YTD	October 2017 YTD	Percentage Change	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	W	W	W	4.47	3.43	W	W
Connecticut	4.23	4.06	4.2%	--	--	4.23	4.06
Maine	W	W	W	--	--	W	W
Massachusetts	4.52	3.26	39.0%	3.45	3.29	4.53	3.26
New Hampshire	W	W	W	5.83	3.80	W	W
Rhode Island	W	3.30	W	--	--	W	3.30
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.12	2.72	15.0%	3.88	3.36	3.05	2.67
New Jersey	3.03	2.56	18.0%	--	--	3.03	2.56
New York	3.56	3.21	11.0%	3.88	3.36	3.43	3.16
Pennsylvania	2.87	2.47	16.0%	--	--	2.87	2.47
East North Central	3.05	3.12	-2.2%	3.18	3.21	2.97	3.07
Illinois	3.17	3.25	-2.5%	3.20	3.64	3.17	3.22
Indiana	3.11	W	W	3.29	3.22	2.99	W
Michigan	3.13	3.20	-2.2%	3.39	3.39	3.01	3.12
Ohio	2.88	2.93	-1.7%	2.93	2.87	2.87	2.95
Wisconsin	3.11	W	W	3.11	3.24	--	W
West North Central	W	W	W	2.93	3.36	W	W
Iowa	2.69	2.76	-2.5%	2.69	2.76	--	--
Kansas	3.06	3.71	-18.0%	3.06	3.71	--	--
Minnesota	W	W	W	3.33	3.83	W	W
Missouri	W	W	W	2.77	3.29	W	W
Nebraska	3.59	3.81	-5.8%	3.59	3.81	--	--
North Dakota	5.17	3.69	40.0%	5.17	3.69	--	--
South Dakota	--	2.96	--	--	2.96	--	--
South Atlantic	4.07	3.85	5.7%	4.16	3.95	3.47	3.11
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	4.17	W	4.22	4.18	W	3.80
Georgia	W	3.47	W	3.63	3.55	W	3.19
Maryland	3.70	3.37	9.8%	3.32	--	3.82	3.37
North Carolina	W	W	W	4.36	3.98	W	W
South Carolina	W	W	W	3.69	3.51	W	W
Virginia	4.10	3.23	27.0%	4.63	3.48	2.93	2.44
West Virginia	W	W	W	3.14	2.96	W	W
East South Central	3.16	3.26	-3.1%	3.15	3.25	3.18	3.27
Alabama	W	W	W	3.22	3.36	W	W
Kentucky	W	W	W	3.41	3.64	W	W
Mississippi	W	W	W	3.09	3.17	W	W
Tennessee	2.97	3.05	-2.6%	2.97	3.05	--	--
West South Central	2.97	3.15	-5.7%	2.93	3.24	3.00	3.07
Arkansas	W	W	W	3.06	3.32	W	W
Louisiana	W	W	W	3.19	3.28	W	W
Oklahoma	W	W	W	2.55	3.20	W	W
Texas	2.99	3.11	-3.9%	2.91	3.21	3.01	3.07
Mountain	2.93	3.45	-15.0%	2.90	3.45	3.20	3.36
Arizona	W	W	W	2.84	3.63	W	W
Colorado	W	W	W	3.47	3.43	W	W
Idaho	2.70	3.35	-19.0%	2.70	3.35	--	--
Montana	1.30	W	W	1.30	1.77	--	W
Nevada	2.87	3.38	-15.0%	2.87	3.38	--	--
New Mexico	2.43	3.39	-28.0%	2.43	3.39	--	--
Utah	2.72	3.31	-18.0%	2.72	3.31	--	--
Wyoming	W	W	W	2.91	4.01	W	W
Pacific Contiguous	3.96	3.45	15.0%	3.68	3.65	4.22	3.24
California	4.42	3.65	21.0%	4.15	4.03	4.64	3.32
Oregon	W	W	W	2.05	2.45	W	W
Washington	W	W	W	3.05	3.34	W	W
Pacific Noncontiguous	8.04	7.03	14.0%	8.04	7.03	--	--
Alaska	8.04	7.03	14.0%	8.04	7.03	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.41	3.36	1.5%	3.54	3.61	3.25	3.03

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 2017 are final. Values for 2018 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, October 2018

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	2	0.73	7.4	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	2	0.73	7.4	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,388	2.89	9.0	0	--	--	0	--	--
New Jersey	49	1.85	7.6	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,339	2.93	9.0	0	--	--	0	--	--
East North Central	5,551	3.32	10.5	6,496	0.25	4.6	0	--	--
Illinois	829	3.50	19.5	2,976	0.25	4.6	0	--	--
Indiana	2,297	2.91	9.0	262	0.21	4.4	0	--	--
Michigan	96	2.24	7.2	1,946	0.27	4.7	0	--	--
Ohio	2,254	3.73	9.5	47	0.22	4.5	0	--	--
Wisconsin	75	2.30	8.3	1,266	0.24	4.8	0	--	--
West North Central	87	3.03	9.6	8,122	0.28	5.1	1,910	0.69	10.0
Iowa	20	2.97	8.6	1,594	0.26	4.8	0	--	--
Kansas	17	3.29	12.9	1,244	0.31	4.9	0	--	--
Minnesota	0	--	--	1,364	0.34	6.1	0	--	--
Missouri	51	2.97	8.9	2,691	0.24	4.7	0	--	--
Nebraska	0	--	--	1,186	0.29	5.2	0	--	--
North Dakota	0	--	--	0	--	--	1,910	0.69	10.0
South Dakota	0	--	--	43	0.35	5.6	0	--	--
South Atlantic	6,234	2.57	9.4	876	0.31	4.5	0	--	--
Delaware	23	2.57	7.9	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,118	2.60	8.4	0	--	--	0	--	--
Georgia	572	2.64	8.3	876	0.31	4.5	0	--	--
Maryland	419	2.51	8.4	0	--	--	0	--	--
North Carolina	820	1.84	9.7	0	--	--	0	--	--
South Carolina	582	1.72	9.2	0	--	--	0	--	--
Virginia	271	1.28	9.7	0	--	--	0	--	--
West Virginia	2,428	3.14	10.2	0	--	--	0	--	--
East South Central	2,753	2.69	9.6	1,488	0.30	5.3	224	0.45	12.8
Alabama	371	1.34	12.7	690	0.31	5.4	0	--	--
Kentucky	2,072	3.06	9.3	643	0.27	5.1	0	--	--
Mississippi	67	1.16	7.4	96	0.40	5.3	224	0.45	12.8
Tennessee	243	1.94	8.2	59	0.30	5.5	0	--	--
West South Central	58	2.24	12.2	6,867	0.27	5.2	2,253	1.09	17.4
Arkansas	3	0.41	8.6	1,592	0.23	4.8	0	--	--
Louisiana	38	2.80	8.8	459	0.27	5.1	103	0.55	15.5
Oklahoma	18	1.43	20.2	458	0.24	4.7	0	--	--
Texas	0	--	--	4,359	0.29	5.3	2,150	1.11	17.5
Mountain	1,490	0.56	13.0	5,374	0.53	9.0	26	0.49	8.7
Arizona	413	0.62	10.9	746	0.66	10.5	0	--	--
Colorado	146	0.47	12.0	997	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	918	0.70	9.1	26	0.49	8.7
Nevada	0	--	--	95	0.41	7.0	0	--	--
New Mexico	208	0.66	21.4	493	0.72	21.2	0	--	--
Utah	723	0.51	12.3	46	0.83	8.6	0	--	--
Wyoming	0	--	--	2,079	0.47	7.1	0	--	--
Pacific Contiguous	33	0.36	10.5	648	0.33	8.6	0	--	--
California	33	0.36	10.5	0	--	--	0	--	--
Oregon	0	--	--	136	0.23	4.7	0	--	--
Washington	0	--	--	513	0.36	9.6	0	--	--
Pacific Noncontiguous	0	--	--	61	0.26	4.9	11	0.14	8.9
Alaska	0	--	--	0	--	--	11	0.14	8.9
Hawaii	0	--	--	61	0.26	4.9	0	--	--
U.S. Total	17,597	2.69	10.0	29,933	0.32	5.8	4,424	0.88	13.9

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 2018 are preliminary. Values for 2017 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 Utilties by State, October 2018

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	2,672	2.96	9.0	4,019	0.25	4.7	0	--	--
Illinois	210	2.76	10.2	498	0.22	4.5	0	--	--
Indiana	2,130	2.86	9.0	262	0.21	4.4	0	--	--
Michigan	78	2.56	7.6	1,946	0.27	4.7	0	--	--
Ohio	192	4.40	9.5	47	0.22	4.5	0	--	--
Wisconsin	62	2.62	7.8	1,266	0.24	4.8	0	--	--
West North Central	66	3.05	10.0	7,906	0.28	5.1	1,910	0.69	10.0
Iowa	0	--	--	1,433	0.26	4.8	0	--	--
Kansas	17	3.29	12.9	1,244	0.31	4.9	0	--	--
Minnesota	0	--	--	1,364	0.34	6.1	0	--	--
Missouri	49	2.97	8.9	2,691	0.24	4.7	0	--	--
Nebraska	0	--	--	1,132	0.30	5.2	0	--	--
North Dakota	0	--	--	0	--	--	1,910	0.69	10.0
South Dakota	0	--	--	43	0.35	5.6	0	--	--
South Atlantic	5,277	2.58	9.6	876	0.31	4.5	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,108	2.62	8.4	0	--	--	0	--	--
Georgia	569	2.65	8.2	876	0.31	4.5	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	798	1.87	9.8	0	--	--	0	--	--
South Carolina	582	1.72	9.2	0	--	--	0	--	--
Virginia	190	1.48	10.3	0	--	--	0	--	--
West Virginia	2,031	3.15	10.5	0	--	--	0	--	--
East South Central	2,691	2.74	9.6	1,488	0.30	5.3	0	--	--
Alabama	371	1.34	12.7	690	0.31	5.4	0	--	--
Kentucky	2,072	3.06	9.3	643	0.27	5.1	0	--	--
Mississippi	67	1.16	7.4	96	0.40	5.3	0	--	--
Tennessee	181	2.31	8.3	59	0.30	5.5	0	--	--
West South Central	38	2.80	8.8	3,856	0.25	4.9	634	1.71	19.5
Arkansas	0	--	--	1,298	0.23	4.8	0	--	--
Louisiana	38	2.80	8.8	295	0.26	5.2	103	0.55	15.5
Oklahoma	0	--	--	360	0.24	4.7	0	--	--
Texas	0	--	--	1,902	0.26	5.0	531	1.97	20.4
Mountain	1,490	0.56	13.0	4,409	0.50	9.0	26	0.49	8.7
Arizona	413	0.62	10.9	746	0.66	10.5	0	--	--
Colorado	146	0.47	12.0	997	0.32	5.7	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	26	0.49	8.7
Nevada	0	--	--	49	0.46	8.3	0	--	--
New Mexico	208	0.66	21.4	493	0.72	21.2	0	--	--
Utah	723	0.51	12.3	46	0.83	8.6	0	--	--
Wyoming	0	--	--	2,078	0.47	7.1	0	--	--
Pacific Contiguous	0	--	--	136	0.23	4.7	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	136	0.23	4.7	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	11	0.14	8.9
Alaska	0	--	--	0	--	--	11	0.14	8.9
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,233	2.47	9.9	22,690	0.32	5.7	2,581	0.92	12.2

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W = Withheld to avoid disclosure of individual company data.

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, October 2018

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	2	0.73	7.4	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	2	0.73	7.4	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,377	2.90	9.0	0	--	--	0	--	--
New Jersey	49	1.85	7.6	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,328	2.94	9.0	0	--	--	0	--	--
East North Central	2,760	3.66	11.9	2,429	0.25	4.6	0	--	--
Illinois	513	3.82	27.1	2,429	0.25	4.6	0	--	--
Indiana	167	3.49	9.7	0	--	--	0	--	--
Michigan	18	0.46	5.0	0	--	--	0	--	--
Ohio	2,062	3.66	9.5	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	895	2.66	8.3	0	--	--	0	--	--
Delaware	23	2.57	7.9	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	407	2.53	8.1	0	--	--	0	--	--
North Carolina	2	0.71	6.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	66	0.85	8.6	0	--	--	0	--	--
West Virginia	397	3.10	8.5	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	224	0.45	12.8
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	224	0.45	12.8
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	18	1.43	20.2	3,012	0.30	5.5	1,619	0.87	16.7
Arkansas	0	--	--	294	0.23	4.9	0	--	--
Louisiana	0	--	--	164	0.29	5.0	0	--	--
Oklahoma	18	1.43	20.2	98	0.24	4.7	0	--	--
Texas	0	--	--	2,457	0.32	5.6	1,619	0.87	16.7
Mountain	0	--	--	965	0.68	8.9	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	918	0.70	9.1	0	--	--
Nevada	0	--	--	46	0.34	5.4	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	1	0.33	5.3	0	--	--
Pacific Contiguous	0	--	--	513	0.36	9.6	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	513	0.36	9.6	0	--	--
Pacific Noncontiguous	0	--	--	61	0.26	4.9	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	61	0.26	4.9	0	--	--
U.S. Total	5,052	3.24	10.4	6,979	0.34	5.9	1,843	0.83	16.3

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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Sector by State, October 2018

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	2	2.87	8.7	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	2	2.87	8.7	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	2	2.87	8.7	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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Sector by State, October 2018

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	11	2.28	8.1	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	11	2.28	8.1	0	--	--	0	--	--
East North Central	120	3.34	8.8	49	0.87	6.5	0	--	--
Illinois	107	3.70	8.5	49	0.87	6.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	13	0.50	10.9	0	--	--	0	--	--
West North Central	20	2.97	8.6	216	0.21	4.4	0	--	--
Iowa	20	2.97	8.6	162	0.20	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	54	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	61	0.97	9.6	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	10	0.80	7.7	0	--	--	0	--	--
Georgia	3	1.30	9.8	0	--	--	0	--	--
Maryland	13	1.74	20.5	0	--	--	0	--	--
North Carolina	20	0.81	6.9	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	15	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	62	0.97	8.0	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	62	0.97	8.0	0	--	--	0	--	--
West South Central	3	0.41	8.6	0	--	--	0	--	--
Arkansas	3	0.41	8.6	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	33	0.36	10.5	0	--	--	0	--	--
California	33	0.36	10.5	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	309	1.92	8.9	265	0.33	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 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Chapter 5

Sales to Ultimate Consumers, Revenue and Average Price of Electricity to Ultimate Consumers

Table 5.1. Sales of Electricity to Ultimate Customers:
Total by End-Use Sector, 2008 - October 2018 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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	1,378,648	1,352,888	984,298	7,523	3,723,356
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	129,212	109,488	78,809	667	318,177
February	100,968	99,640	74,534	635	275,777
March	103,096	107,173	80,530	645	291,444
April	90,725	102,589	78,899	589	272,801
May	98,281	109,872	83,134	583	291,871
June	122,543	120,013	85,399	628	328,583
July	149,900	129,277	87,806	630	367,613
August	142,007	128,481	89,134	640	360,263
Sept	118,779	118,789	83,540	618	321,726
October	102,811	113,287	82,815	626	299,539
November	98,321	104,973	79,456	598	283,347
December	122,005	109,306	80,242	664	312,216
Year 2018					
January	148,978	114,634	76,059	751	340,422
February	113,383	102,018	71,946	643	287,990
March	106,939	107,902	76,810	625	292,276
April	95,128	102,940	75,241	608	273,917
May	103,453	112,622	81,461	591	298,126
June	129,478	121,597	81,528	628	333,231
July	153,071	130,955	85,094	640	369,759
August	152,636	134,333	88,761	686	376,416
Sept	128,458	121,600	81,216	648	331,923
October	106,633	115,863	81,020	635	304,151
Year to Date					
2016	1,196,533	1,151,959	819,677	6,252	3,174,422
2017	1,158,323	1,138,609	824,601	6,261	3,127,793
2018	1,238,156	1,164,464	799,135	6,455	3,208,210
Rolling 12 Months Ending in October					
2017	1,372,848	1,353,841	981,638	7,506	3,715,832
2018	1,458,481	1,378,743	958,832	7,717	3,803,773

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 2017 and prior years are final. Values for 2018 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, 2008 - October 2018 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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	177,661	144,242	67,691	728	390,322
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	15,781	11,183	5,190	63	32,216
February	12,911	10,442	4,941	60	28,354
March	13,289	11,208	5,407	61	29,965
April	11,536	10,669	5,209	56	27,470
May	12,843	11,638	5,639	56	30,176
June	16,171	13,209	6,141	64	35,585
July	19,606	14,184	6,416	64	40,269
August	18,679	14,141	6,435	64	39,320
Sept	15,772	13,104	5,992	62	34,930
October	13,164	12,208	5,725	60	31,157
November	12,721	11,016	5,345	57	29,139
December	15,189	11,239	5,249	62	31,739
Year 2018					
January	18,254	12,020	5,288	71	35,633
February	14,354	10,857	4,896	63	30,170
March	13,892	11,315	5,114	59	30,380
April	12,256	10,744	4,951	57	28,009
May	13,604	11,819	5,553	56	31,033
June	16,891	13,155	5,854	64	35,964
July	20,096	14,370	6,247	65	40,778
August	20,306	14,792	6,430	66	41,594
Sept	16,709	12,985	5,756	67	35,516
October	13,719	12,448	5,594	62	31,823
Year to Date					
2016	150,360	120,596	55,601	605	327,163
2017	149,751	121,987	57,096	610	329,444
2018	160,081	124,505	55,683	630	340,899
Rolling 12 Months Ending in October					
2017	176,468	144,033	67,563	726	388,790
2018	187,991	146,760	66,278	749	401,778

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 2017 and prior years are final. Values for 2018 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, 2008 - October 2018 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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	12.89	10.66	6.88	9.68	10.48
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	10.21	6.59	9.39	10.13
February	12.79	10.48	6.63	9.50	10.28
March	12.89	10.46	6.71	9.49	10.28
April	12.72	10.40	6.60	9.46	10.07
May	13.07	10.59	6.78	9.61	10.34
June	13.20	11.01	7.19	10.18	10.83
July	13.08	10.97	7.31	10.12	10.95
August	13.15	11.01	7.22	10.06	10.91
Sept	13.28	11.03	7.17	9.99	10.86
October	12.80	10.78	6.91	9.57	10.40
November	12.94	10.49	6.73	9.50	10.28
December	12.45	10.28	6.54	9.35	10.17
Year 2018					
January	12.25	10.49	6.95	9.40	10.47
February	12.66	10.64	6.81	9.80	10.48
March	12.99	10.49	6.66	9.40	10.39
April	12.88	10.44	6.58	9.45	10.23
May	13.15	10.49	6.82	9.46	10.41
June	13.05	10.82	7.18	10.15	10.79
July	13.13	10.97	7.34	10.14	11.03
August	13.30	11.01	7.24	9.68	11.05
Sept	13.01	10.68	7.09	10.28	10.70
October	12.87	10.74	6.91	9.81	10.46
Year to Date					
2016	12.57	10.47	6.78	9.68	10.31
2017	12.93	10.71	6.92	9.74	10.53
2018	12.93	10.69	6.97	9.76	10.63
Rolling 12 Months Ending in October					
2017	12.85	10.64	6.88	9.68	10.46
2018	12.89	10.64	6.91	9.70	10.56

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 2017 and prior years are final. Values for 2018 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, October 2018 and 2017 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	3,299	3,197	4,233	4,182	1,406	1,465	45	45	8,983	8,889
Connecticut	844	840	1,042	1,004	268	273	16	16	2,170	2,134
Maine	336	324	319	321	268	285	0	0	923	929
Massachusetts	1,424	1,374	2,057	2,055	520	564	27	27	4,029	4,020
New Hampshire	322	311	359	354	173	166	0	0	854	830
Rhode Island	221	203	292	285	57	58	2	2	572	549
Vermont	152	145	162	163	121	119	0	0	435	427
Middle Atlantic	9,683	9,250	12,934	12,837	5,913	6,121	319	314	28,850	28,523
New Jersey	1,973	1,905	3,190	3,054	599	601	24	25	5,786	5,585
New York	3,913	3,705	6,266	6,327	1,442	1,494	236	230	11,857	11,756
Pennsylvania	3,797	3,641	3,478	3,456	3,872	4,027	59	59	11,207	11,182
East North Central	13,113	12,328	15,371	15,007	15,571	16,082	48	50	44,103	43,467
Illinois	3,138	2,913	4,144	4,178	3,391	3,599	43	45	10,717	10,735
Indiana	2,316	2,168	2,049	1,964	3,435	3,578	2	2	7,801	7,712
Michigan	2,347	2,422	3,223	3,171	2,494	2,506	0	0	8,065	8,100
Ohio	3,773	3,381	4,010	3,737	4,141	4,292	2	2	11,927	11,412
Wisconsin	1,538	1,444	1,944	1,957	2,111	2,107	0	0	5,593	5,508
West North Central	7,080	6,901	8,320	8,233	7,433	7,790	3	4	22,837	22,928
Iowa	925	972	1,004	1,019	1,959	1,985	0	0	3,888	3,976
Kansas	886	898	1,297	1,326	946	943	0	0	3,129	3,167
Minnesota	1,532	1,503	1,817	1,818	1,751	1,880	2	2	5,101	5,202
Missouri	2,407	2,249	2,509	2,444	954	1,109	2	2	5,872	5,804
Nebraska	645	646	756	733	862	893	0	0	2,264	2,273
North Dakota	354	321	534	523	735	732	0	0	1,623	1,575
South Dakota	331	311	404	371	225	248	0	0	960	930
South Atlantic	28,624	27,051	26,447	25,742	11,960	11,975	114	107	67,146	64,876
Delaware	344	318	367	348	190	179	0	0	902	845
District of Columbia	193	170	682	666	17	16	30	28	922	880
Florida	11,346	10,742	8,409	8,173	1,359	1,381	7	6	21,121	20,302
Georgia	4,409	4,202	3,931	3,888	2,737	2,759	14	14	11,092	10,862
Maryland	1,807	1,666	2,407	2,335	320	307	43	41	4,577	4,348
North Carolina	4,222	3,947	3,899	3,972	2,374	2,292	1	0	10,496	10,212
South Carolina	2,369	2,233	1,815	1,842	2,242	2,361	0	0	6,426	6,436
Virginia	3,154	3,065	4,273	3,882	1,465	1,479	18	18	8,909	8,445
West Virginia	780	709	663	637	1,256	1,200	0	0	2,700	2,547
East South Central	9,006	8,303	7,998	7,582	8,300	8,375	0	0	25,304	24,261
Alabama	2,391	2,276	1,917	1,899	2,888	2,770	0	0	7,195	6,945
Kentucky	1,859	1,668	1,653	1,603	2,334	2,373	0	0	5,846	5,644
Mississippi	1,556	1,464	1,255	1,266	1,469	1,311	0	0	4,280	4,041
Tennessee	3,200	2,895	3,172	2,815	1,610	1,921	0	0	7,982	7,631
West South Central	17,631	17,891	17,809	17,282	15,690	16,395	18	18	51,148	51,586
Arkansas	1,415	1,377	1,068	1,056	1,527	1,496	0	0	4,010	3,930
Louisiana	2,665	2,598	2,243	2,181	2,963	3,154	1	1	7,872	7,934
Oklahoma	1,633	1,616	1,743	1,738	1,566	1,455	0	0	4,942	4,809
Texas	11,918	12,301	12,755	12,307	9,634	10,290	16	16	34,324	34,914
Mountain	6,715	6,976	8,007	7,954	6,757	6,658	14	13	21,492	21,602
Arizona	2,244	2,549	2,390	2,484	1,151	1,147	1	1	5,784	6,181
Colorado	1,408	1,364	1,668	1,649	1,343	1,300	8	8	4,428	4,321
Idaho	563	599	514	515	575	579	0	0	1,652	1,693
Montana	350	361	395	394	399	367	0	0	1,143	1,121
Nevada	828	799	1,003	912	971	994	1	1	2,803	2,706
New Mexico	478	449	761	736	685	674	0	0	1,924	1,859
Utah	666	646	990	955	781	753	4	4	2,442	2,358
Wyoming	179	210	286	309	852	844	0	0	1,316	1,363
Pacific Contiguous	11,085	10,521	14,256	13,974	7,553	7,515	75	75	32,969	32,085
California	7,274	6,556	10,417	10,285	4,454	4,326	72	73	22,217	21,240
Oregon	1,296	1,337	1,407	1,340	1,005	1,114	2	2	3,711	3,793
Washington	2,515	2,628	2,432	2,348	2,094	2,075	1	1	7,041	7,052
Pacific Noncontiguous	396	392	488	492	437	440	0	0	1,321	1,324
Alaska	153	158	215	217	104	119	0	0	472	494
Hawaii	243	234	273	275	333	321	0	0	849	830
U.S. Total	106,633	102,811	115,863	113,287	81,020	82,815	635	626	304,151	299,539

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 2017 are final. Values for 2018 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 October 2018 and 2017 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	40,077	37,996	44,032	43,691	13,449	14,146	477	458	98,034	96,291
Connecticut	10,890	10,225	10,447	10,334	2,584	2,717	167	148	24,088	23,425
Maine	3,852	3,830	3,351	3,343	2,335	2,258	0	0	9,537	9,430
Massachusetts	17,097	16,115	21,721	21,676	5,105	5,732	288	287	44,211	43,810
New Hampshire	3,850	3,657	3,719	3,666	1,650	1,649	0	0	9,219	8,972
Rhode Island	2,642	2,510	3,104	3,019	620	615	23	23	6,388	6,166
Vermont	1,746	1,659	1,690	1,654	1,155	1,175	0	0	4,591	4,488
Middle Atlantic	116,148	107,665	133,301	130,721	60,965	60,935	3,323	3,199	313,737	302,521
New Jersey	25,393	23,547	32,609	31,869	5,875	6,162	260	255	64,137	61,833
New York	44,020	41,255	64,308	63,125	14,328	14,752	2,478	2,304	125,134	121,438
Pennsylvania	46,735	42,863	36,384	35,727	40,762	40,021	585	640	124,466	119,251
East North Central	162,035	147,851	157,015	152,516	156,307	161,174	511	480	475,868	462,021
Illinois	40,047	36,355	42,945	41,821	35,576	35,966	458	426	119,026	114,568
Indiana	28,503	25,970	20,701	19,945	34,737	36,801	17	16	83,959	82,733
Michigan	29,339	27,311	33,059	32,276	25,062	25,527	6	5	87,466	85,119
Ohio	45,559	40,841	40,071	38,679	40,229	42,504	30	33	125,889	122,058
Wisconsin	18,587	17,373	20,239	19,794	20,703	20,375	0	0	59,528	57,543
West North Central	90,665	83,359	87,716	85,241	74,018	77,877	40	39	252,439	246,515
Iowa	12,172	11,386	10,371	10,064	19,420	19,216	0	0	41,963	40,666
Kansas	12,045	11,063	13,488	13,273	9,203	9,673	0	0	34,735	34,009
Minnesota	18,595	17,713	19,518	19,447	17,482	18,568	21	20	55,616	55,747
Missouri	31,117	27,551	26,647	25,444	9,720	11,073	19	19	67,503	64,087
Nebraska	8,636	8,026	8,084	7,749	8,897	9,612	0	0	25,617	25,386
North Dakota	4,046	3,820	5,406	5,330	6,973	7,265	0	0	16,425	16,415
South Dakota	4,054	3,801	4,201	3,934	2,324	2,471	0	0	10,580	10,206
South Atlantic	314,888	293,742	267,524	260,878	117,383	117,442	1,100	1,081	700,894	673,143
Delaware	4,310	3,925	3,677	3,510	1,819	1,908	0	0	9,806	9,343
District of Columbia	2,190	2,032	6,929	6,727	150	148	275	277	9,545	9,185
Florida	106,189	104,107	80,763	80,263	13,848	13,931	69	74	200,869	198,375
Georgia	50,840	46,268	40,430	39,141	26,819	26,994	143	141	118,231	112,544
Maryland	23,459	21,470	24,890	24,243	3,167	3,166	434	436	51,950	49,316
North Carolina	51,519	46,643	41,862	40,383	22,482	22,914	10	3	115,873	109,943
South Carolina	27,151	24,587	18,725	18,486	23,018	22,782	0	0	68,894	65,855
Virginia	39,681	36,261	43,681	41,825	14,272	14,395	168	150	97,802	92,631
West Virginia	9,548	8,447	6,567	6,300	11,808	11,204	0	0	27,923	25,952
East South Central	105,950	93,906	79,960	76,161	81,557	85,679	0	0	267,467	255,745
Alabama	28,150	25,343	19,612	19,273	28,389	27,828	0	0	76,152	72,444
Kentucky	23,274	20,568	16,673	16,238	22,223	23,830	0	0	62,170	60,637
Mississippi	16,761	14,847	12,076	12,097	14,189	13,443	0	0	43,026	40,386
Tennessee	37,765	33,147	31,599	28,554	16,756	20,578	0	0	86,120	82,278
West South Central	199,290	182,804	171,474	164,727	150,170	160,476	168	162	521,101	508,169
Arkansas	16,373	14,507	10,447	10,096	14,965	14,352	0	0	41,785	38,956
Louisiana	27,803	25,177	21,363	20,642	28,894	30,963	11	11	78,072	76,794
Oklahoma	20,719	18,630	17,707	17,225	15,358	15,167	0	0	53,784	51,022
Texas	134,395	124,489	121,956	116,763	90,953	99,995	156	151	347,460	341,398
Mountain	85,297	84,240	83,451	82,070	69,445	69,327	134	119	238,327	235,757
Arizona	30,439	30,143	25,547	25,349	11,443	11,528	7	6	67,436	67,026
Colorado	16,199	15,640	17,318	17,338	13,399	12,966	77	58	46,992	46,001
Idaho	6,701	7,064	5,306	5,339	7,799	7,631	0	0	19,806	20,034
Montana	4,183	4,263	4,141	4,135	3,732	3,798	0	0	12,056	12,196
Nevada	11,757	11,340	10,325	9,488	9,992	10,627	7	7	32,081	31,463
New Mexico	5,810	5,514	7,791	7,435	6,681	6,456	0	0	20,282	19,405
Utah	8,018	8,037	9,944	9,862	7,802	7,795	43	48	25,807	25,742
Wyoming	2,191	2,239	3,081	3,123	8,597	8,526	0	0	13,869	13,888
Pacific Contiguous	119,926	122,901	135,239	137,774	71,745	73,314	702	723	327,612	334,712
California	75,830	76,818	96,847	99,317	41,224	41,134	674	696	214,575	217,965
Oregon	15,392	16,152	13,781	13,748	9,962	11,295	21	21	39,157	41,215
Washington	28,704	29,932	24,611	24,709	20,559	20,885	6	6	73,880	75,532
Pacific Noncontiguous	3,881	3,860	4,753	4,829	4,098	4,230	0	0	12,731	12,918
Alaska	1,614	1,664	2,227	2,233	1,104	1,180	0	0	4,946	5,076
Hawaii	2,266	2,196	2,525	2,596	2,994	3,050	0	0	7,785	7,842
U.S. Total	1,238,156	1,158,323	1,164,464	1,138,609	799,135	824,601	6,455	6,261	3,208,210	3,127,793

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 2018 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 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, October 2018 and 2017 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	684	639	695	659	179	180	4	3	1,561	1,482
Connecticut	185	179	175	168	37	36	2	2	399	385
Maine	55	52	39	39	24	25	0	0	118	116
Massachusetts	303	281	348	330	74	78	2	1	727	691
New Hampshire	65	62	58	54	23	21	0	0	146	136
Rhode Island	47	40	49	44	9	9	0	0	106	93
Vermont	28	26	25	24	12	12	0	0	65	62
Middle Atlantic	1,585	1,505	1,620	1,603	404	424	35	35	3,645	3,567
New Jersey	295	279	375	347	59	58	2	2	731	685
New York	755	694	939	950	87	92	28	29	1,810	1,765
Pennsylvania	535	532	306	306	258	274	4	4	1,104	1,116
East North Central	1,765	1,670	1,576	1,521	1,100	1,127	3	3	4,444	4,321
Illinois	415	382	384	383	231	231	3	3	1,033	999
Indiana	287	276	213	207	246	269	0	0	746	753
Michigan	362	366	361	342	182	176	0	0	905	885
Ohio	471	433	406	384	279	296	0	0	1,155	1,114
Wisconsin	230	212	212	205	162	153	0	0	604	570
West North Central	856	830	790	787	524	533	0	0	2,171	2,151
Iowa	119	114	94	87	113	106	0	0	325	307
Kansas	118	120	138	142	71	71	0	0	327	333
Minnesota	210	201	190	193	136	141	0	0	536	535
Missouri	258	251	214	218	62	77	0	0	535	546
Nebraska	73	70	66	62	62	63	0	0	201	195
North Dakota	38	35	49	48	62	56	0	0	149	139
South Dakota	41	39	40	37	18	20	0	0	98	95
South Atlantic	3,400	3,253	2,480	2,449	744	772	9	8	6,634	6,483
Delaware	48	45	37	34	15	14	0	0	100	93
District of Columbia	26	23	83	80	1	1	3	2	114	106
Florida	1,324	1,273	784	783	105	109	1	1	2,214	2,165
Georgia	483	484	373	389	144	156	1	1	1,002	1,030
Maryland	256	239	255	248	25	26	3	3	540	517
North Carolina	504	452	353	344	143	144	0	0	1,001	940
South Carolina	294	290	178	188	132	143	0	0	605	621
Virginia	375	362	355	321	101	101	2	2	833	785
West Virginia	88	85	60	62	77	79	0	0	225	226
East South Central	1,014	944	827	796	478	487	0	0	2,319	2,228
Alabama	297	288	215	220	173	169	0	0	685	677
Kentucky	200	186	158	157	126	133	0	0	484	476
Mississippi	175	162	131	128	88	77	0	0	394	368
Tennessee	342	307	323	290	91	109	0	0	757	707
West South Central	1,948	1,942	1,410	1,428	823	891	1	1	4,182	4,263
Arkansas	132	140	75	89	77	88	0	0	284	316
Louisiana	243	258	184	195	146	178	0	0	573	631
Oklahoma	180	180	140	143	81	78	0	0	400	401
Texas	1,393	1,364	1,011	1,002	519	547	1	1	2,925	2,914
Mountain	820	845	783	786	427	429	1	1	2,031	2,061
Arizona	298	326	259	271	77	75	0	0	634	671
Colorado	173	165	177	168	100	99	1	1	451	432
Idaho	58	61	40	42	33	35	0	0	131	138
Montana	40	40	41	40	22	20	0	0	103	100
Nevada	101	102	79	79	52	59	0	0	232	240
New Mexico	62	58	77	73	39	40	0	0	179	172
Utah	69	68	83	83	47	42	0	0	199	193
Wyoming	20	24	26	31	56	60	0	0	102	115
Pacific Contiguous	1,533	1,431	2,142	2,066	812	790	7	7	4,495	4,294
California	1,144	1,029	1,800	1,738	649	626	7	7	3,600	3,400
Oregon	146	145	127	121	62	67	0	0	335	334
Washington	243	257	215	206	101	97	0	0	560	560
Pacific Noncontiguous	113	103	124	114	104	92	0	0	341	308
Alaska	34	35	43	40	18	18	0	0	95	93
Hawaii	79	68	81	73	86	73	0	0	246	215
U.S. Total	13,719	13,164	12,448	12,208	5,594	5,725	62	60	31,823	31,157

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 2018 are preliminary estimates based on a cutoff model sample.
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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 October 2018 and 2017 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	8,223	7,369	7,156	6,757	1,739	1,768	42	37	17,160	15,932
Connecticut	2,314	2,080	1,745	1,660	360	356	20	16	4,439	4,112
Maine	620	614	408	402	209	207	0	0	1,237	1,223
Massachusetts	3,687	3,227	3,654	3,456	740	793	18	17	8,099	7,494
New Hampshire	754	699	587	541	214	203	0	0	1,555	1,443
Rhode Island	535	456	506	457	94	89	4	4	1,139	1,005
Vermont	313	293	256	241	122	120	0	0	691	655
Middle Atlantic	18,687	17,287	16,682	16,612	4,228	4,224	371	363	39,969	38,486
New Jersey	3,938	3,693	3,995	3,956	596	633	24	23	8,553	8,305
New York	8,220	7,490	9,454	9,441	877	878	304	294	18,854	18,103
Pennsylvania	6,529	6,104	3,233	3,215	2,756	2,714	43	46	12,562	12,078
East North Central	21,354	19,805	15,893	15,530	10,972	11,430	35	32	48,254	46,796
Illinois	5,010	4,699	3,853	3,820	2,362	2,339	31	27	11,255	10,885
Indiana	3,420	3,205	2,141	2,102	2,483	2,777	2	2	8,046	8,086
Michigan	4,588	4,221	3,698	3,552	1,832	1,841	1	1	10,119	9,615
Ohio	5,642	5,173	3,985	3,898	2,702	2,942	2	2	12,331	12,015
Wisconsin	2,695	2,506	2,216	2,158	1,593	1,531	0	0	6,504	6,195
West North Central	11,044	10,246	8,636	8,480	5,513	5,675	4	4	25,196	24,405
Iowa	1,569	1,426	1,034	970	1,319	1,224	0	0	3,922	3,619
Kansas	1,595	1,479	1,419	1,417	690	735	0	0	3,705	3,631
Minnesota	2,504	2,331	2,055	2,071	1,362	1,396	2	2	5,922	5,800
Missouri	3,532	3,268	2,507	2,452	688	821	2	2	6,728	6,543
Nebraska	944	890	727	691	679	748	0	0	2,350	2,330
North Dakota	425	402	495	496	592	557	0	0	1,512	1,455
South Dakota	475	450	400	383	182	193	0	0	1,057	1,027
South Atlantic	37,151	35,065	25,016	24,517	7,610	7,679	86	86	69,864	67,348
Delaware	544	525	354	348	140	149	0	0	1,038	1,022
District of Columbia	279	260	821	781	12	12	26	25	1,138	1,079
Florida	12,259	12,074	7,495	7,489	1,072	1,091	5	6	20,831	20,660
Georgia	5,918	5,593	3,923	3,956	1,568	1,622	8	8	11,418	11,178
Maryland	3,133	3,029	2,591	2,607	261	265	32	34	6,017	5,935
North Carolina	5,833	5,152	3,651	3,430	1,413	1,440	1	0	10,898	10,022
South Carolina	3,384	3,221	1,908	1,957	1,400	1,413	0	0	6,691	6,592
Virginia	4,716	4,226	3,659	3,347	978	941	14	12	9,367	8,525
West Virginia	1,086	986	613	604	767	746	0	0	2,466	2,337
East South Central	11,800	10,631	8,337	8,072	4,763	5,097	0	0	24,900	23,801
Alabama	3,471	3,203	2,212	2,236	1,728	1,724	0	0	7,412	7,163
Kentucky	2,429	2,232	1,587	1,598	1,221	1,365	0	0	5,237	5,196
Mississippi	1,883	1,647	1,263	1,227	862	809	0	0	4,008	3,683
Tennessee	4,016	3,550	3,276	3,011	952	1,199	0	0	8,243	7,760
West South Central	21,656	19,665	14,020	13,777	8,224	8,804	14	13	43,913	42,260
Arkansas	1,616	1,498	807	862	823	877	0	0	3,246	3,237
Louisiana	2,603	2,469	1,864	1,850	1,524	1,704	1	1	5,992	6,024
Oklahoma	2,148	1,994	1,414	1,411	795	827	0	0	4,357	4,231
Texas	15,289	13,704	9,935	9,655	5,083	5,397	13	12	30,319	28,768
Mountain	10,303	10,055	8,127	7,949	4,522	4,609	13	12	22,965	22,625
Arizona	3,925	3,758	2,775	2,690	769	756	1	1	7,470	7,204
Colorado	1,970	1,909	1,756	1,725	976	980	7	6	4,709	4,620
Idaho	692	710	425	428	516	518	0	0	1,632	1,655
Montana	469	468	421	419	194	200	0	0	1,084	1,087
Nevada	1,394	1,350	814	753	635	674	1	1	2,844	2,777
New Mexico	748	715	793	765	385	403	0	0	1,925	1,882
Utah	854	889	845	867	468	486	5	5	2,171	2,247
Wyoming	251	256	298	304	580	592	0	0	1,129	1,152
Pacific Contiguous	18,778	18,631	19,468	19,183	7,147	6,927	65	63	45,457	44,803
California	14,314	14,018	16,102	15,851	5,564	5,290	62	60	36,041	35,219
Oregon	1,686	1,725	1,226	1,218	616	676	2	2	3,530	3,621
Washington	2,779	2,888	2,140	2,113	967	961	1	1	5,887	5,963
Pacific Noncontiguous	1,086	996	1,170	1,110	965	881	0	0	3,220	2,987
Alaska	357	353	422	423	195	192	0	0	973	969
Hawaii	729	643	748	686	770	689	0	0	2,247	2,018
U.S. Total	160,081	149,751	124,505	121,987	55,683	57,096	630	610	340,899	329,444

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 2018 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.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, October 2018 and 2017 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	20.73	20.00	16.41	15.74	12.70	12.32	8.95	7.64	17.38	16.67
Connecticut	21.87	21.29	16.80	16.73	13.68	13.28	13.67	10.10	18.37	18.03
Maine	16.47	16.05	12.34	12.02	8.80	8.80	--	--	12.82	12.43
Massachusetts	21.30	20.45	16.92	16.07	14.31	13.85	5.56	5.36	18.05	17.18
New Hampshire	20.23	19.87	16.08	15.20	13.12	12.50	--	--	17.04	16.41
Rhode Island	21.46	19.55	16.93	15.40	15.55	14.80	17.37	17.56	18.55	16.88
Vermont	18.42	17.97	15.31	14.71	10.31	9.88	--	--	15.01	14.48
Middle Atlantic	16.37	16.27	12.53	12.49	6.84	6.92	10.98	11.19	12.63	12.51
New Jersey	14.96	14.66	11.77	11.35	9.80	9.60	8.66	8.35	12.64	12.27
New York	19.29	18.74	14.98	15.02	6.06	6.15	12.07	12.53	15.26	15.02
Pennsylvania	14.10	14.60	8.79	8.86	6.67	6.81	7.57	7.15	9.85	9.98
East North Central	13.46	13.55	10.25	10.13	7.06	7.01	7.27	6.84	10.08	9.94
Illinois	13.23	13.12	9.26	9.16	6.82	6.43	7.08	6.62	9.64	9.31
Indiana	12.39	12.75	10.40	10.56	7.16	7.53	10.76	10.17	9.57	9.77
Michigan	15.42	15.12	11.21	10.79	7.29	7.04	10.59	13.66	11.22	10.92
Ohio	12.48	12.81	10.12	10.27	6.73	6.91	7.82	7.61	9.69	9.76
Wisconsin	14.94	14.71	10.91	10.47	7.68	7.26	14.45	14.38	10.80	10.35
West North Central	12.09	12.03	9.50	9.56	7.04	6.84	8.42	8.18	9.50	9.38
Iowa	12.82	11.77	9.32	8.56	5.78	5.33	--	--	8.37	7.73
Kansas	13.32	13.38	10.61	10.68	7.52	7.57	--	--	10.45	10.52
Minnesota	13.72	13.36	10.45	10.64	7.74	7.47	9.39	9.19	10.50	10.28
Missouri	10.71	11.15	8.54	8.92	6.54	6.95	7.28	7.17	9.10	9.41
Nebraska	11.23	10.89	8.76	8.45	7.20	7.06	--	--	8.87	8.60
North Dakota	10.83	10.94	9.18	9.19	8.37	7.62	--	--	9.17	8.82
South Dakota	12.35	12.48	9.88	9.88	7.81	7.87	--	--	10.25	10.22
South Atlantic	11.88	12.03	9.38	9.51	6.22	6.45	8.14	7.38	9.88	9.99
Delaware	13.89	14.20	10.21	9.89	7.69	7.59	--	--	11.08	11.03
District of Columbia	13.60	13.44	12.18	11.98	8.14	8.17	9.91	8.11	12.33	12.07
Florida	11.67	11.85	9.32	9.58	7.74	7.86	8.10	9.20	10.48	10.66
Georgia	10.96	11.52	9.50	10.01	5.26	5.65	5.15	5.01	9.03	9.48
Maryland	14.19	14.37	10.60	10.63	7.90	8.53	7.76	6.99	11.80	11.88
North Carolina	11.94	11.45	9.06	8.65	6.05	6.28	8.13	8.34	9.54	9.20
South Carolina	12.43	13.01	9.83	10.22	5.89	6.04	--	--	9.41	9.65
Virginia	11.90	11.79	8.31	8.26	6.91	6.84	8.43	8.30	9.35	9.30
West Virginia	11.27	11.97	9.07	9.68	6.10	6.59	--	--	8.32	8.86
East South Central	11.26	11.37	10.34	10.50	5.76	5.82	--	--	9.17	9.18
Alabama	12.42	12.66	11.24	11.61	5.98	6.09	--	--	9.52	9.75
Kentucky	10.77	11.17	9.54	9.80	5.40	5.59	--	--	8.28	8.44
Mississippi	11.22	11.10	10.40	10.14	6.02	5.86	--	--	9.20	9.10
Tennessee	10.70	10.61	10.19	10.32	5.66	5.69	--	--	9.48	9.26
West South Central	11.05	10.86	7.92	8.26	5.24	5.43	8.18	8.05	8.18	8.26
Arkansas	9.34	10.17	7.05	8.38	5.02	5.86	12.33	11.79	7.08	8.05
Louisiana	9.11	9.93	8.19	8.94	4.94	5.64	7.60	9.82	7.28	7.95
Oklahoma	11.00	11.17	8.02	8.24	5.16	5.34	--	--	8.10	8.35
Texas	11.69	11.09	7.93	8.14	5.39	5.32	8.21	7.93	8.52	8.35
Mountain	12.21	12.11	9.78	9.88	6.32	6.44	9.70	9.57	9.45	9.54
Arizona	13.26	12.78	10.85	10.89	6.70	6.51	10.49	10.53	10.96	10.86
Colorado	12.27	12.07	10.62	10.16	7.48	7.59	9.27	8.96	10.19	9.99
Idaho	10.33	10.26	7.82	8.12	5.66	5.96	--	--	7.92	8.14
Montana	11.48	11.23	10.28	10.22	5.55	5.39	--	--	9.00	8.96
Nevada	12.16	12.79	7.85	8.67	5.39	5.89	8.81	9.29	8.27	8.87
New Mexico	12.97	12.96	10.15	9.97	5.76	6.00	--	--	9.29	9.25
Utah	10.32	10.51	8.41	8.67	6.00	5.61	10.48	10.57	8.16	8.20
Wyoming	11.08	11.56	9.21	9.95	6.60	7.11	--	--	7.78	8.44
Pacific Contiguous	13.83	13.60	15.03	14.78	10.75	10.51	10.00	9.35	13.63	13.38
California	15.73	15.70	17.28	16.90	14.57	14.47	10.03	9.35	16.21	16.01
Oregon	11.24	10.89	9.03	9.04	6.15	6.02	9.21	9.49	9.02	8.80
Washington	9.68	9.76	8.84	8.78	4.84	4.68	9.46	9.15	7.95	7.94
Pacific Noncontiguous	28.62	26.26	25.44	23.12	23.73	20.88	--	--	25.83	23.30
Alaska	22.51	21.78	19.85	18.60	17.14	15.53	--	--	20.11	18.88
Hawaii	32.46	29.30	29.85	26.67	25.80	22.86	--	--	29.01	25.93
U.S. Total	12.87	12.80	10.74	10.78	6.91	6.91	9.81	9.57	10.46	10.40

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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 October 2018 and 2017 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD	October 2018 YTD	October 2017 YTD
New England	20.52	19.40	16.25	15.47	12.93	12.50	8.82	8.14	17.50	16.55
Connecticut	21.25	20.34	16.71	16.06	13.92	13.10	11.98	10.76	18.43	17.55
Maine	16.09	16.03	12.17	12.02	8.97	9.18	--	--	12.97	12.97
Massachusetts	21.56	20.03	16.82	15.94	14.50	13.84	6.35	6.07	18.32	17.10
New Hampshire	19.59	19.12	15.78	14.77	12.99	12.28	--	--	16.87	16.08
Rhode Island	20.26	18.16	16.30	15.12	15.17	14.51	17.09	17.13	17.83	16.30
Vermont	17.95	17.69	15.16	14.60	10.53	10.23	--	--	15.05	14.60
Middle Atlantic	16.09	16.06	12.51	12.71	6.94	6.93	11.17	11.34	12.74	12.72
New Jersey	15.51	15.68	12.25	12.41	10.14	10.27	9.13	8.94	13.33	13.43
New York	18.67	18.16	14.70	14.96	6.12	5.95	12.27	12.76	15.07	14.91
Pennsylvania	13.97	14.24	8.89	9.00	6.76	6.78	7.39	7.19	10.09	10.13
East North Central	13.18	13.40	10.12	10.18	7.02	7.09	6.94	6.66	10.14	10.13
Illinois	12.51	12.93	8.97	9.13	6.64	6.50	6.73	6.35	9.46	9.50
Indiana	12.00	12.34	10.34	10.54	7.15	7.55	10.43	11.18	9.58	9.77
Michigan	15.64	15.46	11.19	11.00	7.31	7.21	10.82	12.13	11.57	11.30
Ohio	12.38	12.67	9.94	10.08	6.72	6.92	7.35	7.58	9.80	9.84
Wisconsin	14.50	14.42	10.95	10.90	7.70	7.51	13.92	14.27	10.93	10.77
West North Central	12.18	12.29	9.85	9.95	7.45	7.29	9.29	9.17	9.98	9.90
Iowa	12.89	12.52	9.97	9.63	6.79	6.37	--	--	9.35	8.90
Kansas	13.25	13.37	10.52	10.67	7.50	7.60	--	--	10.67	10.68
Minnesota	13.46	13.16	10.53	10.65	7.79	7.52	9.68	9.60	10.65	10.40
Missouri	11.35	11.86	9.41	9.64	7.08	7.42	8.87	8.72	9.97	10.21
Nebraska	10.93	11.09	8.99	8.92	7.64	7.78	--	--	9.17	9.18
North Dakota	10.51	10.52	9.15	9.30	8.49	7.67	--	--	9.20	8.86
South Dakota	11.72	11.83	9.52	9.74	7.82	7.83	--	--	9.99	10.06
South Atlantic	11.80	11.94	9.35	9.40	6.48	6.54	7.83	7.97	9.97	10.01
Delaware	12.62	13.37	9.63	9.92	7.70	7.80	--	--	10.59	10.93
District of Columbia	12.73	12.81	11.85	11.60	8.23	8.26	9.35	9.13	11.92	11.74
Florida	11.54	11.60	9.28	9.33	7.74	7.83	7.84	8.60	10.37	10.41
Georgia	11.64	12.09	9.70	10.11	5.85	6.01	5.63	5.46	9.66	9.93
Maryland	13.35	14.11	10.41	10.75	8.24	8.37	7.41	7.90	11.58	12.03
North Carolina	11.32	11.04	8.72	8.49	6.29	6.28	8.01	8.58	9.41	9.12
South Carolina	12.46	13.10	10.19	10.59	6.08	6.20	--	--	9.71	10.01
Virginia	11.88	11.65	8.38	8.00	6.85	6.53	8.26	8.02	9.58	9.20
West Virginia	11.37	11.68	9.34	9.59	6.49	6.66	--	--	8.83	9.00
East South Central	11.14	11.32	10.43	10.60	5.84	5.95	--	--	9.31	9.31
Alabama	12.33	12.64	11.28	11.60	6.09	6.19	--	--	9.73	9.89
Kentucky	10.44	10.85	9.52	9.84	5.49	5.73	--	--	8.42	8.57
Mississippi	11.24	11.09	10.46	10.14	6.08	6.02	--	--	9.32	9.12
Tennessee	10.63	10.71	10.37	10.54	5.68	5.83	--	--	9.57	9.43
West South Central	10.87	10.76	8.18	8.36	5.48	5.49	8.34	8.28	8.43	8.32
Arkansas	9.87	10.33	7.73	8.54	5.50	6.11	11.51	12.19	7.77	8.31
Louisiana	9.36	9.81	8.73	8.96	5.27	5.50	9.42	9.94	7.67	7.84
Oklahoma	10.37	10.70	7.98	8.19	5.17	5.45	--	--	8.10	8.29
Texas	11.38	11.01	8.15	8.27	5.59	5.40	8.26	8.16	8.73	8.43
Mountain	12.08	11.94	9.74	9.69	6.51	6.65	9.54	9.97	9.64	9.60
Arizona	12.89	12.47	10.86	10.61	6.72	6.56	10.27	9.85	11.08	10.75
Colorado	12.16	12.21	10.14	9.95	7.29	7.56	8.99	9.96	10.02	10.04
Idaho	10.32	10.05	8.01	8.01	6.61	6.79	--	--	8.24	8.26
Montana	11.22	10.98	10.18	10.13	5.19	5.26	--	--	8.99	8.91
Nevada	11.86	11.90	7.89	7.93	6.35	6.34	8.52	8.65	8.86	8.83
New Mexico	12.87	12.96	10.18	10.28	5.76	6.23	--	--	9.49	9.70
Utah	10.65	11.06	8.50	8.79	5.99	6.24	10.60	10.20	8.41	8.73
Wyoming	11.46	11.43	9.67	9.73	6.75	6.95	--	--	8.14	8.30
Pacific Contiguous	15.66	15.16	14.40	13.92	9.96	9.45	9.19	8.66	13.88	13.39
California	18.88	18.25	16.63	15.96	13.50	12.86	9.19	8.64	16.80	16.16
Oregon	10.95	10.68	8.89	8.86	6.19	5.98	9.18	9.34	9.01	8.79
Washington	9.68	9.65	8.70	8.55	4.70	4.60	9.29	9.06	7.97	7.89
Pacific Noncontiguous	27.97	25.80	24.61	22.98	23.54	20.84	--	--	25.29	23.12
Alaska	22.10	21.22	18.94	18.96	17.63	16.31	--	--	19.68	19.08
Hawaii	32.16	29.27	29.61	26.44	25.72	22.59	--	--	28.86	25.74
U.S. Total	12.93	12.93	10.69	10.71	6.97	6.92	9.76	9.74	10.63	10.53

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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 - October 2018

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	125,037,837	17,582,382	774,808	726	143,395,753
2009	125,208,829	17,562,235	757,537	704	143,529,305
2010	125,717,935	17,674,338	747,747	239	144,140,259
2011	126,143,072	17,638,062	727,920	92	144,509,146
2012	126,832,343	17,729,029	732,385	83	145,293,840
2013	127,777,153	17,679,562	831,790	75	146,288,580
2014	128,680,416	17,853,995	839,212	79	147,373,702
2015	129,811,718	17,985,690	835,536	78	148,633,022
2016	131,068,760	18,148,353	838,059	86	150,055,258
2017	132,579,747	18,359,427	840,329	86	151,779,589
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	131,977,307	18,289,356	828,464	84	151,095,211
February	131,437,253	18,199,541	817,642	84	150,454,520
March	132,851,616	18,384,031	836,953	84	152,072,684
April	131,902,166	18,225,046	821,828	86	150,949,126
May	132,559,481	18,375,746	847,817	86	151,783,130
June	132,866,506	18,402,963	856,760	85	152,126,314
July	132,345,053	18,354,033	851,042	85	151,550,213
August	133,013,535	18,437,269	867,301	85	152,318,190
Sept	132,461,398	18,354,295	845,776	85	151,661,554
October	133,126,174	18,435,264	846,549	85	152,408,072
November	133,093,866	18,430,836	830,580	85	152,355,367
December	133,321,574	18,423,574	833,004	85	152,578,237
Year 2018					
January	133,342,216	18,484,700	794,303	84	152,621,303
February	132,948,450	18,361,911	771,363	84	152,081,808
March	133,911,047	18,498,366	782,306	84	153,191,803
April	133,452,691	18,455,876	782,458	84	152,691,109
May	134,218,437	18,535,301	805,945	84	153,559,767
June	134,051,924	18,569,074	816,626	84	153,437,708
July	133,973,114	18,549,619	819,029	87	153,341,849
August	134,540,638	18,617,835	825,157	95	153,983,725
Sept	133,920,754	18,593,944	802,443	89	153,317,230
October	134,464,346	18,650,639	806,702	88	153,921,775
Rolling 12 Months Ending in October					
2017	132,310,447	18,323,815	839,754	85	151,474,100
2018	133,769,921	18,514,306	805,826	86	153,090,140

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 2017 and prior years are final. Values for 2018 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: October 2018 and 2017

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	6,374,514	6,306,148	895,452	881,050	20,046	22,960	6	6	7,290,018	7,210,164
Connecticut	1,505,445	1,496,909	154,093	153,338	4,242	4,358	3	3	1,663,783	1,654,608
Maine	701,776	713,500	98,786	100,494	3,024	3,146	0	0	803,586	817,140
Massachusetts	2,784,104	2,738,673	417,778	405,089	7,734	10,297	2	2	3,209,618	3,154,061
New Hampshire	624,690	619,398	107,610	107,517	3,157	3,215	0	0	735,457	730,130
Rhode Island	441,887	423,128	59,975	58,047	1,751	1,758	1	1	503,614	482,934
Vermont	316,612	314,540	57,210	56,565	138	186	0	0	373,960	371,291
Middle Atlantic	16,189,682	16,059,547	2,352,995	2,310,923	29,642	41,207	20	20	18,572,339	18,411,697
New Jersey	3,579,320	3,544,220	526,965	516,723	11,854	11,674	6	6	4,118,145	4,072,623
New York	7,205,032	7,152,187	1,111,140	1,095,302	6,623	6,972	8	8	8,322,803	8,254,469
Pennsylvania	5,405,330	5,363,140	714,890	698,898	11,165	22,561	6	6	6,131,391	6,084,605
East North Central	20,294,976	20,097,770	2,509,734	2,489,569	46,730	54,213	9	9	22,851,449	22,641,561
Illinois	5,313,441	5,271,290	617,225	612,635	4,022	5,693	3	3	5,934,691	5,889,621
Indiana	2,866,780	2,838,956	354,195	352,866	15,216	17,937	1	1	3,236,192	3,209,760
Michigan	4,400,062	4,356,761	550,314	543,628	NM	6,349	2	2	4,955,935	4,906,740
Ohio	4,989,180	4,945,681	630,596	629,003	16,980	18,611	2	2	5,636,758	5,593,297
Wisconsin	2,725,513	2,685,082	357,404	351,437	NM	5,623	1	1	3,087,873	3,042,143
West North Central	9,565,433	9,457,056	1,468,193	1,447,341	110,433	120,574	3	3	11,144,062	11,024,974
Iowa	1,399,731	1,380,900	245,518	238,550	NM	7,618	0	0	1,652,021	1,627,068
Kansas	1,273,964	1,259,022	236,700	232,785	25,189	24,168	0	0	1,535,853	1,515,975
Minnesota	2,421,535	2,413,814	291,874	293,888	NM	8,803	1	1	2,721,489	2,716,506
Missouri	2,820,175	2,775,978	384,647	383,378	6,707	8,138	2	2	3,211,531	3,167,496
Nebraska	863,432	847,413	161,763	152,335	52,529	59,253	0	0	1,077,724	1,059,001
North Dakota	381,361	381,433	74,095	74,730	8,118	8,747	0	0	463,574	464,910
South Dakota	405,235	398,496	73,596	71,675	NM	3,847	0	0	481,870	474,018
South Atlantic	28,004,178	27,618,991	3,817,451	3,751,682	78,151	83,318	13	13	31,899,793	31,454,004
Delaware	431,333	427,314	55,028	54,461	588	851	0	0	486,949	482,626
District of Columbia	276,499	268,280	26,413	26,120	1	1	3	3	302,916	294,404
Florida	9,347,318	9,260,198	1,236,408	1,216,683	20,260	21,151	2	2	10,603,988	10,498,034
Georgia	4,408,258	4,313,277	587,833	575,179	19,401	23,005	1	1	5,015,493	4,911,462
Maryland	2,339,460	2,317,486	254,143	253,202	8,756	8,749	5	5	2,602,364	2,579,442
North Carolina	4,586,790	4,506,786	711,376	683,864	9,824	10,019	1	1	5,307,991	5,200,670
South Carolina	2,308,182	2,261,684	369,541	375,327	4,224	4,358	0	0	2,681,947	2,641,369
Virginia	3,448,434	3,405,724	431,850	422,369	3,737	3,689	1	1	3,884,022	3,831,783
West Virginia	857,904	858,242	144,859	144,477	11,360	11,495	0	0	1,014,123	1,014,214
East South Central	8,494,060	8,342,053	1,408,719	1,399,688	21,597	26,199	0	0	9,924,376	9,767,940
Alabama	2,263,987	2,220,220	371,855	371,050	8,214	8,043	0	0	2,644,056	2,599,313
Kentucky	2,006,269	1,975,068	305,120	305,541	6,063	6,972	0	0	2,317,452	2,287,581
Mississippi	1,321,148	1,287,424	240,779	236,319	6,472	10,017	0	0	1,568,399	1,533,760
Tennessee	2,902,656	2,859,341	490,965	486,778	848	1,167	0	0	3,394,469	3,347,286
West South Central	16,350,243	16,119,705	2,331,023	2,289,515	199,318	192,888	6	6	18,880,590	18,602,114
Arkansas	1,400,926	1,383,985	193,683	192,651	38,209	40,027	2	2	1,632,820	1,616,665
Louisiana	2,105,432	2,077,266	294,539	291,784	18,524	19,552	1	1	2,418,496	2,388,603
Oklahoma	1,791,638	1,756,202	287,102	281,886	17,880	18,704	0	0	2,096,620	2,056,792
Texas	11,052,247	10,902,252	1,555,699	1,523,194	124,705	114,605	3	3	12,732,654	12,540,054
Mountain	9,857,564	9,798,224	1,397,700	1,405,215	89,627	96,578	5	5	11,344,896	11,300,022
Arizona	2,808,303	2,772,254	322,403	323,851	6,309	8,085	2	2	3,137,017	3,104,192
Colorado	2,337,349	2,299,437	364,786	371,605	14,482	16,132	1	1	2,716,618	2,687,175
Idaho	747,864	732,665	111,105	109,501	28,652	28,266	0	0	887,621	870,432
Montana	514,489	505,789	110,836	107,651	NM	10,882	0	0	634,301	624,322
Nevada	1,187,703	1,265,365	164,877	163,580	NM	3,358	1	1	1,355,836	1,432,304
New Mexico	905,133	883,107	139,634	143,403	8,525	9,352	0	0	1,053,292	1,035,862
Utah	1,081,554	1,068,811	125,451	127,611	9,618	9,615	1	1	1,216,624	1,206,038
Wyoming	275,169	270,796	58,608	58,013	9,810	10,888	0	0	343,587	339,697
Pacific Contiguous	18,606,794	18,605,642	2,355,461	2,345,410	208,951	206,460	26	23	21,171,232	21,157,535
California	13,758,218	13,803,131	1,717,415	1,727,415	154,055	153,310	18	15	15,629,706	15,683,871
Oregon	1,765,387	1,732,863	240,790	234,685	26,362	25,480	2	2	2,032,541	1,993,030
Washington	3,083,189	3,069,648	397,256	383,310	28,534	27,670	6	6	3,508,985	3,480,634
Pacific Noncontiguous	726,902	721,038	113,911	114,871	NM	NM	0	0	843,020	838,061
Alaska	290,509	287,381	54,143	53,718	NM	NM	0	0	346,050	342,470
Hawaii	436,393	433,657	59,768	61,153	809	781	0	0	496,970	495,591
U.S. Total	134,464,346	133,126,174	18,650,639	18,435,264	806,702	846,549	88	85	153,921,775	152,408,072

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 2017 are final. Values for 2018 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.

Chapter 6

Capacity

Table 6.1. Electric Generating Summer Capacity Changes (MW), September 2018 to October 2018

		As of End of September 2018	Activity During October 2018 as Reported to EIA		As of End of October 2018	Net Change in Capacity - Current Month and Prior Periods			Changes in and Total Net Summer Capacity -- Outlook Based on Reports to EIA							
									Planned Capacity Additions		Planned Capacity Reductions		Planned Net Change		Planned Total Net Summer	
Technology	Capacity Source	Total In-Service Capacity	Actual Capacity Additions	Actual Capacity Reductions	Total In-Service Capacity	Current Month	Year to Date	Past 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	Next Month	Next 12 Months	At End of Next Month	At End of Next 12 Months
..... *Onshore Wind (Summer Capacity)*	*Utility Scale Facilities*	*89,642.6*	*129.9*	*0.0*	*89,772.5*	*129.9*	*2,204.3*	*5,318.5*	*1,268.5*	*10,063.3*	*0.0*	*0.0*	*1,268.5*	*10,063.3*	*91,041.0*	*99,835.8*
..... *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	89,671.9	129.9	0.0	89,801.8	129.9	2,204.3	5,318.5	1,268.5	10,063.3	0.0	0.0	1,268.5	10,063.3	91,070.3	99,865.1
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*27,891.7*	*152.6*	*0.0*	*28,044.3*	*152.6*	*2,835.3*	*4,949.0*	*701.2*	*4,548.7*	*0.0*	*1.2*	*701.2*	*4,547.5*	*28,745.5*	*32,591.8*
..... *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	29,649.6	152.6	0.0	29,802.2	152.6	2,835.3	4,949.0	701.2	4,548.7	0.0	1.2	701.2	4,547.5	30,503.4	34,349.7
..... Conventional Hydroelectric	Utility Scale Facilities	79,769.0	0.0	0.0	79,769.0	0.0	-25.5	-28.6	124.3	253.5	0.0	109.9	124.3	143.6	79,893.3	79,912.6
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,789.6*	*0.0*	*0.0*	*8,789.6*	*0.0*	*-41.3*	*-66.8*	*9.4*	*167.9*	*55.0*	*79.8*	*-45.6*	*88.1*	*8,744.0*	*8,877.7*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,068.3*	*0.0*	*0.0*	*2,068.3*	*0.0*	*-31.1*	*-37.8*	*0.0*	*6.2*	*0.0*	*12.2*	*0.0*	*-6.0*	*2,068.3*	*2,062.3*
..... *Municipal Solid Waste*	*Utility Scale Facilities*	*2,235.0*	*0.0*	*0.0*	*2,235.0*	*0.0*	*-10.0*	*-10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*2,235.0*	*2,235.0*
..... *Other Waste Biomass*	*Utility Scale Facilities*	*773.5*	*0.0*	*0.0*	*773.5*	*0.0*	*-11.6*	*-22.6*	*0.0*	*48.0*	*0.0*	*0.4*	*0.0*	*47.6*	*773.5*	*821.1*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,866.4	0.0	0.0	13,866.4	0.0	-94.0	-137.2	9.4	222.1	55.0	92.4	-45.6	129.7	13,820.8	13,996.1
..... Geothermal	Utility Scale Facilities	2,499.3	0.0	0.0	2,499.3	0.0	16.0	48.2	37.0	76.9	0.0	0.0	37.0	76.9	2,536.3	2,576.2
... Renewable Sources Subtotal	***Utility Scale Facilities***	***215,456.2***	***282.5***	***0.0***	***215,738.7***	***282.5***	***4,936.1***	***10,149.9***	***2,140.4***	***15,164.5***	***55.0***	***203.5***	***2,085.4***	***14,961.0***	***217,824.1***	***230,699.7***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*257,909.1*	*2,135.1*	*0.0*	*260,044.2*	*2,135.1*	*13,372.2*	*14,521.3*	*7.5*	*9,455.2*	*0.0*	*50.0*	*7.5*	*9,405.2*	*260,051.7*	*269,449.4*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*127,030.7*	*11.4*	*10.0*	*127,032.1*	*1.4*	*771.3*	*929.0*	*644.5*	*2,162.6*	*14.0*	*84.0*	*630.5*	*2,078.6*	*127,662.6*	*129,110.7*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*76,227.4*	*0.0*	*530.0*	*75,697.4*	*-530.0*	*-2,850.3*	*-2,946.3*	*0.0*	*1.0*	*920.0*	*1,403.8*	*-920.0*	*-1,402.8*	*74,777.4*	*74,294.6*
..... *Natural Gas Internal Combustion Engine*	*Utility Scale Facilities*	*4,627.3*	*21.3*	*0.7*	*4,647.9*	*20.6*	*348.9*	*350.9*	*3.0*	*289.7*	*0.0*	*2.1*	*3.0*	*287.6*	*4,650.9*	*4,935.5*
..... *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*	*122.3*	*0.0*	*0.0*	*122.3*	*0.0*	*0.2*	*0.2*	*3.7*	*44.4*	*0.0*	*0.0*	*3.7*	*44.4*	*126.0*	*166.7*
..... Natural Gas Subtotal	Utility Scale Facilities	466,026.8	2,167.8	540.7	467,653.9	1,627.1	11,642.3	12,855.1	658.7	11,952.9	934.0	1,539.9	-275.3	10,413.0	467,378.6	478,066.9
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*244,855.9*	*0.0*	*270.9*	*244,585.0*	*-270.9*	*-11,206.3*	*-13,105.3*	*0.0*	*17.0*	*51.0*	*4,313.1*	*-51.0*	*-4,296.1*	*244,534.0*	*240,288.9*
..... *Coal Integrated Gasification Combined Cycle*	*Utility Scale Facilities*	*756.0*	*0.0*	*0.0*	*756.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*756.0*	*756.0*
..... Coal Subtotal	Utility Scale Facilities	245,611.9	0.0	270.9	245,341.0	-270.9	-11,206.3	-13,105.3	0.0	17.0	51.0	4,313.1	-51.0	-4,296.1	245,290.0	241,044.9
..... Petroleum Coke	Utility Scale Facilities	1,527.9	0.0	0.0	1,527.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,527.9	1,527.9
..... Petroleum Liquids	Utility Scale Facilities	31,607.7	7.5	3.9	31,611.3	3.6	-167.5	-232.3	4.8	24.3	0.0	6.4	4.8	17.9	31,616.1	31,629.2
..... Other Gases	Utility Scale Facilities	2,375.8	0.0	0.0	2,375.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,375.8	2,375.8
... Fossil Fuels Subtotal	***Utility Scale Facilities***	***747,150.1***	***2,175.3***	***815.5***	***748,509.9***	***1,359.8***	***268.5***	***-482.5***	***663.5***	***11,994.2***	***985.0***	***5,859.4***	***-321.5***	***6,134.8***	***748,188.4***	***754,644.7***
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,855.4	0.0	0.0	22,855.4	0.0	45.0	45.0	0.0	57.0	0.0	0.0	0.0	57.0	22,855.4	22,912.4
..... Flywheels	Utility Scale Facilities	47.0	0.0	0.0	47.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	47.0	47.0
..... Batteries	Utility Scale Facilities	768.9	20.0	0.0	788.9	20.0	124.0	107.5	21.3	133.6	0.0	0.0	21.3	133.6	810.2	922.5
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,671.3***	***20.0***	***0.0***	***23,691.3***	***20.0***	***169.0***	***152.5***	***21.3***	***190.6***	***0.0***	***0.0***	***21.3***	***190.6***	***23,712.6***	***23,881.9***
... Nuclear	***Utility Scale Facilities***	***99,176.2***	***0.0***	***0.0***	***99,176.2***	***0.0***	***-452.7***	***-452.7***	***155.0***	***310.0***	***0.0***	***1,480.0***	***155.0***	***-1,170.0***	***99,331.2***	***98,006.2***
... All Other	***Utility Scale Facilities***	***2,184.9***	***0.9***	***0.0***	***2,185.8***	***0.9***	***11.4***	***11.4***	***0.0***	***47.9***	***0.0***	***0.0***	***0.0***	***47.9***	***2,185.8***	***2,233.7***
TOTAL	**UTILITY SCALE FACILITIES**	**1,087,638.7**	**2,478.7**	**815.5**	**1,089,301.9**	**1,663.2**	**4,932.3**	**9,378.6**	**2,980.2**	**27,707.2**	**1,040.0**	**7,542.9**	**1,940.2**	**20,164.3**	**1,091,242.1**	**1,109,466.2**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*18,708.4*			*18,992.5*	*284.2*	*2,844.8*	*3,535.9*								
..... Estimated Total Solar Photovoltaic	All Facilities	46,600.1			47,036.8	436.8	5,680.1	8,484.9								
... Estimated Total Solar	***All Facilities***	***48,358.0***			***48,794.7***	***436.8***	***5,680.1***	***8,484.9***								

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 - October 2018

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
2017	25,209.0	16,147.8	41,356.8
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	20,603.7	12,970.1	33,573.8
February	20,792.6	13,272.0	34,064.6
March	21,177.9	13,558.9	34,736.8
April	21,700.6	13,815.1	35,515.7
May	22,006.1	14,115.3	36,121.4
June	22,242.6	14,401.8	36,644.4
July	22,356.4	14,670.8	37,027.2
August	22,547.7	15,018.7	37,566.4
Sept	22,762.8	15,216.3	37,979.1
October	23,095.3	15,456.6	38,551.9
November	23,660.0	15,719.9	39,379.9
December	25,209.0	16,147.8	41,356.8
Year 2018			
January	25,958.5	16,489.5	42,448.0
February	26,048.3	16,742.2	42,790.5
March	26,546.5	17,029.2	43,575.7
April	26,822.9	17,293.9	44,116.8
May	27,243.0	17,581.1	44,824.1
June	27,393.6	17,862.9	45,256.5
July	27,505.1	18,110.9	45,616.0
August	27,569.7	18,412.4	45,982.1
Sept	27,891.7	18,708.4	46,600.1
October	28,044.3	18,992.5	47,036.8

Values for 2017 are final. Values for 2018 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 - October 2018

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
2017	9,626.8	5,155.8	1,365.1	16,147.8
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	7,754.9	4,071.5	1,143.7	12,970.1
February	7,946.3	4,110.9	1,214.8	13,272.0
March	8,115.3	4,203.6	1,240.0	13,558.9
April	8,269.3	4,293.6	1,252.2	13,815.1
May	8,453.2	4,381.8	1,280.4	14,115.3
June	8,618.2	4,481.8	1,301.9	14,401.8
July	8,778.3	4,565.3	1,327.2	14,670.8
August	8,961.3	4,711.5	1,346.0	15,018.7
Sept	9,113.0	4,738.4	1,364.9	15,216.3
October	9,265.2	4,826.7	1,364.7	15,456.6
November	9,429.8	4,924.9	1,365.1	15,719.9
December	9,626.8	5,155.8	1,365.1	16,147.8
Year 2018				
January	9,820.2	5,308.4	1,360.8	16,489.5
February	9,985.3	5,389.1	1,367.9	16,742.2
March	10,154.5	5,489.6	1,385.1	17,029.2
April	10,314.3	5,572.4	1,407.3	17,293.9
May	10,491.8	5,661.6	1,427.7	17,581.1
June	10,657.4	5,760.7	1,444.8	17,862.9
July	10,826.0	5,832.1	1,452.8	18,110.9
August	11,008.8	5,934.5	1,469.0	18,412.4
Sept	11,179.9	6,019.6	1,508.9	18,708.4
October	11,372.9	6,095.7	1,523.9	18,992.5

Values for 2017 are final. Values for 2018 are preliminary.
Improved renewable data reporting has resulted in realignment of the commercial and industrial sectors.
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 6.2.A. Net Summer Capacity of Utility Scale Units by Technology and by State, October 2018 and 2017 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	5,729.0	5,561.9	22,850.3	21,205.7	1,797.4	1,797.4	28.8	24.2	4,014.1	4,014.1	320.9	320.9	34,740.5	32,924.2
Connecticut	390.3	361.2	7,007.0	6,100.4	29.4	29.4	1.6	1.6	2,087.8	2,087.8	298.9	298.9	9,815.0	8,879.3
Maine	2,345.6	2,322.8	2,540.5	2,536.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,924.3	4,897.5
Massachusetts	1,316.1	1,252.8	9,110.9	8,376.9	1,768.0	1,768.0	9.0	4.4	677.2	677.2	0.0	0.0	12,881.2	12,079.3
New Hampshire	928.9	928.9	2,262.9	2,262.9	0.0	0.0	0.0	0.0	1,249.1	1,249.1	0.0	0.0	4,440.9	4,440.9
Rhode Island	113.3	104.8	1,831.1	1,831.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,944.4	1,935.9
Vermont	634.8	591.4	97.9	97.9	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	734.7	691.3
Middle Atlantic	11,041.3	10,820.1	71,800.3	68,003.5	3,409.8	3,409.8	73.9	72.4	18,687.9	19,295.6	425.4	420.9	105,438.6	102,022.3
New Jersey	962.3	906.2	12,410.9	12,366.4	420.0	420.0	2.5	1.0	3,500.2	4,107.9	15.7	11.2	17,311.6	17,812.7
New York	7,224.4	7,037.3	26,764.6	26,023.8	1,406.8	1,406.8	21.0	21.0	5,390.7	5,390.7	221.7	221.7	41,029.2	40,101.3
Pennsylvania	2,854.6	2,876.6	32,624.8	29,613.3	1,583.0	1,583.0	50.4	50.4	9,797.0	9,797.0	188.0	188.0	47,097.8	44,108.3
East North Central	11,937.1	11,047.0	112,387.6	113,797.2	2,179.0	2,134.0	168.7	187.4	19,024.4	19,024.4	188.1	188.1	145,884.9	146,378.1
Illinois	4,549.9	4,172.4	28,983.1	28,931.1	0.0	0.0	112.7	112.4	11,577.4	11,577.4	78.0	78.0	45,301.1	44,871.3
Indiana	2,442.8	2,312.2	23,892.4	23,159.4	0.0	0.0	22.0	22.0	0.0	0.0	89.0	89.0	26,446.2	25,582.6
Michigan	2,659.0	2,481.7	20,790.5	20,941.1	2,179.0	2,134.0	1.0	0.0	4,119.8	4,119.8	0.0	0.0	29,749.3	29,676.6
Ohio	1,044.3	855.2	25,886.5	26,227.7	0.0	0.0	33.0	53.0	2,134.0	2,134.0	0.0	0.0	29,097.8	29,269.9
Wisconsin	1,241.1	1,225.5	12,835.1	14,537.9	0.0	0.0	0.0	0.0	1,193.2	1,193.2	21.1	21.1	15,290.5	16,977.7
West North Central	26,966.2	25,639.2	60,169.4	60,778.5	657.0	657.0	3.2	3.2	5,443.4	5,443.4	24.5	24.5	93,263.7	92,545.8
Iowa	7,315.7	6,976.4	9,801.9	9,973.9	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	17,719.0	17,551.7
Kansas	5,136.2	5,136.2	9,190.8	9,776.5	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	15,552.8	16,138.5
Minnesota	5,101.8	4,612.1	10,306.7	10,077.8	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,084.9	16,366.3
Missouri	1,581.4	1,257.5	18,386.9	18,474.5	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,817.5	21,581.2
Nebraska	1,761.5	1,627.4	6,157.7	6,148.4	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	8,689.2	8,545.8
North Dakota	3,592.8	3,592.8	4,633.6	4,635.6	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	8,231.7	8,233.7
South Dakota	2,476.8	2,436.8	1,691.8	1,691.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,168.6	4,128.6
South Atlantic	19,382.3	17,444.2	161,877.7	159,758.2	7,905.2	7,905.2	94.5	80.5	24,602.6	24,602.6	452.7	446.7	214,315.0	210,237.4
Delaware	48.3	46.1	3,331.4	3,331.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,379.7	3,377.5
District of Columbia	23.0	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	32.0
Florida	2,547.2	1,756.0	52,634.1	53,176.0	0.0	0.0	14.0	0.0	3,572.0	3,572.0	348.7	348.7	59,116.0	58,852.7
Georgia	3,963.5	3,923.1	26,973.7	26,974.3	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	44.0	44.0	36,905.4	36,865.6
Maryland	1,161.8	1,088.7	11,837.3	10,278.7	0.0	0.0	13.0	13.0	1,707.8	1,707.8	6.0	0.0	14,725.9	13,088.2
North Carolina	6,329.8	5,730.8	22,130.3	21,644.3	86.0	86.0	1.0	1.0	5,117.6	5,117.6	54.0	54.0	33,718.7	32,633.7
South Carolina	2,148.7	1,966.1	12,137.2	11,435.2	2,716.0	2,716.0	0.0	0.0	6,576.2	6,576.2	0.0	0.0	23,578.1	22,693.5
Virginia	2,132.9	1,883.3	19,043.4	18,746.0	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,985.3	27,438.3
West Virginia	1,027.1	1,027.1	13,781.3	14,163.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	14,873.9	15,255.9
East South Central	8,762.9	8,610.7	64,846.3	65,678.8	1,616.3	1,616.3	1.0	0.0	11,139.1	10,984.1	1.4	1.4	86,367.0	86,891.3
Alabama	4,156.0	4,069.6	20,507.4	20,507.4	0.0	0.0	1.0	0.0	5,215.4	5,060.4	0.0	0.0	29,879.8	29,637.4
Kentucky	1,245.4	1,227.6	18,874.3	18,874.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,119.7	20,101.9
Mississippi	435.3	383.3	13,274.3	13,989.9	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	15,112.0	15,775.6
Tennessee	2,926.2	2,930.2	12,190.3	12,307.2	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,255.5	21,376.4
West South Central	37,051.5	33,680.5	139,983.8	143,015.7	286.0	286.0	99.8	76.5	8,910.7	8,910.7	512.7	512.7	186,844.5	186,482.1
Arkansas	1,694.3	1,608.3	11,193.0	11,183.0	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,733.1	14,637.1
Louisiana	683.2	683.2	20,600.7	20,600.7	0.0	0.0	0.5	0.5	2,132.9	2,132.9	288.7	288.7	23,706.0	23,706.0
Oklahoma	8,661.7	7,701.5	18,577.0	17,889.9	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,496.7	25,849.4
Texas	26,012.3	23,687.5	89,613.1	93,342.1	0.0	0.0	99.3	76.0	4,960.0	4,960.0	224.0	224.0	120,908.7	122,289.6
Mountain	26,335.8	25,647.5	62,321.3	63,168.3	778.8	778.8	35.6	23.6	3,937.0	3,937.0	127.2	126.3	93,535.7	93,681.5
Arizona	5,090.8	5,011.6	19,407.3	19,407.3	216.3	216.3	32.0	20.0	3,937.0	3,937.0	0.0	0.0	28,683.4	28,592.2
Colorado	4,286.1	4,180.8	11,119.2	11,161.2	562.5	562.5	1.0	1.0	0.0	0.0	9.3	9.3	15,978.1	15,914.8
Idaho	4,011.9	4,014.6	1,127.6	1,127.6	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,154.3	5,157.0
Montana	3,552.8	3,449.3	2,740.4	2,740.4	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,337.2	6,233.7
Nevada	3,595.6	3,535.5	7,821.6	7,791.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,423.7	11,333.6
New Mexico	2,403.7	2,060.8	5,966.8	6,813.8	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.0	8,373.1	8,877.2
Utah	1,600.5	1,600.5	7,360.2	7,348.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2	40.2	9,000.9	8,988.9
Wyoming	1,794.4	1,794.4	6,778.2	6,778.2	0.0	0.0	0.0	0.0	0.0	0.0	12.4	11.5	8,585.0	8,584.1
Pacific Contiguous	67,348.1	66,009.4	48,053.3	49,364.3	4,225.9	4,225.9	243.2	171.9	3,417.0	3,417.0	106.3	106.3	123,393.8	123,294.8
California	30,386.9	29,187.1	38,975.4	40,286.4	3,911.9	3,911.9	230.8	159.5	2,240.0	2,240.0	106.3	106.3	75,851.3	75,891.2
Oregon	12,259.7	12,123.5	4,318.1	4,318.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,582.8	16,446.6
Washington	24,701.5	24,698.8	4,759.8	4,759.8	314.0	314.0	7.4	7.4	1,177.0	1,177.0	0.0	0.0	30,959.7	30,957.0
Pacific Noncontiguous	1,184.5	1,128.3	4,219.9	4,222.2	0.0	0.0	87.2	88.7	0.0	0.0	26.6	26.6	5,518.2	5,465.8
Alaska	538.2	538.2	2,161.6	2,163.9	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,746.0	2,748.3
Hawaii	646.3	590.1	2,058.3	2,058.3	0.0	0.0	41.0	42.5	0.0	0.0	26.6	26.6	2,772.2	2,717.5
U.S. Total	215,738.7	205,588.8	748,509.9	748,992.4	22,855.4	22,810.4	835.9	728.4	99,176.2	99,628.9	2,185.8	2,174.4	1,089,301.9	1,079,923.3

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 are preliminary.

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

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

Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, October 2018 and 2017 (Megawatts)

	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
Census Division and State	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	1,402.1	1,347.8	836.0	722.4	0.0	0.0	1,960.7	1,960.7	1,530.2	1,531.0	0.0	0.0	5,729.0	5,561.9	2,112.5	1,689.7	2,948.5	2,412.1	2,948.5	2,412.1
Connecticut	1.0	1.0	63.6	34.5	0.0	0.0	122.2	122.2	203.5	203.5	0.0	0.0	390.3	361.2	393.1	314.6	456.7	349.1	456.7	349.1
Maine	921.6	898.8	5.6	5.6	0.0	0.0	732.4	732.4	686.0	686.0	0.0	0.0	2,345.6	2,322.8	39.4	31.1	45.0	36.7	45.0	36.7
Massachusetts	94.4	92.9	669.0	606.4	0.0	0.0	267.4	267.4	285.3	286.1	0.0	0.0	1,316.1	1,252.8	1,419.0	1,147.8	2,088.0	1,754.2	2,088.0	1,754.2
New Hampshire	183.1	183.1	0.0	0.0	0.0	0.0	504.8	504.8	241.0	241.0	0.0	0.0	928.9	928.9	80.4	67.8	80.4	67.8	80.4	67.8
Rhode Island	51.8	51.8	18.7	10.2	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	113.3	104.8	81.0	41.2	99.7	51.4	99.7	51.4
Vermont	150.2	120.2	79.1	65.7	0.0	0.0	331.2	331.2	74.3	74.3	0.0	0.0	634.8	591.4	99.6	87.3	178.7	153.0	178.7	153.0
Middle Atlantic	3,284.0	3,205.6	1,011.3	843.5	0.0	0.0	5,466.2	5,466.2	1,279.8	1,304.8	0.0	0.0	11,041.3	10,820.1	2,925.7	2,434.0	3,937.0	3,277.5	3,937.0	3,277.5
New Jersey	7.6	7.6	715.1	659.0	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	962.3	906.2	1,435.0	1,224.4	2,150.1	1,883.4	2,150.1	1,883.4
New York	1,904.6	1,826.2	241.4	132.7	0.0	0.0	4,554.3	4,554.3	524.1	524.1	0.0	0.0	7,224.4	7,037.3	1,175.7	942.6	1,417.1	1,075.3	1,417.1	1,075.3
Pennsylvania	1,371.8	1,371.8	54.8	51.8	0.0	0.0	899.6	899.6	528.4	553.4	0.0	0.0	2,854.6	2,876.6	315.0	267.0	369.8	318.8	369.8	318.8
East North Central	9,378.7	8,533.0	432.5	366.0	0.0	0.0	857.3	857.3	1,268.6	1,290.7	0.0	0.0	11,937.1	11,047.0	373.3	257.8	805.8	623.8	805.8	623.8
Illinois	4,380.9	3,983.8	34.9	32.8	0.0	0.0	34.1	34.1	100.0	121.7	0.0	0.0	4,549.9	4,172.4	72.0	45.7	106.9	78.5	106.9	78.5
Indiana	2,109.4	1,989.7	196.7	185.8	0.0	0.0	60.4	60.4	76.3	76.3	0.0	0.0	2,442.8	2,312.2	72.5	26.4	269.2	212.2	269.2	212.2
Michigan	1,735.8	1,591.8	97.2	62.5	0.0	0.0	266.9	266.9	559.1	560.5	0.0	0.0	2,659.0	2,481.7	60.4	49.2	157.6	111.7	157.6	111.7
Ohio	713.4	538.4	81.6	67.5	0.0	0.0	101.9	101.9	147.4	147.4	0.0	0.0	1,044.3	855.2	114.1	95.4	195.7	162.9	195.7	162.9
Wisconsin	439.2	429.3	22.1	17.4	0.0	0.0	394.0	394.0	385.8	384.8	0.0	0.0	1,241.1	1,225.5	54.4	41.2	76.5	58.6	76.5	58.6
West North Central	22,323.5	21,317.2	793.6	472.9	0.0	0.0	3,291.7	3,291.7	557.4	557.4	0.0	0.0	26,966.2	25,639.2	322.4	251.3	1,116.0	724.2	1,116.0	724.2
Iowa	7,140.2	6,802.2	7.7	6.4	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	7,315.7	6,976.4	88.4	64.6	96.1	71.0	96.1	71.0
Kansas	5,116.0	5,116.0	4.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,136.2	5,136.2	17.8	10.7	22.0	14.9	22.0	14.9
Minnesota	3,707.9	3,507.9	703.0	413.3	0.0	0.0	205.9	205.9	485.0	485.0	0.0	0.0	5,101.8	4,612.1	59.9	42.6	762.9	455.9	762.9	455.9
Missouri	954.3	654.3	62.1	38.2	0.0	0.0	548.5	548.5	16.5	16.5	0.0	0.0	1,581.4	1,257.5	148.3	129.0	210.4	167.2	210.4	167.2
Nebraska	1,454.3	1,326.0	15.6	9.8	0.0	0.0	275.9	275.9	15.7	15.7	0.0	0.0	1,761.5	1,627.4	7.1	3.7	22.7	13.5	22.7	13.5
North Dakota	3,073.0	3,073.0	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,592.8	3,592.8	0.3	0.2	0.3	0.2	0.3	0.2
South Dakota	877.8	837.8	1.0	1.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,476.8	2,436.8	0.6	0.5	1.6	1.5	1.6	1.5
South Atlantic	1,086.3	1,086.3	6,763.7	4,707.6	0.0	0.0	7,229.2	7,268.2	4,303.1	4,382.1	0.0	0.0	19,382.3	17,444.2	1,650.5	1,308.0	8,414.2	6,015.6	8,414.2	6,015.6
Delaware	2.0	2.0	34.1	31.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	48.3	46.1	77.5	67.1	111.6	99.0	111.6	99.0
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	0.0	0.0	23.0	23.0	48.8	36.8	48.8	36.8	48.8	36.8
Florida	0.0	0.0	1,261.9	393.7	0.0	0.0	54.5	54.5	1,230.8	1,307.8	0.0	0.0	2,547.2	1,756.0	269.1	183.8	1,531.0	577.5	1,531.0	577.5
Georgia	0.0	0.0	1,010.9	970.5	0.0	0.0	2,047.2	2,047.2	905.4	905.4	0.0	0.0	3,963.5	3,923.1	NM	NM	NM	NM	NM	NM
Maryland	190.0	190.0	241.8	166.7	0.0	0.0	590.0	590.0	140.0	142.0	0.0	0.0	1,161.8	1,088.7	703.2	602.9	945.0	769.6	945.0	769.6
North Carolina	208.0	208.0	3,551.5	2,952.5	0.0	0.0	2,002.0	2,002.0	568.3	568.3	0.0	0.0	6,329.8	5,730.8	134.7	112.6	3,686.2	3,065.1	3,686.2	3,065.1
South Carolina	0.0	0.0	289.0	67.4	0.0	0.0	1,328.7	1,367.7	531.0	531.0	0.0	0.0	2,148.7	1,966.1	188.7	111.0	477.7	178.4	477.7	178.4
Virginia	0.0	0.0	374.5	124.9	0.0	0.0	866.0	866.0	892.4	892.4	0.0	0.0	2,132.9	1,883.3	62.5	44.5	437.0	169.4	437.0	169.4
West Virginia	686.3	686.3	0.0	0.0	0.0	0.0	340.8	340.8	0.0	0.0	0.0	0.0	1,027.1	1,027.1	6.7	5.7	6.7	5.7	6.7	5.7
East South Central	29.1	29.1	455.5	298.9	0.0	0.0	7,049.3	7,053.7	1,229.0	1,229.0	0.0	0.0	8,762.9	8,610.7	93.1	81.7	548.6	380.6	548.6	380.6
Alabama	0.0	0.0	179.3	92.9	0.0	0.0	3,290.8	3,290.8	685.9	685.9	0.0	0.0	4,156.0	4,069.6	NM	NM	NM	NM	NM	NM
Kentucky	0.0	0.0	26.3	11.1	0.0	0.0	1,146.9	1,144.3	72.2	72.2	0.0	0.0	1,245.4	1,227.6	22.3	16.2	48.6	27.3	48.6	27.3
Mississippi	0.0	0.0	160.6	108.6	0.0	0.0	0.0	0.0	274.7	274.7	0.0	0.0	435.3	383.3	7.3	6.3	167.9	114.9	167.9	114.9
Tennessee	29.1	29.1	89.3	86.3	0.0	0.0	2,611.6	2,618.6	196.2	196.2	0.0	0.0	2,926.2	2,930.2	56.5	54.2	145.8	140.5	145.8	140.5
West South Central	30,995.9	28,292.5	1,758.4	1,078.9	0.0	0.0	2,987.5	2,987.5	1,309.7	1,321.6	0.0	0.0	37,051.5	33,680.5	609.0	429.0	2,367.4	1,507.9	2,367.4	1,507.9
Arkansas	0.0	0.0	100.0	14.0	0.0	0.0	1,263.9	1,263.9	330.4	330.4	0.0	0.0	1,694.3	1,608.3	14.4	6.7	114.4	20.7	114.4	20.7
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	490.1	490.1	0.0	0.0	683.2	683.2	137.2	119.8	138.3	120.9	138.3	120.9
Oklahoma	7,693.4	6,743.2	30.5	20.5	0.0	0.0	861.6	861.6	76.2	76.2	0.0	0.0	8,661.7	7,701.5	7.0	3.7	37.5	24.2	37.5	24.2
Texas	23,302.5	21,549.3	1,626.8	1,043.3	0.0	0.0	670.0	670.0	413.0	424.9	0.0	0.0	26,012.3	23,687.5	450.4	298.8	2,077.2	1,342.1	2,077.2	1,342.1
Mountain	8,914.5	8,439.5	5,614.4	5,433.9	473.9	473.9	10,575.9	10,580.1	174.3	174.3	582.8	545.8	26,335.8	25,647.5	2,286.9	1,897.1	7,901.3	7,331.0	8,375.2	7,804.9
Arizona	267.3	267.3	1,776.5	1,697.3	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,090.8	5,011.6	1,245.3	1,034.0	3,021.8	2,731.3	3,317.2	3,026.7
Colorado	3,103.2	3,031.2	466.8	433.5	0.0	0.0	687.4	687.4	28.7	28.7	0.0	0.0	4,286.1	4,180.8	348.9	322.0	815.7	755.5	815.7	755.5
Idaho	970.5	970.5	240.0	240.0	0.0	0.0	2,707.5	2,710.2	83.9	83.9	10.0	10.0	4,011.9	4,014.6	23.7	11.7	263.7	251.7	263.7	251.7
Montana	783.5	678.5	17.0	17.0	0.0	0.0	2,749.3	2,750.8	3.0	3.0	0.0	0.0	3,552.8	3,449.3	13.4	10.7	30.4	27.7	30.4	27.7
Nevada	150.0	150.0	1,707.7	1,684.6	178.5	178.5	1,051.4	1,051.4	9.8	9.8	498.2	461.2	3,595.6	3,535.5	283.5	223.4	1,991.2	1,908.0	2,169.7	2,086.5
New Mexico	1,764.5	1,466.5	549.3	504.4	0.0	0.0	82.9	82.9	5.4	5.4	1.6	1.6	2,403.7	2,060.8	139.4	112.2	688.7	616.6	688.7	616.6
Utah	388.2	388.2	857.1	857.1	0.0	0.0	269.4	269.4	12.8	12.8	73.0	73.0	1,600.5	1,600.5	228.6	179.9	1,085.7	1,037.0	1,085.7	1,037.0
Wyoming	1,487.3	1,487.3	0.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,794.4	1,794.4	4.1	NM	4.1	NM	4.1	NM
Pacific Contiguous	12,121.5	11,966.1	10,274.8	9,072.9	1,284.0	1,284.0	39,854.7	39,835.7	1,939.6	1,988.4	1,873.5	1,862.3	67,348.1	66,009.4	8,012.2	6,540.0	18,287.0	15,612.9	19,571.0	16,896.9
California	5,838.2	5,682.8	9,982.2	8,916.5	1,284.0	1,284.0	10,198.0	10,198.0	1,230.5	1,263.0	1,854.0	1,842.8	30,386.9	29,187.1	7,736.3	6,312.5	17,718.5	15,229.0	19,002.5	16,513.0
Oregon	3,210.2	3,210.2	292.1	155.9	0.0	0.0	8,423.2	8,423.2	314.7	314.7	19.5	19.5	12,259.7	12,123.5	152.0	132.4	444.1	288.3	444.1	288.3
Washington	3,073.1	3,073.1	0.5	0.5	0.0	0.0	21,233.5	21,214.5	394.4	410.7	0.0	0.0	24,701.5	24,698.8	123.9	95.1	124.4	95.6	124.4	95.6
Pacific Noncontiguous	266.2	266.2	104.1	98.3	0.0	0.0	496.5	496.5	274.7	224.3	43.0	43.0	1,184.5	1,128.3	606.8	568.0	710.9	666.3	710.9	666.3
Alaska	60.6	60.6	0.0	0.0	0.0	0.0	470.6	470.6	7.0	7.0	0.0	0.0	538.2	538.2	3.1	2.0	3.1	2.0	3.1	2.0
Hawaii	205.6	205.6	104.1	98.3	0.0	0.0	25.9	25.9	267.7	217.3	43.0	43.0	646.3	590.1	603.7	566.0	707.8	664.3	707.8	664.3
U.S. Total	89,801.8	84,483.3	28,044.3	23,095.3	1,757.9	1,757.9	79,769.0	79,797.6	13,866.4	14,003.6	2,499.3	2,451.1	215,738.7	205,588.8	18,992.5	15,456.6	47,036.8	38,551.9	48,794.7	40,309.8

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 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 6.2.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, October 2018 and 2017 (Megawatts)

Census Division and State	Natural Gas Fired Combined Cycle		Natural Gas Fired Combustion Turbine		Other Natural Gas		Coal		Petroleum Coke		Petroleum Liquids		Other Gases		Total Fossil Fuels	
	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017	October 2018	October 2017
New England	13,404.6	11,859.4	1,212.8	1,118.8	1,607.1	1,605.7	917.3	917.3	0.0	0.0	5,708.5	5,704.5	0.0	0.0	22,850.3	21,205.7
Connecticut	3,147.1	2,331.9	567.6	477.6	873.8	872.4	383.4	383.4	0.0	0.0	2,035.1	2,035.1	0.0	0.0	7,007.0	6,100.4
Maine	1,250.0	1,250.0	301.1	297.1	108.5	108.5	0.0	0.0	0.0	0.0	880.9	880.9	0.0	0.0	2,540.5	2,536.5
Massachusetts	5,989.3	5,259.3	333.5	333.5	199.7	199.7	0.0	0.0	0.0	0.0	2,588.4	2,584.4	0.0	0.0	9,110.9	8,376.9
New Hampshire	1,231.0	1,231.0	3.8	3.8	400.2	400.2	533.9	533.9	0.0	0.0	94.0	94.0	0.0	0.0	2,262.9	2,262.9
Rhode Island	1,787.2	1,787.2	6.8	6.8	24.9	24.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	1,831.1	1,831.1
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	97.9	0.0	0.0	97.9	97.9
Middle Atlantic	30,168.9	26,068.9	7,797.2	7,682.3	14,674.0	15,118.6	13,529.2	13,530.2	78.6	78.6	5,423.2	5,395.7	129.2	129.2	71,800.3	68,003.5
New Jersey	8,530.4	8,158.0	2,959.9	2,845.0	42.6	493.2	609.0	609.0	11.6	11.6	234.0	226.2	23.4	23.4	12,410.9	12,366.4
New York	8,698.4	7,977.3	3,157.0	3,157.0	9,688.5	9,688.5	1,640.2	1,640.2	0.0	0.0	3,580.5	3,560.8	0.0	0.0	26,764.6	26,023.8
Pennsylvania	12,940.1	9,933.6	1,680.3	1,680.3	4,942.9	4,936.9	11,280.0	11,281.0	67.0	67.0	1,608.7	1,608.7	105.8	105.8	32,624.8	29,613.3
East North Central	21,597.0	18,179.4	26,588.1	26,591.8	4,212.5	4,212.9	56,175.0	60,829.3	247.6	247.6	2,474.5	2,643.3	1,092.9	1,092.9	112,387.6	113,797.2
Illinois	3,580.2	3,580.2	10,436.3	10,385.3	289.9	288.9	13,966.0	13,966.0	0.0	0.0	674.2	674.2	36.5	36.5	28,983.1	28,931.1
Indiana	3,807.0	2,406.0	3,355.8	3,405.8	729.1	729.1	15,281.4	15,761.4	0.0	0.0	99.8	237.8	619.3	619.3	23,892.4	23,159.4
Michigan	4,421.0	4,421.0	3,977.6	3,970.8	2,389.6	2,394.0	9,216.7	9,367.7	47.2	47.2	488.4	490.4	250.0	250.0	20,790.5	20,941.1
Ohio	7,038.0	5,021.4	5,446.1	5,446.1	189.2	189.2	12,274.4	14,605.4	142.0	142.0	609.7	636.5	187.1	187.1	25,886.5	26,227.7
Wisconsin	2,750.8	2,750.8	3,372.3	3,383.8	614.7	611.7	5,436.5	7,128.8	58.4	58.4	602.4	604.4	0.0	0.0	12,835.1	14,537.9
West North Central	6,633.1	6,633.1	11,730.9	11,506.4	3,832.5	4,472.3	34,055.0	34,199.0	32.0	32.0	3,877.5	3,927.3	8.4	8.4	60,169.4	60,778.5
Iowa	1,772.6	1,772.6	1,258.2	1,265.7	420.5	532.8	5,497.9	5,497.9	32.0	32.0	820.7	872.9	0.0	0.0	9,801.9	9,973.9
Kansas	266.0	266.0	2,148.3	2,148.3	1,566.7	2,096.7	4,653.2	4,714.2	0.0	0.0	556.6	551.3	0.0	0.0	9,190.8	9,776.5
Minnesota	2,172.0	2,172.0	2,671.4	2,439.4	363.1	369.9	4,309.4	4,309.4	0.0	0.0	790.8	787.1	0.0	0.0	10,306.7	10,077.8
Missouri	1,789.9	1,789.9	3,399.6	3,399.6	836.1	836.1	11,260.8	11,343.8	0.0	0.0	1,100.5	1,105.1	0.0	0.0	18,386.9	18,474.5
Nebraska	342.6	342.6	1,150.8	1,150.8	525.8	516.5	3,817.3	3,817.3	0.0	0.0	321.2	321.2	0.0	0.0	6,157.7	6,148.4
North Dakota	0.0	0.0	408.0	408.0	111.6	111.6	4,042.4	4,042.4	0.0	0.0	63.2	65.2	8.4	8.4	4,633.6	4,635.6
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.5	224.5	0.0	0.0	1,691.8	1,691.8
South Atlantic	57,116.0	53,188.3	31,934.6	31,786.6	7,405.6	7,308.6	54,752.3	56,789.3	142.8	142.8	10,391.4	10,407.6	135.0	135.0	161,877.7	159,758.2
Delaware	1,512.0	1,512.0	317.2	317.2	843.1	843.1	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,331.4	3,331.4
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	28,773.8	27,953.7	7,763.1	7,890.1	2,498.2	2,481.2	8,570.0	9,822.0	59.0	59.0	4,970.0	4,970.0	0.0	0.0	52,634.1	53,176.0
Georgia	7,963.9	7,963.9	7,787.2	7,787.2	832.9	832.9	9,360.5	9,360.5	83.8	83.8	945.4	946.0	0.0	0.0	26,973.7	26,974.3
Maryland	2,844.6	976.0	1,965.6	1,957.6	1,494.2	1,414.2	4,327.0	4,712.0	0.0	0.0	1,205.9	1,218.9	0.0	0.0	11,837.3	10,278.7
North Carolina	5,210.8	4,724.8	6,045.1	6,045.1	0.0	0.0	10,536.8	10,536.8	0.0	0.0	337.6	337.6	0.0	0.0	22,130.3	21,644.3
South Carolina	3,152.0	2,399.0	2,763.8	2,814.8	546.0	546.0	5,212.0	5,212.0	0.0	0.0	463.4	463.4	0.0	0.0	12,137.2	11,435.2
Virginia	7,658.9	7,658.9	4,194.3	3,894.3	1,068.2	1,068.2	3,778.0	3,778.0	0.0	0.0	2,344.0	2,346.6	0.0	0.0	19,043.4	18,746.0
West Virginia	0.0	0.0	1,089.3	1,071.3	123.0	123.0	12,558.0	12,958.0	0.0	0.0	11.0	11.0	0.0	0.0	13,781.3	14,163.3
East South Central	21,684.2	20,632.1	12,640.1	12,646.9	5,354.0	6,053.8	25,015.2	26,184.2	0.0	0.0	133.0	142.0	19.8	19.8	64,846.3	65,678.8
Alabama	9,618.4	9,618.4	2,532.2	2,532.2	2,791.3	2,791.3	5,503.1	5,503.1	0.0	0.0	42.6	42.6	19.8	19.8	20,507.4	20,507.4
Kentucky	1,763.0	1,763.0	4,976.6	4,976.6	260.0	260.0	11,862.8	11,862.8	0.0	0.0	11.9	11.9	0.0	0.0	18,874.3	18,874.3
Mississippi	7,847.7	7,847.7	1,350.8	1,357.6	2,236.5	2,936.3	1,804.0	1,804.0	0.0	0.0	35.3	44.3	0.0	0.0	13,274.3	13,989.9
Tennessee	2,455.1	1,403.0	3,780.5	3,780.5	66.2	66.2	5,845.3	7,014.3	0.0	0.0	43.2	43.2	0.0	0.0	12,190.3	12,307.2
West South Central	60,415.1	59,942.6	14,301.4	13,753.7	31,886.1	31,670.9	31,593.2	35,856.2	957.9	957.9	174.8	179.1	655.3	655.3	139,983.8	143,015.7
Arkansas	4,566.0	4,566.0	702.8	702.8	802.0	802.0	5,110.0	5,100.0	0.0	0.0	12.2	12.2	0.0	0.0	11,193.0	11,183.0
Louisiana	7,537.0	7,537.0	2,357.9	2,357.9	6,528.4	6,528.4	2,832.6	2,832.6	894.1	894.1	43.3	43.3	407.4	407.4	20,600.7	20,600.7
Oklahoma	7,247.6	6,780.1	1,684.9	1,456.9	5,235.5	5,243.9	4,334.6	4,334.6	0.0	0.0	74.4	74.4	0.0	0.0	18,577.0	17,889.9
Texas	41,064.5	41,059.5	9,555.8	9,236.1	19,320.2	19,096.6	19,316.0	23,589.0	63.8	63.8	44.9	49.2	247.9	247.9	89,613.1	93,342.1
Mountain	22,513.8	22,483.8	8,638.9	8,648.9	3,663.9	3,693.9	26,989.0	27,826.0	52.0	52.0	356.3	356.3	107.4	107.4	62,321.3	63,168.3
Arizona	9,891.6	9,891.6	2,367.6	2,367.6	1,303.6	1,303.6	5,754.0	5,754.0	0.0	0.0	90.5	90.5	0.0	0.0	19,407.3	19,407.3
Colorado	3,240.5	3,240.5	2,572.3	2,572.3	639.0	681.0	4,499.0	4,499.0	0.0	0.0	168.4	168.4	0.0	0.0	11,119.2	11,161.2
Idaho	547.7	547.7	552.0	552.0	14.0	14.0	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,127.6	1,127.6
Montana	0.0	0.0	321.6	321.6	72.2	72.2	2,293.1	2,293.1	52.0	52.0	0.0	0.0	1.5	1.5	2,740.4	2,740.4
Nevada	5,445.0	5,415.0	1,185.6	1,185.6	444.6	444.6	740.4	740.4	0.0	0.0	6.0	6.0	0.0	0.0	7,821.6	7,791.6
New Mexico	1,465.0	1,465.0	966.0	976.0	849.4	849.4	2,634.0	3,471.0	0.0	0.0	52.4	52.4	0.0	0.0	5,966.8	6,813.8
Utah	1,830.0	1,830.0	520.2	520.2	328.2	316.2	4,654.0	4,654.0	0.0	0.0	27.8	27.8	0.0	0.0	7,360.2	7,348.2
Wyoming	94.0	94.0	153.6	153.6	12.9	12.9	6,406.0	6,406.0	0.0	0.0	5.8	5.8	105.9	105.9	6,778.2	6,778.2
Pacific Contiguous	26,032.3	26,056.1	11,561.8	11,741.4	7,766.9	8,861.1	1,982.0	1,982.0	17.0	17.0	471.9	485.3	221.4	221.4	48,053.3	49,364.3
California	20,003.8	20,027.6	10,708.6	10,888.2	7,510.9	8,605.1	57.0	57.0	17.0	17.0	456.7	470.1	221.4	221.4	38,975.4	40,286.4
Oregon	3,374.9	3,374.9	133.8	133.8	224.4	224.4	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	4,318.1	4,318.1
Washington	2,653.6	2,653.6	719.4	719.4	31.6	31.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	4,759.8	4,759.8
Pacific Noncontiguous	479.2	479.2	626.3	626.3	175.0	175.0	332.8	332.8	0.0	0.0	2,600.2	2,602.5	6.4	6.4	4,219.9	4,222.2
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	728.3	730.6	0.0	0.0	2,161.6	2,163.9
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,871.9	1,871.9	6.4	6.4	2,058.3	2,058.3
U.S. Total	260,044.2	245,522.9	127,032.1	126,103.1	80,577.6	83,172.8	245,341.0	258,446.3	1,527.9	1,527.9	31,611.3	31,843.6	2,375.8	2,375.8	748,509.9	748,992.4

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 are preliminary.

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

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

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	1	60118	83WI 8ME, LLC	IPP	Midway Solar Farm 1	CA	60336	MSF1	50.0	Solar Photovoltaic	SUN	PV
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3A	0.4	Petroleum Liquids	DFO	IC
2018	1	56769	Consolidated Edison Development Inc.	IPP	Panoche Valley Solar Farm	CA	57340	1	240.0	Solar Photovoltaic	SUN	PV
2018	1	4254	Consumers Energy Co	Electric Utility	Cross Winds Energy Park	MI	58830	CWEP2	44.0	Onshore Wind Turbine	WND	WT
2018	1	61060	Cypress Creek Renewables	IPP	LeSun CSG, LLC	MN	61544	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	1	61060	Cypress Creek Renewables	IPP	WrightSun CSG, LLC	MN	61547	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Versailles	OH	61437	AMPVS	1.8	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40802	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40803	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40804	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40805	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40806	1.0	Solar Photovoltaic	SUN	PV
2018	1	61111	DG New Jersey Solar, LLC	IPP	DG New Jersey Solar RLS Logistics	NJ	61507	RLSNJ	4.0	Solar Photovoltaic	SUN	PV
2018	1	56215	E ON Climate Renewables N America LLC	IPP	Inadale Wind Farm LLC	TX	56984	INABT	9.9	Batteries	MWH	BA
2018	1	56215	E ON Climate Renewables N America LLC	IPP	Pyron Wind Farm LLC	TX	56981	PYRBT	9.9	Batteries	MWH	BA
2018	1	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN5	3.9	Petroleum Liquids	DFO	IC
2018	1	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN6	3.9	Petroleum Liquids	DFO	IC
2018	1	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 5, LLC	OR	61423	PV1	8.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN1	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN2	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN3	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN4	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN5	1.0	Solar Photovoltaic	SUN	PV
2018	1	59218	East. Michigan Univ. Heating Plant	Commercial	East. Michigan Univ. Heating Plant	MI	59452	COGN2	6.8	Natural Gas Fired Combustion Turbine	NG	GT
2018	1	58135	Ecos Energy LLC	IPP	Jefferson Solar	CT	62024	JEFRS	1.0	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Coral Farms Solar Energy Center	FL	61022	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Horizon Solar Energy Center	FL	61021	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Indian River Solar Center	FL	61020	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Wildflower Solar Energy Center	FL	61050	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	7140	Georgia Power Co	Electric Utility	Comer Solar	GA	61554	1	2.0	Solar Photovoltaic	SUN	PV
2018	1	59462	Heelstone Energy Holdings, LLC	IPP	Chiloquin Solar, LLC	OR	61631	CHILO	9.9	Solar Photovoltaic	SUN	PV
2018	1	12341	MidAmerican Energy Co	IPP	Prairie Wind Farm	IA	60873	PWE	168.0	Onshore Wind Turbine	WND	WT
2018	1	61227	Nautilus Solar Solutions	IPP	Kilroy Solar	CA	61628	KILRO	1.1	Solar Photovoltaic	SUN	PV
2018	1	60644	OEE XXIV LLC	Industrial	Whirlpool Corporation - Ottawa Wind Farm	OH	61004	W1	1.5	Onshore Wind Turbine	WND	WT
2018	1	49748	ORCAL Geothermal, Inc	IPP	Heber Geothermal	CA	54689	4	16.0	Geothermal	GEO	BT
2018	1	60882	Red Dirt Wind Project, LLC	IPP	Red Dirt Wind Project	OK	61270	RDDRT	299.3	Onshore Wind Turbine	WND	WT
2018	1	60520	SoCore Energy LLC	IPP	Gopher CSG	MN	61426	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Lahr 1, LLC	MN	61203	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV4	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV5	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	New Auburn DPC Solar	WI	60936	PV1	2.5	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Taylors Falls CSG	MN	61428	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60871	Stuttgart Solar, LLC	IPP	Stuttgart Solar	AR	61262	STGRT	81.0	Solar Photovoltaic	SUN	PV
2018	1	60881	Thunder Ranch Wind Project, LLC	IPP	Thunder Ranch Wind Project	OK	61269	WT1	297.8	Onshore Wind Turbine	WND	WT
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	1	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	2	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	3	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	4	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	5	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	61361	Walton Solar	IPP	Gratis Road Solar Facility	GA	61740	GR01	3.0	Solar Photovoltaic	SUN	PV
2018	2	61105	ABEC #2 LLC	IPP	ABEC #2 dba West-Star Dairy	CA	61501	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	61106	ABEC #3 LLC	IPP	ABEC #3 dba Lakeview Dairy	CA	61502	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	61107	ABEC #4 LLC	IPP	ABEC #4 dba CE&S Dairy	CA	61503	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	60571	AEP Onsite Partners	IPP	Porter Way Community Solar Garden	MN	61500	PV1	3.0	Solar Photovoltaic	SUN	PV
2018	2	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 2	CA	61723	IRV2W	3.3	Batteries	MWH	BA
2018	2	59247	Bearford Solar II, LLC	IPP	Bearford Solar II	NC	59488	BEARF	4.9	Solar Photovoltaic	SUN	PV
2018	2	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKAT	196.7	Onshore Wind Turbine	WND	WT
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS1	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS2	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS3	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS4	0.9	Solar Photovoltaic	SUN	PV
2018	2	56769	Consolidated Edison Development Inc.	IPP	Big Timber Wind Farm	MT	61155	BT-MT	25.0	Onshore Wind Turbine	WND	WT
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Coldwater	MI	61435	AMPCW	1.3	Solar Photovoltaic	SUN	PV
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Jackson Center	OH	61438	AMPJC	1.6	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Orrville 3	OH	61436	AMPO3	2.3	Solar Photovoltaic	SUN	PV
2018	2	57249	EPP Renewable Energy	IPP	Pennsauken Solar	NJ	56883	GEN10	2.4	Solar Photovoltaic	SUN	PV
2018	2	7140	Georgia Power Co	Electric Utility	Marine Corps Logistics Base Solar	GA	59876	1	31.0	Solar Photovoltaic	SUN	PV
2018	2	61171	Lake Waconia Solar IV LLC	IPP	Lake Waconia IV Community Solar Garden	MN	61573	40926	1.0	Solar Photovoltaic	SUN	PV
2018	2	61170	Lake Waconia Solar LLC	IPP	Lake Waconia Community Solar Garden	MN	61572	38610	1.0	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS1	0.9	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS2	0.9	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS3	0.9	Solar Photovoltaic	SUN	PV
2018	2	61156	NMRD Data Center, LLC	IPP	Facebook 2 Solar Energy Center	NM	61557	FB2	10.0	Solar Photovoltaic	SUN	PV
2018	2	14063	Oklahoma Gas & Electric Co	Electric Utility	Covington Solar Farm	OK	61759	CVS1	10.0	Solar Photovoltaic	SUN	PV
2018	2	17470	PUD 1 of Snohomish County	Electric Utility	Calligan Creek Hydroelectric Project	WA	60418	CC6MW	6.0	Conventional Hydroelectric	WAT	HY
2018	2	17470	PUD 1 of Snohomish County	Electric Utility	Hancock Creek Hydroelectric Project	WA	60517	HY1	6.0	Conventional Hydroelectric	WAT	HY
2018	2	60755	Phelps 158 Solar Farm, LLC	IPP	Phelps 158 Solar Farm	NC	61134	15800	5.0	Solar Photovoltaic	SUN	PV
2018	2	60947	Tesla Inc.	IPP	Greene County Meter #1	NY	60463	PV1	1.6	Solar Photovoltaic	SUN	PV
2018	2	61168	Veseli Solar I LLC	IPP	Veseli Community Solar Garden	MN	61570	40921	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	0000H	3.4	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE2	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE3	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE4	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE5	1.0	Solar Photovoltaic	SUN	PV
2018	3	60571	AEP Onsite Partners	IPP	Sherburne Community Solar	MN	61672	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	3	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS1	0.9	Solar Photovoltaic	SUN	PV
2018	3	60922	Belchertown Renewables, LLC	IPP	Belchertown Renewables Community Solar	MA	61295	02675	4.0	Solar Photovoltaic	SUN	PV
2018	3	61060	Cypress Creek Renewables	IPP	Gaston Solar I - SC	SC	61530	GEN1	10.2	Solar Photovoltaic	SUN	PV
2018	3	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS1	0.9	Solar Photovoltaic	SUN	PV
2018	3	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS2	0.9	Solar Photovoltaic	SUN	PV
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN8	150.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	3	61228	Dundas Solar Holdings LLC	IPP	Dundas Solar Holdings LLC CSG	MN	61626	DU	5.0	Solar Photovoltaic	SUN	PV
2018	3	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 8, LLC	OR	61424	PV1	10.0	Solar Photovoltaic	SUN	PV
2018	3	60904	ETCAP NES CS MN 06 LLC	IPP	Armstrong Solar	MN	61138	0000A	3.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR4	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR5	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX4	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX5	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY01	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY02	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY03	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY04	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY05	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Adams Solar	CT	62026	ADAMS	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Franklin Solar	CT	62021	FRANK	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Hamilton Solar	CT	62025	HAMLT	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Wilson Solar	CT	62023	WILSN	1.0	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Babcock Solar Energy Center	FL	59993	BA	10.0	Batteries	MWH	BA
2018	3	6452	Florida Power & Light Co	Electric Utility	Barefoot Bay Solar Energy Center	FL	61051	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Blue Cypress Solar Energy Center	FL	61029	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Citrus Solar Energy Center	FL	60061	BA	4.0	Batteries	MWH	BA
2018	3	6452	Florida Power & Light Co	Electric Utility	Hammock Solar	FL	61024	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Loggerhead Solar Energy Center	FL	61052	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	60556	Fusion Solar Centre, L.L.C	IPP	Fusion Solar Center LLC	CT	58876	PV	20.0	Solar Photovoltaic	SUN	PV
2018	3	59633	Great Bay Solar I LLC	IPP	Great Bay Solar 1	MD	59851	GBS01	57.0	Solar Photovoltaic	SUN	PV
2018	3	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN1	465.0	Natural Gas Fired Combined Cycle	NG	CS
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS1	1.1	Solar Photovoltaic	SUN	PV
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS2	1.1	Solar Photovoltaic	SUN	PV
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS3	1.1	Solar Photovoltaic	SUN	PV
2018	3	61323	PowerFin ASL 1, LLC	IPP	PowerFin Kingsbery	TX	61700	PFPKB	2.6	Solar Photovoltaic	SUN	PV
2018	3	61069	RE Gaskell West LLC	IPP	RE Gaskell West 1 LLC	CA	61445	PV1	20.0	Solar Photovoltaic	SUN	PV
2018	3	61491	ReNew Petra Integrators, LLC	IPP	Bartow Solar Energy LLC	FL	61879	PV	7.3	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES1	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES2	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES3	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES4	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES5	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	60520	SoCore Energy LLC	IPP	Carrizozo Solar	NM	61662	PV1	3.0	Solar Photovoltaic	SUN	PV
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT1	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT2	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT3	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT4	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS3	0.9	Solar Photovoltaic	SUN	PV
2018	3	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS4	0.9	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822	PV2	1.4	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Onondaga County- Jamesville	NY	60232	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	US GSA - Sacramento	CA	60846	PV1	1.1	Solar Photovoltaic	SUN	PV
2018	3	60923	Theodore Drive Solar, LLC	IPP	Theodore Drive Community Solar	MA	61296	02529	1.5	Solar Photovoltaic	SUN	PV
2018	3	61397	Town of Otis	Commercial	Town of Otis Wind Energy Project	MA	61775	OT196	1.5	Onshore Wind Turbine	WND	WT
2018	3	57081	WGL Energy Systems, Inc	IPP	Bowie State Solar	MD	61915	SO285	1.3	Solar Photovoltaic	SUN	PV
2018	3	57081	WGL Energy Systems, Inc	IPP	Danville	VA	61849	SO291	6.0	Solar Photovoltaic	SUN	PV
2018	3	61229	Waterville Solar Holdings LLC	IPP	Waterville Solar Holdings LLC	MN	61627	WA	5.0	Solar Photovoltaic	SUN	PV
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	3B	0.4	Petroleum Liquids	DFO	IC
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Pilot Station	AK	57058	1	0.5	Petroleum Liquids	DFO	IC
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5501	3.0	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5502	1.3	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5511	1.7	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5EG	1.0	Petroleum Liquids	DFO	IC
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STA	40.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STB	40.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN9	150.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT11	216.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT12	216.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	ST10	321.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	0000C	5.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM2	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM3	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM4	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM5	1.0	Solar Photovoltaic	SUN	PV
2018	4	61124	Great Valley Solar Portfolio Holdings, LLC	IPP	Great Valley Solar Portfolio Holdings, LLC	CA	59940	TQ8	200.0	Solar Photovoltaic	SUN	PV
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT1	207.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT2	207.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	STG1	230.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	61417	Lavio Solar, LLC	IPP	Lavio Solar	CA	61792	5002	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND1	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND2	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND3	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42254	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42255	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42256	1.0	Solar Photovoltaic	SUN	PV
2018	4	61156	NMRD Data Center, LLC	IPP	Facebook 3 Solar Energy Center	NM	61558	FB3	10.0	Solar Photovoltaic	SUN	PV
2018	4	61169	New Germany Solar I LLC	IPP	New Germany Community Solar Garden	MN	61571	39062	1.0	Solar Photovoltaic	SUN	PV
2018	4	13781	Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904	6-1	215.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT1	310.3	Natural Gas Fired Combined Cycle	NG	CT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT2	310.3	Natural Gas Fired Combined Cycle	NG	CT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	ST1	493.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60584	Onyx Asset Services Group	IPP	Amsterdam North	NY	61904	10044	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Amsterdam South	NY	61905	10045	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Broadalbin	NY	61847	10046	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Duanesburg	NY	61863	10048	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Johnstown	NY	61888	10049	2.0	Solar Photovoltaic	SUN	PV
2018	4	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	61730	1.0	Batteries	MWH	BA
2018	4	61295	Pinal Central Energy Center, LLC	IPP	Pinal Central Energy Center	AZ	61678	BA1	10.0	Batteries	MWH	BA
2018	4	61295	Pinal Central Energy Center, LLC	IPP	Pinal Central Energy Center	AZ	61678	PCEC	20.0	Solar Photovoltaic	SUN	PV
2018	4	61494	Radian Generation	IPP	Hanover Solar, LLC	NC	61877	HAN01	5.0	Solar Photovoltaic	SUN	PV
2018	4	17164	Sierra Pacific Industries Inc	Industrial	Sierra Pacific Sonora	CA	54517	GEN3	6.0	Wood/Wood Waste Biomass	WDS	ST

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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
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT1	229.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT2	229.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST1	245.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	61418	Stage Gulch Solar, LLC	IPP	Stage Gulch Solar	CA	61791	5001	0.8	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL1	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL2	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL3	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL4	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL5	1.0	Solar Photovoltaic	SUN	PV
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	CTG1	311.9	Natural Gas Fired Combined Cycle	NG	CT
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	CTG2	311.9	Natural Gas Fired Combined Cycle	NG	CT
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	STG1	428.3	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60059	ZGlobal Inc	IPP	Merced 1 PV	CA	61420	MRCD1	3.0	Solar Photovoltaic	SUN	PV
2018	4	61172	Zumbro Solar LLC	IPP	Zumbro Community Solar Garden	MN	61574	38674	1.0	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Imboden Solar Garden	CO	61753	PV1	1.5	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Imboden Solar Garden	CO	61753	PV2	1.5	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Ohio Northern University Solar Site	OH	60913	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Quincy II Solar Garden	CO	61752	PV1	1.5	Solar Photovoltaic	SUN	PV
2018	5	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 1	CA	61722	IRV01	1.0	Batteries	MWH	BA
2018	5	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 1	CA	61722	IRV1W	4.5	Batteries	MWH	BA
2018	5	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS2	0.9	Solar Photovoltaic	SUN	PV
2018	5	56267	Bayonne Energy Center LLC	IPP	Bayonne Energy Center	NJ	56964	GT10	59.5	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	56267	Bayonne Energy Center LLC	IPP	Bayonne Energy Center	NJ	56964	GT9	59.5	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	59777	Buckthorn Westex, LLC	IPP	Buckthorn Solar 1	TX	60044	BKTH1	202.0	Solar Photovoltaic	SUN	PV
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG1	233.6	Natural Gas Fired Combined Cycle	NG	CT
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG2	233.6	Natural Gas Fired Combined Cycle	NG	CT
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	STG	277.8	Natural Gas Fired Combined Cycle	NG	CA
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG1	198.2	Natural Gas Fired Combined Cycle	NG	CT
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG2	198.2	Natural Gas Fired Combined Cycle	NG	CT
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	STG	308.7	Natural Gas Fired Combined Cycle	NG	CA
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT1	2.0	Petroleum Liquids	DFO	IC
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT2	2.0	Petroleum Liquids	DFO	IC
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT3	2.0	Petroleum Liquids	DFO	IC
2018	5	61481	Dignity - San Martin	IPP	Dignity - San Martin	NV	61862	PV1	1.7	Solar Photovoltaic	SUN	PV
2018	5	61442	Dignity - Siena Campus	IPP	Dignity - Siena Campus	NV	61825	PV1	1.4	Solar Photovoltaic	SUN	PV
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	1	147.5	Natural Gas Fired Combined Cycle	NG	CA
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	2	147.5	Natural Gas Fired Combined Cycle	NG	CA
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	3	217.5	Natural Gas Fired Combined Cycle	NG	CT
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	4	217.5	Natural Gas Fired Combined Cycle	NG	CT
2018	5	61303	Grimm CSG LLC	IPP	Grimm Community Solar	MN	61689	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	5	61109	Huneke I CSG LLC	IPP	Huneke I CSG	MN	61505	HUNE1	1.0	Solar Photovoltaic	SUN	PV
2018	5	61110	Krause CSG LLC	IPP	Krause CSG	MN	61506	KRAUS	1.0	Solar Photovoltaic	SUN	PV
2018	5	56990	NJR Clean Energy Ventures Corporation	IPP	Raritan Solar - 53 Highway	NJ	61601	RARIT	8.4	Solar Photovoltaic	SUN	PV
2018	5	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC1	257.0	Natural Gas Fired Combined Cycle	NG	CT
2018	5	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA
2018	5	60584	Onyx Asset Services Group	IPP	SeaWorld Aquatica	CA	61843	10276	1.0	Solar Photovoltaic	SUN	PV
2018	5	60584	Onyx Asset Services Group	IPP	Sharon Springs	NY	61903	10116	2.0	Solar Photovoltaic	SUN	PV
2018	5	61114	School Sisters CSG LLC	IPP	School Sisters CSG	MN	61516	SCHOO	1.0	Solar Photovoltaic	SUN	PV
2018	5	60712	South Maui Renewable Resources LLC	IPP	Kihei Solar Farm	HI	61099	KIHEI	2.9	Solar Photovoltaic	SUN	PV
2018	5	60653	Stafford St Solar 2, LLC	IPP	Stafford St 2 Community Solar	MA	61017	STAF2	2.0	Solar Photovoltaic	SUN	PV
2018	5	61210	Stenner Creek Solar LLC	Commercial	Stenner Creek Solar	CA	61607	CPOLY	4.5	Solar Photovoltaic	SUN	PV
2018	5	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS1	0.9	Solar Photovoltaic	SUN	PV
2018	5	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS2	0.9	Solar Photovoltaic	SUN	PV
2018	5	60947	Tesla Inc.	IPP	Time Warner Cable - Knowles	NY	60904	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	5	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	CGAP	180.0	Solar Photovoltaic	SUN	PV
2018	5	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG6	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG7	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS1	0.9	Solar Photovoltaic	SUN	PV
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS2	0.9	Solar Photovoltaic	SUN	PV
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS3	0.9	Solar Photovoltaic	SUN	PV
2018	6	803	Arizona Public Service Co	Electric Utility	Punkin Center Battery Storage	AZ	61913	B1	2.0	Batteries	MWH	BA
2018	6	58519	Clean Energy Collective LLC	IPP	SCE&G Nimitz CSG	SC	61433	SCNM1	8.0	Solar Photovoltaic	SUN	PV
2018	6	58519	Clean Energy Collective LLC	IPP	SCE&G Springfield CSG	SC	61434	SCSP1	6.1	Solar Photovoltaic	SUN	PV
2018	6	61187	DG Minnesota CSG, LLC	IPP	Big Lake Project	MN	61817	BIGLA	5.0	Solar Photovoltaic	SUN	PV
2018	6	61406	Delta Solar Power I, LLC	IPP	Delta Solar Power I	MI	61954	DSPI	7.7	Solar Photovoltaic	SUN	PV
2018	6	61435	EGP Stillwater Solar PV II, LLC	IPP	EGP Stillwater Solar PV II, LLC	NV	61809	STWII	20.0	Solar Photovoltaic	SUN	PV
2018	6	61538	Ecogy Delaware II LLC.	IPP	WHA Southbridge Solar Park	DE	61934	2	1.0	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	6	60886	Gray Hawk Solar, LLC	IPP	Gray Hawk Solar	AZ	61272	GHS	55.0	Solar Photovoltaic	SUN	PV
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S1	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S2	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S3	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S4	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S5	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S6	8.4	Other Waste Biomass	OBL	IC
2018	6	61409	Heyer CSG LLC	IPP	Heyer CSG	MN	61793	HEYER	1.0	Solar Photovoltaic	SUN	PV
2018	6	57389	IKEA Property Inc	Commercial	IKEA Oak Creek Rooftop PV System	WI	61816	PV1	1.2	Solar Photovoltaic	SUN	PV
2018	6	49893	Invenergy Services LLC	IPP	Bishop Hill III	IL	61787	BHIII	119.0	Onshore Wind Turbine	WND	WT
2018	6	61369	Kimball Wind, LLC	Electric Utility	Kimball Wind	NE	56106	KIM01	30.0	Onshore Wind Turbine	WND	WT
2018	6	58822	MC Power Companies Inc	IPP	El Dorado Springs Solar Farm	MO	61566	EDSF1	2.5	Solar Photovoltaic	SUN	PV
2018	6	58822	MC Power Companies Inc	IPP	Independence II Solar Farm	MO	61588	1	4.1	Solar Photovoltaic	SUN	PV
2018	6	58822	MC Power Companies Inc	IPP	Independence II Solar Farm	MO	61588	2	4.4	Solar Photovoltaic	SUN	PV
2018	6	61211	Montgomery County Solar	Commercial	Montgomery County Solar	MD	61608	1	1.9	Solar Photovoltaic	SUN	PV
2018	6	56990	NJR Clean Energy Ventures Corporation	IPP	New Road Solar, LLC	NJ	61599	NEWRD	10.0	Solar Photovoltaic	SUN	PV
2018	6	60635	Northern Cardinal Solar LLC	IPP	Northern Cardinal Solar	NC	60992	NCARD	2.0	Solar Photovoltaic	SUN	PV
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	701	328.0	Natural Gas Fired Combined Cycle	NG	CT
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	702	196.5	Natural Gas Fired Combined Cycle	NG	CA
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG1	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG2	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG3	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	STG	417.6	Natural Gas Fired Combined Cycle	NG	CA
2018	6	61298	Pine Gate Renewables	IPP	Sadiebrook Solar, LLC	SC	60719	SADIE	5.0	Solar Photovoltaic	SUN	PV
2018	6	61285	RJC II CSG LLC	IPP	RJC II Community Solar Garden	MN	61670	RJCII	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	6	61443	Solar Star RPUWD, LLC	IPP	RPUWD Scheuer Well Solar PV Project	CA	61824	RPU2	3.0	Solar Photovoltaic	SUN	PV
2018	6	61376	SunSelect 1	Industrial	SunSelect1	CA	61754	1	2.0	Natural Gas Internal Combustion Engine	NG	IC
2018	6	60947	Tesla Inc.	IPP	Broome County	NY	60507	NORTH	2.0	Solar Photovoltaic	SUN	PV
2018	6	60947	Tesla Inc.	IPP	Broome County	NY	60507	SOUTH	2.0	Solar Photovoltaic	SUN	PV
2018	6	60947	Tesla Inc.	IPP	Oswego County - Fulton Solar	NY	60818	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	6	61522	Viridity Energy Solutions, Inc.	IPP	Viridity Energy Solutions ACUA	NJ	61923	VACUA	1.0	Batteries	MWH	BA
2018	6	61277	Vista Energy Storage, LLC	IPP	Vista Energy Storage System	CA	61661	VISTA	40.0	Batteries	MWH	BA
2018	7	61012	AES Distributed Energy	IPP	Anheuser-Busch Baldwinsville	NY	61575	BAL01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Call Farms 1	NY	61470	CFM11	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Call Farms 3	NY	61471	CFM31	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Columbia University - Johnson Farms	NY	61576	JF01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Columbia University - Minisink	NY	61578	MIN01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Lichtenthal	NY	61469	LIC01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	St. Lawerence University - Sutton	NY	61579	SUT01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Time Warner Cable Enterprises - Martino	NY	61577	MRT01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61103	Adams Solar Center LLC	IPP	Adams Solar Center	OR	61496	ADAMS	10.0	Solar Photovoltaic	SUN	PV
2018	7	60146	Ameresco Federal Solutions	IPP	Fort Bliss (DEA EPIC)	TX	61887	DEPIC	2.0	Solar Photovoltaic	SUN	PV
2018	7	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS3	0.9	Solar Photovoltaic	SUN	PV
2018	7	59474	BQ Energy LLC	IPP	Sunlight Beacon	NY	61922	BEACO	2.0	Solar Photovoltaic	SUN	PV
2018	7	60655	Bullock Road Solar 1, LLC	IPP	Bullock Road Solar 1	MA	61010	BULLO	3.9	Solar Photovoltaic	SUN	PV
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC1	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC10	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC11	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC12	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC2	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC3	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC4	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC5	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC6	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC7	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC8	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC9	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	61060	Cypress Creek Renewables	IPP	Old Caroleen Solar Farm	NC	61534	GEN1	2.0	Solar Photovoltaic	SUN	PV
2018	7	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Smyrna	DE	61800	AMPSM	1.2	Solar Photovoltaic	SUN	PV
2018	7	61407	Delta Solar Power II, LLC	IPP	Delta Solar Power II	MI	61955	DSPII	15.2	Solar Photovoltaic	SUN	PV
2018	7	61304	Foreman's Hill CSG LLC	IPP	Foreman's Hill Community Solar	MN	61690	FOREM	5.0	Solar Photovoltaic	SUN	PV
2018	7	61499	Georgia-Pacific Wood Products LLC	Industrial	Georgia-Pacific Taylorsville Plywood	MS	61927	CTG1	6.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	49893	Invenergy Services LLC	IPP	Shoreham Solar Commons	NY	60045	GEN1	24.9	Solar Photovoltaic	SUN	PV
2018	7	61520	Kearsarge Oppenheim LLC	IPP	Kearsarge Oppenheim	NY	61917	OPPEN	1.4	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	7	11161	Loma Linda University	Commercial	Loma Linda University Cogen	CA	10206	GEN5	1.0	Petroleum Liquids	DFO	IC
2018	7	61383	MN Solar Community, LLC	IPP	Sherburne North Project	MN	61762	SHERB	5.0	Solar Photovoltaic	SUN	PV
2018	7	61461	Mustang Solar LLC	IPP	Mustang Solar	NC	61533	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT1	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT2	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT3	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT4	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT5	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT6	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	60685	Novel Energy Solutions	IPP	Novel - OYA of Mapleton	MN	61060	0000I	3.5	Solar Photovoltaic	SUN	PV
2018	7	60685	Novel Energy Solutions	IPP	Novel OYA of Osakis	MN	61059	0000G	5.0	Solar Photovoltaic	SUN	PV
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	10	327.0	Natural Gas Fired Combined Cycle	NG	CA
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	11	214.0	Natural Gas Fired Combined Cycle	NG	CT
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	12	214.0	Natural Gas Fired Combined Cycle	NG	CT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-1	2.3	Onshore Wind Turbine	WND	WT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-2	2.3	Onshore Wind Turbine	WND	WT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-3	2.3	Onshore Wind Turbine	WND	WT
2018	7	61108	RJC I CSG LLC	IPP	RJC I CSG	MN	61504	RCJ1	1.0	Solar Photovoltaic	SUN	PV
2018	7	61284	Scandia CSG LLC	IPP	Scandia Community Solar Garden	MN	61669	SCAND	2.5	Solar Photovoltaic	SUN	PV
2018	7	60163	Soltage LLC	IPP	Kelly Solar, LLC	NC	61219	KELLY	5.0	Solar Photovoltaic	SUN	PV
2018	7	17650	Southern Power Co	IPP	Cactus Flats Wind Energy Project	TX	61001	WT1	150.0	Onshore Wind Turbine	WND	WT
2018	7	61188	West Texas A&M University	Commercial	UL Advanced Wind Turbine Test Facility	TX	61589	UT-1	3.4	Onshore Wind Turbine	WND	WT
2018	8	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 2	CA	61723	IRV06	2.5	Batteries	MWH	BA
2018	8	58261	Arkwright Summit Wind Farm LLC	IPP	Arkwright Summit Wind Farm LLC	NY	61673	WT	78.4	Onshore Wind Turbine	WND	WT
2018	8	15399	Avangrid Renewables LLC	IPP	WyEast Solar	OR	61345	PV1	10.0	Solar Photovoltaic	SUN	PV
2018	8	59474	BQ Energy LLC	IPP	Annapolis Solar Park, LLC	MD	60681	ASP12	12.0	Solar Photovoltaic	SUN	PV
2018	8	61256	Betcher CSG LLC	IPP	Betcher Community Solar Garden	MN	61671	BETCH	1.0	Solar Photovoltaic	SUN	PV
2018	8	61410	Broad Street Fuel Cell, LLC	IPP	Trinity College Fuel Cell	CT	61786	MB-22	1.4	Other Natural Gas	NG	FC
2018	8	6175	City of Falls City - (NE)	Electric Utility	Falls City	NE	2237	9	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	8	60609	Clean Focus Renewables, Inc.	IPP	BHE Pueblo 2 Community Solar Array	CO	60801	PUEB2	1.5	Solar Photovoltaic	SUN	PV
2018	8	61060	Cypress Creek Renewables	IPP	Antanavica Solar	MA	61526	GEN1	1.0	Solar Photovoltaic	SUN	PV
2018	8	61104	Elbe Solar Center LLC	IPP	Elbe Solar Center	OR	61497	ELBE	10.0	Solar Photovoltaic	SUN	PV
2018	8	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation California Training Facility	CA	61442	WTG1	1.8	Onshore Wind Turbine	WND	WT
2018	8	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Salinas Valley State Prison	CA	61444	WTG1	1.8	Onshore Wind Turbine	WND	WT
2018	8	60849	Green Beanworks C, LLC	IPP	Green Beanworks C PV	CA	61215	GBWXC	3.0	Solar Photovoltaic	SUN	PV
2018	8	60850	Green Beanworks D, LLC	IPP	Green Beanworks D PV	CA	61216	GBWXD	3.0	Solar Photovoltaic	SUN	PV
2018	8	61287	Johnson I CSG LLC	IPP	Johnson 1 Community Solar	MN	61686	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	8	61346	Lisbon East	IPP	COU Solar I, LLC	NY	61720	LECOU	1.5	Solar Photovoltaic	SUN	PV
2018	8	61345	Lisbon West	IPP	CJ Solar I, LLC	NY	61719	LWCJ1	2.0	Solar Photovoltaic	SUN	PV
2018	8	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN1	490.0	Natural Gas Fired Combined Cycle	NG	CS
2018	8	56990	NJR Clean Energy Ventures Corporation	IPP	Old Bridge Solar Farm	NJ	61600	OLDBR	8.8	Solar Photovoltaic	SUN	PV
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC1	259.0	Natural Gas Fired Combined Cycle	NG	CT
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA
2018	8	61348	PCS Energy, LLC	Industrial	Aerolease	CA	61718	APLEX	1.1	Solar Photovoltaic	SUN	PV
2018	8	61575	Pacific Ethanol Madera	Industrial	Pacific Ethanol Madera Solar Array	CA	61989	PV	3.9	Solar Photovoltaic	SUN	PV
2018	8	60748	Salisbury Solar, LLC	IPP	Salisbury Solar	NC	61128	12349	3.8	Solar Photovoltaic	SUN	PV
2018	8	57081	WGL Energy Systems, Inc	IPP	Cornillie	MN	61977	SO334	1.0	Solar Photovoltaic	SUN	PV
2018	9	61012	AES Distributed Energy	IPP	Broadalbin-Perth Solar	NY	61958	BAP1	1.5	Solar Photovoltaic	SUN	PV
2018	9	60281	Altus Power America Management, LLC	IPP	Big George PV CSG	MA	61429	12344	1.0	Solar Photovoltaic	SUN	PV
2018	9	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	GRDMT	4.4	Solar Photovoltaic	SUN	PV
2018	9	1015	Austin Energy	Electric Utility	Kingsberry Energy Storage System	TX	61741	KBESS	1.5	Batteries	MWH	BA
2018	9	60899	Bear Creek Solar Center, LLC	IPP	Bear Creek Solar Center	OR	61281	BCRSC	10.0	Solar Photovoltaic	SUN	PV
2018	9	4254	Consumers Energy Co	Electric Utility	Parkview Battery	MI	61909	PKVWB	1.0	Batteries	MWH	BA
2018	9	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Piqua Staunton	OH	61805	AMPPS	1.8	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY1	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY2	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY3	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY4	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY5	1.0	Solar Photovoltaic	SUN	PV
2018	9	60844	Flat Top Wind I, LLC	IPP	Flat Top Wind I	TX	61212	FTWI	200.0	Onshore Wind Turbine	WND	WT
2018	9	57484	Foundation CA Fund V Manager, LLC	IPP	Foundation NWNA	CA	58114	WTG3	1.9	Onshore Wind Turbine	WND	WT
2018	9	60025	Greenbacker Renewable Energy Corporation	IPP	Midway Solar Farm III	CA	60315	MSF3	20.0	Solar Photovoltaic	SUN	PV
2018	9	61620	IOS II LLC	IPP	Cuyahoga County Landfill	OH	62041	CCBO1	3.7	Solar Photovoltaic	SUN	PV
2018	9	61309	Johnson II CSG LLC	IPP	Johnson II Community Solar	MN	61695	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	9	61642	Lane Solar Farm LLC	IPP	Lane Solar	NC	62104	PGRF2	5.0	Solar Photovoltaic	SUN	PV
2018	9	58822	MC Power Companies Inc	IPP	Farmington Solar Farm	MO	61450	FSF1	2.5	Solar Photovoltaic	SUN	PV
2018	9	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN2	490.0	Natural Gas Fired Combined Cycle	NG	CS

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	9	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA
2018	9	61209	NC 102 Project LLC	IPP	NC 102 Project LLC	NC	61610	NC102	74.8	Solar Photovoltaic	SUN	PV
2018	9	61598	Novel Solar Three, LLC	IPP	Gibbon Solar	MN	62010	PGRK1	3.3	Solar Photovoltaic	SUN	PV
2018	9	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W1	1.5	Onshore Wind Turbine	WND	WT
2018	9	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W2	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG1	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG2	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG3	1.5	Onshore Wind Turbine	WND	WT
2018	9	61495	Persimmon Creek Wind Farm 1, LLC	IPP	Persimmon Creek Wind Farm 1, LLC	OK	61876	PCWF1	198.6	Onshore Wind Turbine	WND	WT
2018	9	61298	Pine Gate Renewables	IPP	Soluga Farms IV	NC	59934	SFIV	4.9	Solar Photovoltaic	SUN	PV
2018	9	60443	Rattlesnake Power, LLC	IPP	Rattlesnake Power, LLC	TX	60743	WT1	160.0	Onshore Wind Turbine	WND	WT
2018	9	18454	Tampa Electric Co	Electric Utility	Balm Solar	FL	61654	PV1	74.4	Solar Photovoltaic	SUN	PV
2018	9	18454	Tampa Electric Co	Electric Utility	Payne Creek Solar	FL	61665	GEN1	70.3	Solar Photovoltaic	SUN	PV
2018	9	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH1	100.0	Onshore Wind Turbine	WND	WT
2018	9	19876	Virginia Electric & Power Co	Electric Utility	Hollyfield	VA	61023	1	6.8	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Eichtens II CSG	MN	62137	SO340	1.0	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Huneke II CSG	MN	62139	SO346	1.1	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Susquehanna University Solar	PA	61914	SO829	3.0	Solar Photovoltaic	SUN	PV
2018	10	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	CARPT	1.6	Solar Photovoltaic	SUN	PV
2018	10	60533	Carl Friedrich Gauss Solar LLC	IPP	Carl Friedrich Gauss Solar	NC	60882	GAUSS	5.0	Solar Photovoltaic	SUN	PV
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC1	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC2	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG1	263.0	Natural Gas Fired Combined Cycle	NG	CT
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG2	263.0	Natural Gas Fired Combined Cycle	NG	CT
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	STG1	324.0	Natural Gas Fired Combined Cycle	NG	CA
2018	10	56769	Consolidated Edison Development Inc.	IPP	Aurora County Wind	SD	61745	ACSD	20.0	Onshore Wind Turbine	WND	WT
2018	10	56769	Consolidated Edison Development Inc.	IPP	Brule County Wind	SD	61746	BCSD	20.0	Onshore Wind Turbine	WND	WT
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS1	0.9	Solar Photovoltaic	SUN	PV
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS2	0.9	Solar Photovoltaic	SUN	PV
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS3	0.9	Solar Photovoltaic	SUN	PV
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS4	0.9	Solar Photovoltaic	SUN	PV
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS5	0.9	Solar Photovoltaic	SUN	PV
2018	10	61060	Cypress Creek Renewables	IPP	Brantley Solar	NC	60623	PV1	50.2	Solar Photovoltaic	SUN	PV
2018	10	61060	Cypress Creek Renewables	IPP	Saint Albans Solar	VT	61928	GEN1	4.9	Solar Photovoltaic	SUN	PV
2018	10	61187	DG Minnesota CSG, LLC	IPP	Cottage Grove Project CSG	MN	61983	COTG	4.9	Solar Photovoltaic	SUN	PV
2018	10	5199	Devon Energy Production Co	Industrial	Beaver Creek Gas Plant	WY	55278	STG-1	0.9	All Other	WH	ST
2018	10	58468	Dominion Renewable Energy	IPP	Puller Solar	VA	62140	PULL	15.0	Solar Photovoltaic	SUN	PV
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	CC1ST	316.7	Natural Gas Fired Combined Cycle	NG	CA
2018	10	5701	El Paso Electric Co	Electric Utility	Holloman Solar Facility	NM	60301	HPV1	5.0	Solar Photovoltaic	SUN	PV
2018	10	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1A	18.5	Solar Photovoltaic	SUN	PV
2018	10	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN2	465.0	Natural Gas Fired Combined Cycle	NG	CS
2018	10	60713	Ku'ia Solar LLC	IPP	Ku'ia Solar	HI	61101	KUIA	2.9	Solar Photovoltaic	SUN	PV
2018	10	11208	Los Angeles Department of Water & Power	Electric Utility	Beacon BESS 1	CA	61431	BCNB1	20.0	Batteries	MWH	BA
2018	10	61681	Minisink Solar 1 LLC	IPP	Minisink Solar 1 LLC	NY	62145	MINI1	1.8	Solar Photovoltaic	SUN	PV
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41327	1.0	Solar Photovoltaic	SUN	PV
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41328	1.0	Solar Photovoltaic	SUN	PV
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41329	1.0	Solar Photovoltaic	SUN	PV
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41330	1.0	Solar Photovoltaic	SUN	PV
2018	10	56990	NJR Clean Energy Ventures Corporation	IPP	Quakertown Solar Farm, LLC	NJ	61965	QKRTN	8.8	Solar Photovoltaic	SUN	PV
2018	10	56990	NJR Clean Energy Ventures Corporation	IPP	Springfield Solar Project	NJ	61907	NJLND	7.5	Solar Photovoltaic	SUN	PV
2018	10	54913	NSTAR Electric Company	Electric Utility	East Springfield Solar PV	MA	62093	REC34	1.4	Solar Photovoltaic	SUN	PV
2018	10	54913	NSTAR Electric Company	Electric Utility	Montague Site 36-Grosolar	MA	62092	REC34	4.1	Solar Photovoltaic	SUN	PV
2018	10	56545	Pattern Operators LP	IPP	Stillwater Wind, LLC	MT	61858	WT	80.0	Onshore Wind Turbine	WND	WT
2018	10	60520	SoCore Energy LLC	IPP	Anoka County MN CONX	MN	62061	PV1	3.4	Solar Photovoltaic	SUN	PV
2018	10	60520	SoCore Energy LLC	IPP	Hampton MN GRE	MN	62060	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	10	61582	USS Kasch Solar LLC	IPP	USS Kasch Solar CSG	MN	61999	USSKA	1.0	Solar Photovoltaic	SUN	PV
2018	10	57081	WGL Energy Systems, Inc	IPP	Barone CSG	MN	62138	SO328	1.0	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 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3	0.5	Petroleum Liquids	DFO	IC
2018	1	4329	Copper Valley Elec Assn, Inc	Electric Utility	Valdez	AK	6306	7	2.8	Petroleum Liquids	DFO	GT
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	17887	St Joseph's Hospital	Commercial	St Josephs Hospital	FL	54534	0001	1.6	Natural Gas Internal Combustion Engine	NG	IC
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	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	1	3.8	Landfill Gas	LFG	CT
2018	2	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	2	3.8	Landfill Gas	LFG	CT
2018	2	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	4	7.6	Landfill Gas	LFG	CA
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	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	1	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN1	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN2	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN3	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN4	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN5	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN6	1.7	Landfill Gas	LFG	IC
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	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	1	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	2	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	3	1.0	Petroleum Liquids	DFO	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	4	1.0	Petroleum Liquids	DFO	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	5	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	6	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	3	12686	Mississippi Power Co	Electric Utility	Jack Watson	MS	2049	3	107.0	Natural Gas Steam Turbine	NG	ST
2018	3	12199	Montana-Dakota Utilities Co	Electric Utility	Portable Generator 1	ND	59196	IC1	2.0	Petroleum Liquids	DFO	IC
2018	3	17164	Sierra Pacific Industries Inc	Industrial	Sierra Pacific Sonora	CA	54517	GEN2	6.0	Wood/Wood Waste Biomass	WDS	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	1	247.0	Conventional Steam Coal	SUB	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	2	247.0	Conventional Steam Coal	SUB	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	3	247.0	Conventional Steam Coal	SUB	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	11460	City of Macon - (MO)	Electric Utility	Macon	MO	2141	3	4.6	Petroleum Liquids	DFO	IC
2018	4	59936	Georgia-Pacific Consumer Operations (Camas) LLC	Industrial	Consumer Operations LLC	WA	57759	STG1	16.3	Wood/Wood Waste Biomass	BLQ	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	1	594.0	Conventional Steam Coal	RC	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	2	594.0	Conventional Steam Coal	RC	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	3	2.0	Petroleum Liquids	DFO	IC
2018	5	57017	DOE National Renewable Energy Laboratory	Commercial	DOE Golden NWTC Turbine Side	CO	57693	ALSTO	3.0	Onshore Wind Turbine	WND	WT
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	3	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	4	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	7	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	8	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	1	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	2	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	3	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	4	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	5	4.8	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	6	4.8	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	7	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	8	2.9	Conventional Hydroelectric	WAT	HY
2018	5	3046	Duke Energy Progress - (NC)	Electric Utility	Darlington County	SC	3250	5	51.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	57400	Evergreen Community Power, LLC	Industrial	Evergreen Community Power	PA	58023	ECP	25.0	Wood/Wood Waste Biomass	WDS	ST
2018	5	9205	Illinois Electricial Gen Partn	IPP	Morris Genco LLC	IL	55774	MO4	1.0	Landfill Gas	LFG	IC

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	5	9205	Illinois Electricial Gen Partn	IPP	Morris Genco LLC	IL	55774	MO5	1.0	Landfill Gas	LFG	IC
2018	5	10071	Kauai Island Utility Cooperative	Electric Utility	KRS II Koloa Solar	HI	58640	BESS3	1.5	Batteries	MWH	BA
2018	5	15908	NRG California South LP	IPP	Etiwanda Generating Station	CA	331	3	320.0	Natural Gas Steam Turbine	NG	ST
2018	5	15908	NRG California South LP	IPP	Etiwanda Generating Station	CA	331	4	320.0	Natural Gas Steam Turbine	NG	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	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	1	190.0	Conventional Steam Coal	SUB	ST
2018	6	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	2	195.0	Conventional Steam Coal	SUB	ST
2018	6	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	GT1	14.0	Petroleum Liquids	DFO	GT
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	15470	Duke Energy Indiana, LLC	Electric Utility	Connersville	IN	1002	1	37.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Connersville	IN	1002	2	37.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	1	14.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	2	12.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	3	12.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	5	14.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	6	12.0	Petroleum Liquids	DFO	GT
2018	6	12685	Entergy Mississippi Inc	Electric Utility	Baxter Wilson	MS	2050	2	530.7	Natural Gas Steam Turbine	NG	ST
2018	6	12685	Entergy Mississippi Inc	Electric Utility	Rex Brown	MS	2053	3	29.3	Natural Gas Steam Turbine	NG	ST
2018	6	3303	Florida Power Development	IPP	Florida Power Development	FL	10333	GEN1	66.0	Other Waste Biomass	OBS	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	1	11.0	Natural Gas Steam Turbine	NG	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	3	17.9	Natural Gas Steam Turbine	NG	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H10	1.3	Natural Gas Internal Combustion Engine	NG	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H11	1.3	Natural Gas Internal Combustion Engine	NG	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H4	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H5	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H6	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H7	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H8	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H9	1.3	Natural Gas Internal Combustion Engine	NG	IC
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	Milton L Kapp	IA	1048	2	112.5	Natural Gas Steam Turbine	NG	ST
2018	6	9417	Interstate Power and Light Co	Electric Utility	Red Cedar	IA	7595	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	11217	Los Angeles County Sanitation	IPP	Commerce Refuse To Energy	CA	10090	GEN1	10.0	Municipal Solid Waste	MSW	ST
2018	6	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	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG2		Natural Gas Fired Combined Cycle	NG	CT
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG3		Natural Gas Fired Combined Cycle	NG	CT
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	STG1		Natural Gas Fired Combined Cycle	NG	CA
2018	6	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	7	160.0	Conventional Steam Coal	BIT	ST
2018	6	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	8	320.0	Conventional Steam Coal	BIT	ST
2018	7	57101	FC Landfill Energy	IPP	FC Landfill Energy	MD	57786	UNIT1	1.0	Landfill Gas	LFG	IC
2018	7	57101	FC Landfill Energy	IPP	FC Landfill Energy	MD	57786	UNIT2	1.0	Landfill Gas	LFG	IC
2018	7	56772	TX LFG Energy, LP	IPP	Coastal Plains	TX	55554	UNT2	1.7	Landfill Gas	LFG	IC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	63	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	64	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	65	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	67	0.3	Other Natural Gas	NG	FC
2018	9	2872	Auburndale Peaker Energy Center LLC	IPP	Auburndale Peaker Energy Center	FL	55833	CTP	117.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	9	55951	Exelon Nuclear	IPP	Oyster Creek	NJ	2388	1	607.7	Nuclear	NUC	ST
2018	9	8927	Hunterdon Cogeneration LP	Commercial	Hunterdon Cogen Facility	NJ	54707	1	4.1	Natural Gas Fired Combustion Turbine	NG	GT
2018	9	20856	Wisconsin Power & Light Co	Electric Utility	Edgewater	WI	4050	4	294.4	Conventional Steam Coal	SUB	ST
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
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	S O Purdom	FL	689	GT2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	10	10005	Kansas Gas & Electric Co	Electric Utility	Gordon Evans Energy Center	KS	1240	1	154.0	Natural Gas Steam Turbine	NG	ST

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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	10005	Kansas Gas & Electric Co	Electric Utility	Gordon Evans Energy Center	KS	1240	2	376.0	Natural Gas Steam Turbine	NG	ST
2018	10	22500	Westar Energy Inc	Electric Utility	Tecumseh Energy Center	KS	1252	7	61.0	Conventional Steam Coal	SUB	ST
2018	10	20860	Wisconsin Public Service Corp	Electric Utility	Pulliam	WI	4072	7	76.1	Conventional Steam Coal	SUB	ST
2018	10	20860	Wisconsin Public Service Corp	Electric Utility	Pulliam	WI	4072	8	133.8	Conventional Steam Coal	SUB	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)
2018	11	61633	AVS Phase 2 LLC	IPP	Lancaster	CA	62056	LANC	3.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.0
2018	11	61529	Adams Nielson Solar, LLC	IPP	Adams Nielson Solar	WA	61933	ADAMS	19.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	19.2
2018	11	61514	Agilitas Energy, LLC	IPP	Blydenburgh Solar Project	NY	61900	BLYD	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2018	11	61514	Agilitas Energy, LLC	IPP	Lincoln Ave Solar Project	NY	61899	LINC	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	11	61639	Atkinson Solar II LLC	IPP	Atkinson Solar II	NC	62096	PGRF3	1.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.9
2018	11	60476	Bluebell Solar, LLC	IPP	Bluebell Solar	TX	60789	UNIT1	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2018	11	61230	CD Arevon USA, Inc.	IPP	Mount Signal Solar Farm 3	CA	61202	MTSG3	252.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	252.3
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 6	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 7	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 8	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 9	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC10	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	61531	Casa Mesa Wind, LLC	IPP	Casa Mesa Wind Energy Center	NM	61925	CMNM	50.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	50.9
2018	11	61531	Casa Mesa Wind, LLC	IPP	Casa Mesa Wind Energy Center	NM	61925	CMNMB	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	11	2.8	Petroleum Liquids	DFO	IC	(OT) Other	2.8
2018	11	18947	City of Tipton - (IA)	Electric Utility	Tipton	IA	8106	7	2.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.0
2018	11	61060	Cypress Creek Renewables	IPP	Buckleberry Solar	NC	61693	GEN	52.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.1
2018	11	61060	Cypress Creek Renewables	IPP	Chisum	TX	61810	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	Eddy II	TX	61874	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	Fox Creek Solar	NC	60624	PV1	50.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.2
2018	11	61060	Cypress Creek Renewables	IPP	Hopewell Friends	NC	61883	GEN1	1.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.3
2018	11	61060	Cypress Creek Renewables	IPP	Pinesage	NC	61978	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61060	Cypress Creek Renewables	IPP	Staunton	IN	61885	GEN1	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2018	11	61060	Cypress Creek Renewables	IPP	Sterling Solar (TX)	TX	61871	GEN1	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	West Moore Solar II	TX	61625	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61060	Cypress Creek Renewables	IPP	Yellow Jacket	TX	61873	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61187	DG Minnesota CSG, LLC	IPP	Hammer CSG	MN	62099	HAMME	4.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.8
2018	11	61187	DG Minnesota CSG, LLC	IPP	Monticello Project CSG	MN	62105	MONTI	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2018	11	61187	DG Minnesota CSG, LLC	IPP	Schultz CSG	MN	62088	SCHUL	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2018	11	61187	DG Minnesota CSG, LLC	IPP	Tiller CSG	MN	62098	TILLE	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2018	11	58970	Ecoplexus, Inc	IPP	Manning PV 1	NC	59520	MANN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	60147	Enerparc Solar Development, LLC	IPP	Gastonia Solar Center	NC	60359	60916	4.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.3
2018	11	59745	First Solar Asset Management	IPP	Willow Spring Solar, LLC	CA	60324	GEN01	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2018	11	60252	Friendswood Energy Genco, LLC	IPP	Friendswood Energy	TX	60468	GT-1	117.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	121.5
2018	11	61674	Greenskies	IPP	Roseville Solar	CA	62114	ROSE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	11	9234	Indiana Municipal Power Agency	Electric Utility	Rensselaer Solar Site 2	IN	61799	SREN2	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2018	11	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Site 2	IN	61729	SRIC2	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2018	11	61334	Libra Community Solar Garden, LLC	IPP	Libra Community Solar	MN	61709	LIBR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	11	61458	Minco Wind IV, LLC	IPP	Minco Wind IV, LLC	OK	61836	MIV	130.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	130.0
2018	11	61682	Minisink Solar 2 LLC	IPP	Minisink Solar 2 LLC	NY	62146	MINI2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	61487	Montevideo Solar LLC	IPP	Montevideo Solar LLC, CSG	MN	61870	MONTE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	54913	NSTAR Electric Company	Electric Utility	Hatfield Solar PV	MA	62091	LG395	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2018	11	58489	OCI Solar Power	IPP	Ivory Solar	TX	61697	IVORY	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2018	11	34691	Ormat Nevada Inc	Commercial	McGinness Hills 3	NV	61912	OEC31	17.0	Geothermal	GEO	BT	(V) Under construction, more than 50 percent complete	37.0
2018	11	34691	Ormat Nevada Inc	Commercial	McGinness Hills 3	NV	61912	OEC32	20.0	Geothermal	GEO	BT	(V) Under construction, more than 50 percent complete	37.0
2018	11	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8A	122.0	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	122.0
2018	11	61353	Philadelphia Authority for Industrial Development	IPP	Navy Yard Peaker Station	PA	61737	GEN4	2.0	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	2.0
2018	11	61507	Plumsted 537 LLC	IPP	Plumsted 537 LLC	NJ	61892	PLMST	19.8	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	19.8
2018	11	15466	Public Service Co of Colorado	Electric Utility	Rush Creek Wind	CO	60619	GEN1	576.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	600.0
2018	11	61640	Quarter Horse Farm LLC	IPP	Quarter Horse Solar	NC	62095	PGRF5	4.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.5
2018	11	61414	Rattlesnake Creek Wind Project, LLC	IPP	Rattlesnake Creek Wind Project	NE	59292	RCWP	318.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	318.1
2018	11	16191	Robbins Lumber Inc	Industrial	Robbins Lumber	ME	50230	WEG	8.5	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	10.0
2018	11	60520	SoCore Energy LLC	IPP	Athens MN CONX	MN	62062	PV1	6.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	6.6
2018	11	61677	Sol Systems	IPP	Red Toad 4451 Buffalo Road, LLC	NC	62131	G4451	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	17633	Southern Indiana Gas & Elec Co	Electric Utility	Oak Hill Solar Array	IN	61333	OHSA1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	11	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA1	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	11	60910	Sun Farm V, LLC	IPP	Sun Farm V, LLC	NC	61287	SF5PV	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61441	Sun Farm VI, LLC	IPP	Sun Farm VI, LLC	NC	61842	PV1	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	59138	SunPower Corporation, Systems	IPP	Gavilan District College Solar Project	CA	61993	GDCBA	0.5	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	0.5
2018	11	59138	SunPower Corporation, Systems	IPP	Gavilan District College Solar Project	CA	61993	GDCPV	1.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.4
2018	11	58658	Sunlight Partners	IPP	Kathleen Solar	NC	60180	PV1	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2018	11	60403	TRS Fuel Cell, LLC	Electric CHP	TRS Fuel Cell	CT	60683	MMH1	3.7	Other Natural Gas	NG	FC	(TS) Construction complete, but not yet in commercial operation	3.7
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind II	CA	61582	VYGR2	128.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	128.7
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind III	CA	61583	VYGR3	43.2	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	43.2
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind IV	CA	61584	VYGR4	21.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	21.6
2018	11	60947	Tesla Inc.	IPP	Estrella Mountain PV	AZ	60230	PV1	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2018	11	61626	USS Dubhe Solar LLC	IPP	USS Dubhe Solar CSG	MN	62048	USSDB	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61628	USS Nillie Corn Solar LLC	IPP	USS Nillie Corn Solar CSG	MN	62046	USSNC	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61629	USS Norelius Solar LLC	IPP	USS Norelius Solar CSG	MN	62045	USSNO	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61630	USS Solar Dawn LLC	IPP	USS Solar Dawn CSG	MN	62044	USSSD	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61012	AES Distributed Energy	IPP	Palmer	MA	62135	PAL01	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2018	12	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2018	12	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA2	20.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	20.0
2018	12	60248	Agilon Energy LLC	IPP	Victoria City Power LLC	TX	61241	VC-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	60248	Agilon Energy LLC	IPP	Victoria City Power LLC	TX	61241	VC-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	201	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	202	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	203	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	204	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	205	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	TBESS	4.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	4.0
2018	12	60876	Antelope Expansion 2, LLC	IPP	Antelope Expansion 2	CA	61264	ANTX2	105.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	105.0
2018	12	61327	Arcturus Community Solar Garden, LLC	IPP	Arcturus Community Solar	MN	61705	ARCT	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	57003	Arlington Valley Solar Energy LLC	IPP	Arlington Valley Solar Energy I	AZ	57679	AVSE1	125.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	127.0
2018	12	61530	Armadillo Flats Wind Project, LLC	IPP	Armadillo Flats Wind Project, LLC	OK	61926	ARM	250.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	250.0
2018	12	61328	Auriga Community Solar Garden, LLC	IPP	Auriga Community Solar	MN	61706	AURI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	59359	BHE Renewables, LLC	IPP	Walnut Ridge Wind Farm	IL	58694	1	212.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	212.0
2018	12	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	61545	Blacktip Solar, LLC	IPP	Blacktip Solar	SC	61939	5	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	12	61563	Blue Summit II Wind, LLC	IPP	Blue Summit II Wind, LLC	TX	61970	BSII	99.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	99.4
2018	12	61230	CD Arevon USA, Inc.	IPP	CA Flats Solar 150, LLC	CA	60034	GEN01	150.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	150.0
2018	12	59365	Capital Power Corporation	IPP	New Frontier Wind	ND	59903	GEN	100.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100.0
2018	12	61568	Chisago Holdco LLC	IPP	Chisago Holdco LLC, CSG	MN	61968	CHIS	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2018	12	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	7	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2018	12	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	8	3.3	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	3.3
2018	12	61571	Clara City CSG I, LLC	IPP	Syncarpha Clara City CSG I (Stamer)	MN	61980	SCSG1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	12	56769	Consolidated Edison Development Inc.	IPP	Blackwell Solar Park	CA	59524	FRBSP	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2018	12	56769	Consolidated Edison Development Inc.	IPP	Wistaria Ranch Solar	CA	61750	WICA	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	106.7
2018	12	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	12	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYS	2.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.6
2018	12	61540	Coolridge Solar I, LLC	IPP	Coolridge Solar 1, LLC	VT	61959	COLS	19.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	19.6
2018	12	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	79.9
2018	12	58695	Coronal Development Services	IPP	Latitude Solar Center	TN	61412	LATSC	15.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	15.0
2018	12	61528	Cumberland Land Holdings, LLC	IPP	Cumblerland Land Holdings, LLC	AL	61924	CUMB	14.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	14.7
2018	12	61060	Cypress Creek Renewables	IPP	Atood II	SC	61960	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	61060	Cypress Creek Renewables	IPP	Bar D	CO	61886	GEN1	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2018	12	61060	Cypress Creek Renewables	IPP	Bovine	TX	61867	GEN1	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Bronson	TX	61868	GEN1	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Cascade Solar (TX)	TX	61875	GEN1	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Copperfield	NC	61882	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	61060	Cypress Creek Renewables	IPP	Gaston II	SC	61961	GEN1	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2018	12	61060	Cypress Creek Renewables	IPP	Morning View	NC	61881	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Brewster	OH	61818	AMPBR	1.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.9
2018	12	61567	DP-C2 Episode 1 LLC	IPP	Diamond Solar II	SC	61974	C2BV	8.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.2
2018	12	61567	DP-C2 Episode 1 LLC	IPP	Edison Solar II	SC	61975	C2BV	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.8
2018	12	5109	DTE Electric Company	Electric Utility	Pine River Wind Park	MI	61106	1	161.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	161.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	CC2ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	364.7
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Hamilton Solar Power Plant	FL	61807	PV1	74.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.9
2018	12	56215	E ON Climate Renewables N America LLC	IPP	Stella Wind Farm	TX	59063	WT1	201.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	201.0
2018	12	61688	ENGIE Generation North America LLC	IPP	Goose Lake MN DPC-GM	MN	62148	PV1	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2018	12	61420	ENGIE Storage Services NA LLC	Commercial	Pacific Union College BESS	CA	61795	12649	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	58970	Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	17.0
2018	12	58970	Ecoplexus, Inc	IPP	Folsom SP and CSP Sacramento	CA	61698	FOLSM	1.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2018	12	61404	Edenton Solar	IPP	Edenton Solar	NC	61781	EDE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	12	61413	Enel Green Power Diamond Vista Wind Project, LLC	IPP	Diamond Vista Wind Project, LLC	KS	61789	DV	299.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	299.3
2018	12	56201	Engie North America	IPP	Live Oak Wind Project	TX	61782	WTGS	199.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	199.5
2018	12	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2018	12	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	5	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2018	12	61579	FL Solar 5, LLC	IPP	Citrus Ridge Solar	FL	61988	FL501	52.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.0
2018	12	59745	First Solar Asset Management	IPP	North Rosamond Solar LLC	CA	59879	GEN01	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2018	12	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.8
2018	12	61548	Gary Solar, LLC	IPP	Gary Solar	SC	61942	8	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	7019	Gay & Robinson Inc	Industrial	Gay Robinson	HI	50333	HYD3	6.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	6.5
2018	12	60878	Green Beanworks B, LLC	IPP	Green Beanworks B PV	CA	61339	GBWXB	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2018	12	61214	Heartland Divide Wind Project, LLC	IPP	Heartland Divide Wind Project, LLC	IA	61609	1	103.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	103.5
2018	12	59462	Heelstone Energy Holdings, LLC	IPP	Innovative Solar 54	NC	59669	IS054	50.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	59462	Heelstone Energy Holdings, LLC	IPP	Innovative Solar 67	NC	59678	IS067	33.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	33.3
2018	12	60356	Hexagon Energy	IPP	Bay Branch Solar	NC	60601	BBSOL	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	12	61001	Hu Honua Bioenergy, LLC	IPP	Hu Honua Bioenergy Facility	HI	61364	HHB	32.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	36.0
2018	12	49893	Invenergy Services LLC	IPP	Upstream Wind Energy LLC	NE	61784	UWE	202.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	202.5
2018	12	61342	Leo Community Solar, LLC	IPP	Leo Community Solar	MN	61713	LEO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	61133	Lorenzo Wind, LLC	IPP	Lorenzo Wind	TX	59244	FIBE1	80.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	80.0
2018	12	61373	MERIT SI	IPP	Rotor Clip	NJ	61751	RCLIP	2.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.8
2018	12	61381	Meadow Lake Wind Farm VI LLC	IPP	Meadow Lake Wind Farm VI LLC	IN	61756	MWLVI	200.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.4
2018	12	12341	MidAmerican Energy Co	Electric Utility	Arbor Hill Wind Farm	IA	62132	WT1	250.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	250.0
2018	12	12341	MidAmerican Energy Co	Electric Utility	Beaver Creek II Wind	IA	62134	GT1	170.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	170.0
2018	12	12341	MidAmerican Energy Co	Electric Utility	Ivester Wind Farm	IA	61911	WT1	90.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	90.8
2018	12	12341	MidAmerican Energy Co	Electric Utility	North English	IA	62133	GT1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2018	12	61004	Midway Solar LLC	IPP	Midway Solar - TX	TX	61368	PV1	182.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	182.0
2018	12	61396	Midway Wind, LLC	IPP	Midway Wind, LLC	TX	61776	MIDWY	162.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	162.9
2018	12	61459	Minco Wind V, LLC	IPP	Minco Wind V, LLC	OK	61837	MV	220.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	220.0
2018	12	12199	Montana-Dakota Utilities Co	Electric Utility	Thunder Spirit Wind, LLC	ND	58965	2	48.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	48.0
2018	12	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	CTG1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.6
2018	12	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	STG	1.0	Natural Gas Steam Turbine	NG	ST	(V) Under construction, more than 50 percent complete	1.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Greenfield Solar PV	MA	62063	LG400	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Hinsdale Solar PV	MA	62064	LG400	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Savoy Solar PV	MA	62065	LG400	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Southampton Solar PV	MA	62066	LG400	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Southwick Solar PV	MA	62082	REC34	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Springfield Solar PV	MA	62072	LG395	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Wareham Solar PV	MA	62055	LG395	3.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.3
2018	12	61080	North Smithfield Solar Power 1, LLC	IPP	North Smithfield Solar Power 1	RI	61461	NSS01	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	12	61603	Page Solar Farm, LLC	IPP	Page Solar	NC	62018	PGRI1	1.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.6
2018	12	61612	Panda Solar NC 1, LLC	IPP	Panda Solar NC 1, LLC	NC	62089	20002	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	12	61655	Panda Solar NC 2, LLC	IPP	Panda Solar NC 2, LLC	NC	62120	20003	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	61521	Pegasus Wind, LLC	IPP	Pegasus Wind	MI	61916	PWEC	141.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	141.1
2018	12	61566	Peony Solar, LLC	IPP	Peony Solar	SC	61976	PGRG1	39.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	39.0
2018	12	15248	Portland General Electric Co	Electric Utility	Timothy Lake Powerhouse	OR	60868	1	1.2	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	1.2
2018	12	61537	Pratt Wind, LLC	IPP	Pratt Wind, LLC	KS	61957	PW	220.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	243.0
2018	12	61573	Prinsburg CSG I, LLC	IPP	Syncarpha Prinsburg CSG (Ledeboer)	MN	61979	SYPRN	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	12	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	12	60334	SR Millington, LLC	IPP	Millington Solar Farm	TN	60560	MILL	53.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	53.0
2018	12	61675	SS PA II PSU LLC	IPP	University Park Solar	PA	62119	PSUPV	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2018	12	61333	Sagitta Community Solar Garden, LLC	IPP	Sagitta Community Solar	MN	61708	SAGI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	61591	Solar University, LLC	IPP	UC Merced Solar	CA	61995	UCMBA	0.5	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	0.5
2018	12	61591	Solar University, LLC	IPP	UC Merced Solar	CA	61995	UCMPV	4.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.3
2018	12	61556	South Solar, LLC	IPP	South Solar	SC	61949	13	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.0
2018	12	61506	Stryker 22, L.L.C.	IPP	Stryker 22, L.L.C.	NJ	61891	EDGRD	19.8	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	19.8
2018	12	58658	Sunlight Partners	IPP	Shelter Solar	NC	60156	PV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	12	60495	Sunpin Holdings, LLC	IPP	Colgreen North Shore Solar Farm	CA	60825	CNS1	74.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.8
2018	12	61005	Sweetwater Solar LLC	IPP	Sweetwater Solar	WY	61369	PV1	92.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	92.0
2018	12	61685	Syncarpha Eagle Nest I, LLC	IPP	Syncarpha Eagle Nest	NM	62149	SYEN1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	61527	Tahoka Wind, LLC	IPP	Tahoka Wind	TX	61921	TAH	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2018	12	18454	Tampa Electric Co	Electric Utility	Bonnie Mine Solar	FL	61655	PV1	35.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	35.0
2018	12	18454	Tampa Electric Co	Electric Utility	Grange Hall Solar	FL	61656	PV1	61.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	61.0
2018	12	18454	Tampa Electric Co	Electric Utility	Lithia Solar	FL	61663	GEN1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	12	18454	Tampa Electric Co	Electric Utility	Peace Creek Solar	FL	61666	GEN	56.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	56.6
2018	12	61532	Techren Solar I LLC	IPP	Techren	NV	61611	TECH1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG1	276.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG2	276.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	STG1	374.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	394.0
2018	12	60947	Tesla Inc.	IPP	Bd of Educ of Queen Anne's Cnty, Cnty HS	MD	62074	PV1	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2018	12	60947	Tesla Inc.	IPP	Blue Shld Of Cal- El Dorado Hlls Mtr B	CA	62077	PV1	2.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.1
2018	12	61436	Titan Solar, LLC	IPP	Titan Solar	CO	61811	PCEC	50.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	61562	Torrecillas Wind Energy, LLC	IPP	Torrecillas Wind Energy, LLC	TX	61969	TWE	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2018	12	59056	Tri Global Energy, LLC	IPP	Blue Cloud Renewable Energy Project, LLC	TX	60270	WT1	350.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	350.0
2018	12	61580	USS Big Lake 1 LLC	IPP	USS Big Lake 1 Solar CSG	MN	61997	USSBL	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61625	USS Brockway Solar LLC	IPP	USS Brockway Solar CSG	MN	62049	USSBR	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61581	USS Good Solar LLC	IPP	USS Good Solar CSG	MN	61998	USSGO	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	12	61627	USS JJ Solar LLC	IPP	USS JJ Solar CSG	MN	62047	USSJJ	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61583	USS Rockpoint Solar LLC	IPP	USS Rockpoint Solar CSG	MN	62000	USSRP	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	12	61631	USS Solar Rapids LLC	IPP	USS Solar Rapids CSG	MN	62042	USSSR	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	19511	University of Alaska	Commercial	University of Alaska Fairbanks	AK	50711	GEN5	17.0	Conventional Steam Coal	SUB	ST	(TS) Construction complete, but not yet in commercial operation	17.0
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT01	324.4	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT02	324.4	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT03	324.4	Natural Gas Fired Combined Cycle	NG	CT	(TS) Construction complete, but not yet in commercial operation	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	ST01	611.8	Natural Gas Fired Combined Cycle	NG	CA	(TS) Construction complete, but not yet in commercial operation	663.9
2018	12	61666	WED GW Solar, LLC	IPP	WED GW Solar, LLC	RI	62118	GWSOL	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2018	12	61648	WED Green Hill, LLC	IPP	WED Green Hill, LLC	RI	62106	GHILL	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61649	WED Plainfield II, LLC	IPP	WED Plainfield II, LLC	RI	62107	PLAI2	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61650	WED Plainfield III, LLC	IPP	WED Plainfield III, LLC	RI	62108	PLAI3	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61651	WED Plainfield, LLC	IPP	WED Plainfield, LLC	RI	62109	PLAI1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61652	WED Shun I, LLC	IPP	WED Shun I, LLC	RI	62110	SHUN1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61653	WED Shun II, LLC	IPP	WED Shun II, LLC	RI	62111	SHUN2	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61654	WED Shun III, LLC	IPP	WED Shun III, LLC	RI	62112	SHUN3	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61645	Warrenton Solar I LLC	IPP	Warrenton I Solar	NC	62100	PGRI4	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2018	12	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2018	12	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSPV	3.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.4
2018	12	61291	Wildcat Ranch Wind Project, LLC	IPP	Wildcat Ranch Wind Project	TX	61674	WT	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2018	12	61366	Woods Hill Solar, LLC	IPP	Woods Hill Solar	CT	61736	PV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	1	61541	1634 Solar, LLC	IPP	1634 Solar	SC	61935	3	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61543	ACE Solar, LLC	IPP	Ace Solar	SC	61937	18	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	61482	AES ES GILBERT, LLC	IPP	AES ES GILBERT	AZ	61861	SRP	10.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	10.0
2019	1	61542	Abbot Solar, LLC	IPP	Abbot Solar	SC	61936	2	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	60248	Agilon Energy LLC	IPP	Victoria Port Power LLC	TX	61242	VP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	1	60248	Agilon Energy LLC	IPP	Victoria Port Power LLC	TX	61242	VP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	1	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	1	61544	Bani Solar, LLC	IPP	Bani Solar	SC	61938	4	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	1	61546	Bloom Solar, LLC	IPP	Bloom Solar	SC	61940	6	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61547	Bond Solar, LLC	IPP	Bond Solar	SC	61941	7	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61260	Capricornus Community Solar Garden, LLC	IPP	Capricornus Community Solar Garden	MN	61651	CAPR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC1	18.5	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC2	18.5	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC3	18.5	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC4	18.5	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	1	57202	E&E Enterprises LLC	IPP	Allendorf	IA	56215	ET	1.8	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	2.0
2019	1	59735	Enerparc CA2, LLC	IPP	Cloverdale Solar Center	CA	60813	ECA02	1.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.0
2019	1	6452	Florida Power & Light Co	Electric Utility	Interstate Solar Energy Center	FL	61768	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Miami Dade Solar Energy Center	FL	61766	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Pioneer Trail Solar Energy Center	FL	61767	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Sunshine Gateway Solar Energy Center	FL	61763	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2019	1	61518	Frontenac Holdco LLC	IPP	Frontenac Holdco LLC, CSG	MN	61919	FRONT	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	1	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	1	61549	Goldenrod Solar, LLC	IPP	Goldenrod Solar	SC	61943	9	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	60428	Green City Recovery, LLC	IPP	Green City Recovery, LLC	KY	60703	2	1.0	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	1	61365	Hilltopper Wind Project, LLC	IPP	Hilltopper Wind Project	IL	61735	WT1	185.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	185.0
2019	1	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN3	465.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	555.0
2019	1	61550	Jessamine Solar, LLC	IPP	Jessamine Solar	SC	61944	10	1.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.9
2019	1	61687	KCE NY 1, LLC	IPP	KCE NY 1	NY	62147	KNY1	20.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	20.0
2019	1	61289	Kaus Community Solar Garden, LLC	IPP	Kaus Community Solar	MN	61716	KAUS	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(L) Regulatory approvals pending. Not under construction	1.6
2019	1	61679	MSC-GreyCloud01 LLC	IPP	MSC-GreyCloud01	MN	62143	52785	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	61680	MSC-Scandia01 LLC	IPP	MSC-Scandia01	MN	62144	52741	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	54913	NSTAR Electric Company	Electric Utility	East Longmeadow Solar PV	MA	62059	LG400	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	1	13484	New York Methodist Hospital	IPP	New York Methodist Hospital	NY	52091	CCHEG	1.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.5
2019	1	61552	Pelzer Solar I, LLC	IPP	Pelzer Solar I	SC	61945	19	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	1	61553	Redwing Solar, LLC	Industrial	Redwing Solar	SC	61946	11	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61554	River Solar, LLC	IPP	River Solar	SC	61947	12	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61614	Rollingstone Holdco LLC	IPP	Rollingstone Holdco CSG	MN	62037	ROLLI	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	1	61587	Sagittarius Community Solar Gardens LLC	IPP	Sagittarius Community Solar Gardens LLC	MN	61994	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	1	61555	Sapphire Solar, LLC	IPP	Sapphire Solar	SC	61948	17	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	60693	Saratoga Wind Energy LLC	IPP	Saratoga Wind Farm	IA	61070	SWE	66.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	66.0
2019	1	18454	Tampa Electric Co	Electric Utility	Mountain View Solar (FL)	FL	61664	GEN1	55.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	55.0
2019	1	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	BAT1	9.9	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	9.9
2019	1	61557	Vincent Solar, LLC	IPP	Vincent Solar	SC	61950	14	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61558	Watauga Solar, LLC	IPP	Watauga Solar	SC	61951	15	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	1	61559	Whitt Solar, LLC	IPP	Whitt Solar	SC	61952	20	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61560	Willis Solar, LLC	IPP	Willis Solar	SC	61953	16	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	2	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA01	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	2	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA02	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	2	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA1C	11.8	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	11.8
2019	2	61259	Altair Community Solar Garden, LLC	IPP	Altair Community Solar Garden	MN	61645	ALTA	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61325	Aquarius Community Solar Gardens, LLC	IPP	Aquarius Community Solar	MN	61710	AQUA	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	2	61326	Aquila Community Solar Gardens, LLC	IPP	Aquila Community Solar	MN	61704	AQUI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	2	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2019	2	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2019	2	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	STG2	395.1	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	419.6
2019	2	61329	Canopus Community Solar Garden, LLC	IPP	Canopus Community Solar	MN	61707	CANO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61337	Cassiopeia Community Solar Garden, LLC	IPP	Cassiopeia Community Solar	MN	61711	CASS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61467	Central CA Fuel Cell 2, LLC	IPP	Tulare WWTP BioMat Fuel Cell	CA	61846	MM27	2.8	Other Natural Gas	NG	FC	(V) Under construction, more than 50 percent complete	2.8
2019	2	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT	(V) Under construction, more than 50 percent complete	58.2
2019	2	61567	DP-C2 Episode 1 LLC	IPP	Blackville Solar II	SC	61973	C2BV	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	2	61339	Deneb Community Solar Garden, LLC	IPP	Deneb Community Solar	MN	61715	DENE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2019	2	60379	Howardtown Farm, LLC	IPP	Howardtown Farm	NC	60630	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	2	60018	NET Power, LLC	IPP	NET Power La Porte Station	TX	60910	NPLPS	25.5	Other Natural Gas	NG	OT	(V) Under construction, more than 50 percent complete	25.5
2019	2	61585	Pisces Community Solar Garden LLC	IPP	Pisces Community Solar Garden	MN	61992	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61613	Sartell Holdco LLC	IPP	Sartell Holdco CSG	MN	62036	SARTE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	2	60947	Tesla Inc.	IPP	Pima Community College	AZ	62075	PV1	1.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.1
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	2.5
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	1.0
2019	3	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	CHPP	3.5	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	3.5
2019	3	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	3	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKA2	103.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	103.4
2019	3	61338	Crux Community Solar Gardens, LLC	IPP	Crux Community Solar	MN	61712	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	93.5	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	93.5
2019	3	60846	GRP Madison Renewable Energy Facility, LLC	IPP	GRP Madison Renewable Energy Facility	GA	61213	GEN	65.0	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	65.0
2019	3	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	3	9417	Interstate Power and Light Co	Electric Utility	English Farms	IA	61565	1	169.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	169.9
2019	3	9417	Interstate Power and Light Co	Electric Utility	Upland Prairie	IA	61564	1	299.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	299.3
2019	3	59898	Kawailoa Solar, LLC	IPP	Kawailoa Solar	HI	60125	KAWS	49.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	49.0
2019	3	60987	Lanikuhana Solar LLC	IPP	Lanikuhana Solar LLC	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	14.7
2019	3	61606	Lindstrom Solar LLC	IPP	Nautilus Lindstrom Solar CSG	MN	62030	LI	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	3	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	18	13.5	Petroleum Liquids	DFO	GT	(V) Under construction, more than 50 percent complete	15.4
2019	3	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	19	1.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	1.0
2019	3	59967	Phoenix Energy	Electric CHP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	3	59010	Rhubarb One LLC	IPP	Rhubarb One SC	SC	59596	PV1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	3	61607	Saint Cloud Solar, LLC	IPP	Nautilus Saint Cloud Solar CSG	MN	62031	SC	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2019	3	61616	Solar Provider Group MN I LLC	IPP	Syncarpha Dodge 1	MN	62053	SPGD1	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	3	60117	SunShare	IPP	Becker Solar 2 CSG	MN	62084	BCKR2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 3 CSG	MN	62085	BCKR3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 4 CSG	MN	62086	BCKR4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 5 CSG	MN	62087	BCKR5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar CSG	MN	62040	BCKR1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	3	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	45.9
2019	3	61609	Winsted Solar LLC	IPP	Nautilus Winsted Solar CSG	MN	62032	WS	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
2019	4	58519	Clean Energy Collective LLC	IPP	SCE&G Curie CSG	SC	61432	SCCU1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	4	60609	Clean Focus Renewables, Inc.	IPP	Rugged Solar LLC	CA	57960	1	80.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	80.0
2019	4	58970	Ecoplexus, Inc	IPP	Everett PV1	NC	60997	EVRT1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	4	60496	Enerparc Inc.	IPP	Neenach Solar Center	CA	60826	ECA03	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	4	58959	Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	97.0
2019	4	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH2	3.7	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	3.7
2019	4	19547	Hawaiian Electric Co Inc	Electric Utility	West Loch Solar One	HI	61987	WLS1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2019	4	54769	INEOS USA LLC	Industrial	Power Island	TX	10154	GEN2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	4	54769	INEOS USA LLC	Industrial	Power Island	TX	10154	GEN3	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	4	58849	Mariah del Este LLC	IPP	Mariah East	TX	59006	MARN	152.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	152.5
2019	4	61663	Panda Solar NC 10, LLC	IPP	Panda Solar NC 10, LLC	NC	62128	20031	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61664	Panda Solar NC 11, LLC	IPP	Panda Solar NC 11, LLC	NC	62129	20032	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61656	Panda Solar NC 3, LLC	IPP	Panda Solar NC 3, LLC	NC	62121	20011	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61657	Panda Solar NC 4, LLC	IPP	Panda Solar NC 4, LLC	NC	62122	20009	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61660	Panda Solar NC 6, LLC	IPP	Panda Solar NC 6, LLC	NC	62124	20028	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	4	61659	Panda Solar NC 7 , LLC	IPP	Panda Solar NC 7, LLC	NC	62125	20038	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	4	61661	Panda Solar NC 8, LLC	IPP	Panda Solar NC 8, LLC	NC	62126	20052	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	61662	Panda Solar NC 9, LLC	IPP	Panda Solar NC 9, LLC	NC	62127	20022	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	60193	Tamworth Holdings, LLC	IPP	Tamworth Holdings	NC	60394	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	4	60410	Tanager Holdings, LLC	IPP	Tanager Holdings	NC	60691	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M1	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M2	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	A.J. Mihm Generating Station	MI	61391	M3	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K1	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K2	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K3	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K4	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K5	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K6	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	61029	Upper Michigan Energy Resources Company	Electric Utility	F.D. Kuester Generating Station	MI	61392	K7	18.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	18.8
2019	4	60192	Warbler Holdings, LLC	IPP	Warbler Holdings	NC	60393	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	5	60292	Advanced Solar Power Holdings, Inc	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	16.2
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	5	60672	Birdsboro Power LLC	IPP	Birdsboro Power	PA	61035	GEN1	476.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	525.0
2019	5	61519	Blackville Solar Farm, LLC	IPP	Blackville Solar Farm, LLC	SC	61918	1	7.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	7.2
2019	5	61060	Cypress Creek Renewables	IPP	West Moore Solar	TX	61624	GEN1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	5	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2019	5	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH3	3.7	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	3.7
2019	5	13902	NorthWestern Energy	Electric Utility	Hauser	MT	2185	HAU7	3.4	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	5	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.5
2019	5	59598	Tooele Army Depot	IPP	Tooele Army Depot	UT	59817	PV1	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	5	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	5.4
2019	5	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT2	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	5.4
2019	6	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	6	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	6	59474	BQ Energy LLC	IPP	Yeoman Creek	IL	61910	YEOM	8.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	8.8
2019	6	60366	BRE NC Solar 2, LLC	IPP	BRE NC Solar 2	NC	60626	BEAM2	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60367	BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627	BEAM3	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60368	BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628	BEAM4	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	57449	Borrego Solar Systems Inc	Industrial	Clif Bar Bakery of Twin Falls	ID	62151	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	6	60096	Calvert Energy LLC	IPP	Pine Valley Solar Farm, LLC	NC	60298	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	61615	Citizens Imperial Solar LLC	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	30.0
2019	6	59319	Cotton Solar, LLC	IPP	Cotton Solar	SC	59572	PV1	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	8.9
2019	6	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	58135	Ecos Energy LLC	IPP	Apple Hill Solar	VT	61037	APPL	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	6	58135	Ecos Energy LLC	IPP	Lake Perris Solar	CA	60973	LKPR	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	6	58135	Ecos Energy LLC	IPP	San Jacinto Solar	CA	60972	SJAC	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	500.0
2019	6	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG2	10.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	10.5
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1A	376.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1B	376.6	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1C	376.6	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1ST	593.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	593.3
2019	6	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	352.8
2019	6	57389	IKEA Property Inc	Commercial	IKEA Live Oak Rooftop PV System	TX	62152	570	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	302.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	302.4
2019	6	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	22.0
2019	6	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	6	21461	NRG Canal LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	330.0
2019	6	61401	North 301 Solar	IPP	North 301 Solar	NC	61778	N301	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	58477	O2energies, Inc.	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	58764	Origis Energy USA, Inc	IPP	OR Solar 2, LLC	OR	61200	ORSR2	10.0	Solar Photovoltaic	SUN	PV	(OT) Other	10.0
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	501	375.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	375.7
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	502	200.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	200.6
2019	6	61658	Panda Solar NC 5, LLC	IPP	Panda Solar NC 5, LLC	NC	62123	20007	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	6	60389	Rabbit Hill Energy Storage Project	IPP	Rabbit Hill Energy Storage Project	TX	60649	1	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2019	6	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	237.6
2019	6	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2019	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	200.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	210.0
2019	6	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.9
2019	6	58658	Sunlight Partners	IPP	Alexis Solar	NC	60139	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Blue Bird Solar	NC	60177	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	6	58658	Sunlight Partners	IPP	Brooke Solar	NC	60140	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2019	6	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	6	58658	Sunlight Partners	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Icarus Solar	NC	60169	PV1	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2019	6	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	June Solar	NC	60158	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	6	58658	Sunlight Partners	IPP	Longleaf Solar	NC	60173	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Roman Solar	NC	60159	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Wilfork Solar	NC	60162	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	61533	Techren Solar II LLC	IPP	Techren Solar II LLC	NV	61930	TECH2	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	6	59731	Windham Solar LLC	IPP	Lebanon Solar 1	CT	59991	LEB1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	6	59731	Windham Solar LLC	IPP	Lebanon Solar 2	CT	59992	LEB2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	61466	Bakersfield Fuel Cell 1, LLC	IPP	Bolthouse Farms Fuel Cell	CA	61845	MM28	2.5	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	7	61466	Bakersfield Fuel Cell 1, LLC	IPP	Bolthouse Farms Fuel Cell	CA	61845	MM29	2.5	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	7	61060	Cypress Creek Renewables	IPP	Lampwick	TX	61872	GEN1	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	7	60147	Enerparc Solar Development, LLC	IPP	Hilly Branch	NC	60358	28941	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	7	56201	Engie North America	IPP	Solomon Forks Wind Project, LLC	KS	61984	WTGS	275.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	275.6
2019	7	60534	Halifax Solar LLC	IPP	Halifax Solar LLC	NC	60884	HALFX	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	7	54913	NSTAR Electric Company	Electric Utility	Hampden Solar PV	MA	62073	LG390	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2019	7	60975	SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332	NIKE2	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2019	7	61502	Sholes Wind Energy Center, LLC	IPP	Sholes Wind Energy Center	NE	61889	WSN1	160.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	160.0
2019	7	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T1	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	7	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T2	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	8	60877	Antelope DSR 3, LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	8	59714	Antrim Wind Energy LLC	IPP	Antrim Wind	NH	59953	AWND1	28.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	28.8
2019	8	59550	Croda Inc.	Industrial	Croda Atlas Point CHP	DE	59783	91199	2.0	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	8	16534	Sacramento Municipal Util Dist	Electric Utility	White Rock/Slab Creek	CA	435	H3	2.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.7
2019	9	60328	Big Level Wind LLC	IPP	Big Level Wind	PA	60551	BLW01	90.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	90.0
2019	9	60719	Broadlands Wind Farm LLC	IPP	Broadlands Wind Farm	IL	61161	GEN01	300.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	300.0
2019	9	59365	Capital Power Corporation	IPP	Black Fork Wind Energy Project	OH	59907	GEN	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	9	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	158.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	9	61374	Foxtail Wind, LLC	Electric Utility	Foxtail Wind, LLC	ND	61747	1	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
2019	9	60259	Green River Wind Farm, LLC	IPP	Green River Wind Farm	IL	60471	GRNRV	212.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	212.0
2019	9	58606	Mauka Fit One LLC	IPP	Mauka FIT One	HI	58662	3501	3.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.5
2019	9	61515	Phoebe Energy Project, LLC	IPP	Phoebe Solar	TX	61906	PHOEB	250.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	250.0
2019	9	60217	San Bernardino Valley Mun. Water Dist.	Electric Utility	Waterman Turnout Hydroelectric	CA	60466	WTHF	1.0	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	1.0
2019	9	17609	Southern California Edison Co	Electric Utility	DESI-1 Battery Energy Storage Facility	CA	60699	DESI1	2.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.4
2019	10	61465	Brush Solar Center	IPP	Brush Solar Center	OR	61844	BRUSH	2.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.8
2019	10	61473	Morgan Solar Center	IPP	Morgan Solar Center	OR	61855	MORGN	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG4	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG5	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG6	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG7	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	61637	TUUSSO Energy, LLC	IPP	Camas Solar Project	WA	62071	CAMAS	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Fumaria Solar Project	WA	62070	FUMAR	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Penstemon Solar Project	WA	62069	PENST	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Typha Solar Project	WA	62068	TYPHA	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Urtica Solar Project	WA	62067	URTIC	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	61330	Turtle Creek Wind Farm LLC	IPP	Turtle Creek Wind Farm LLC	IA	61638	TC1	200.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.1
2019	10	61472	Vale Solar Center	IPP	Vale Solar Center	OR	61856	VALE	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	59260	Wright Solar Park LLC	IPP	Wright Solar Park	CA	59525	FRWSP	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2019	11	60656	Chestnut Solar LLC	IPP	Chestnut Solar	NC	61011	PV1	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT5	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT7	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST6	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST8	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	11	60229	Quail Holdings, LLC	IPP	Quail Holdings	NC	60434	PV1	25.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	25.0
2019	11	59770	Shorthorn Holdings, LLC	IPP	Shorthorn Holdings	SC	60028	PV1	15.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	15.4
2019	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	131.1
2019	12	60600	Adams Solar, LLC	IPP	Adams Solar	NC	60949	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	61617	Alpha Value Solar, LLC	IPP	Alpha Value Solar	NC	62054	AVS01	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	61118	Ameresco, Inc - Candlewood	IPP	Candlewood Solar	CT	61517	CANDL	25.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	25.0
2019	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	15399	Avangrid Renewables LLC	IPP	Coyote Ridge	SD	61047	WT1	98.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	98.0
2019	12	15399	Avangrid Renewables LLC	IPP	Karankawa Wind LLC	TX	61343	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Lund Hill	WA	61045	WT1	60.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	60.0
2019	12	15399	Avangrid Renewables LLC	IPP	Montague Wind Power Facility LLC	OR	58099	1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	98.0
2019	12	61474	Baker City Solar	IPP	Baker City Solar	OR	61854	BAKER	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.0
2019	12	60714	Burke Wind LLC	IPP	Burke Wind, LLC	ND	61100	GE23	199.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	199.4
2019	12	59365	Capital Power Corporation	IPP	Garrison Butte Wind, LLC	ND	60066	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2019	12	59365	Capital Power Corporation	IPP	Poplars Ranch Solar LLC	OR	59890	GEN	16.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	16.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	Cabaniss Solar	NC	60430	PV1	4.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.2
2019	12	58508	Carolina Solar Energy II LLC	IPP	McGrigor Farm Solar	NC	60440	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	Sellers Farm Solar	NC	60439	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	Tides Lane Farm	NC	60429	PV1	3.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.7
2019	12	61416	Cattle Ridge Wind Holdings, LLC	IPP	Cattle Ridge Wind Farm 1	SD	60503	CTTL1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	1	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	12	56769	Consolidated Edison Development Inc.	IPP	Burt County Wind	NE	61511	BCNE	75.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.0
2019	12	58695	Coronal Development Services	IPP	Biggs Ford Solar Center	MD	61321	BFSC	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	60290	Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	59464	Current Energy Group	IPP	Hickory	NC	59829	5515	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	61060	Cypress Creek Renewables	IPP	Willard Solar	NC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	61302	Depot Solar Center, LLC	IPP	Depot Solar Center, LLC	VA	61691	DEPOT	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	58468	Dominion Renewable Energy	Electric Utility	Colonial Trail West	VA	61985	CTWS	142.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	142.4
2019	12	56215	E ON Climate Renewables N America LLC	IPP	Vici Wind Farm	OK	59062	VICI	180.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	180.0
2019	12	56987	East Blackland Solar Project 1 LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	144.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	144.0
2019	12	58970	Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	58970	Ecoplexus, Inc	IPP	Underwood PV2	NC	60998	UNWD2	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	58970	Ecoplexus, Inc	IPP	Willoughby PV1	NC	60003	WILL1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58135	Ecos Energy LLC	IPP	Weybridge 1 Solar	VT	61038	WEY1	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	60147	Enerparc Solar Development, LLC	IPP	Pike Road Solar	NC	60360	51116	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Baron Winds Farm	NY	60596	1	272.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	272.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Buckeye Wind Farm	OH	58776	1	99.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	99.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Cassadaga Wind Farm	NY	58777	1	126.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Horse Thief Wind Project, LLC	MT	59758	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Mason Dixon Wind Farm	PA	60212	1	79.9	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	79.9
2019	12	58672	Everpower Wind Holdings Inc	IPP	Mud Springs Wind Project, LLC	MT	59756	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Pryor Caves Wind Project, LLC	MT	59757	1	80.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	80.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Sand Creek Wind Farm	MT	60595	WT1	75.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Scioto Ridge Wind Farm	OH	58780	1	189.2	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	189.2
2019	12	58672	Everpower Wind Holdings Inc	IPP	Terrapin Hills Wind Farm	MD	60211	1	50.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	50.0
2019	12	59745	First Solar Asset Management	IPP	Twiggs Solar	GA	61696	TWIGG	200.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	56615	First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826	GEN01	102.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2019	12	56615	First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	56615	First Solar Project Development	IPP	Windhub Solar B, LLC	CA	59969	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3ST1	38.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG1	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG2	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	7140	Georgia Power Co	Electric Utility	Robins Air Force Base Solar	GA	61648	1	139.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	139.0
2019	12	61611	Glaciers Edge Wind Project LLC	IPP	Glaciers Edge Wind Project	IA	62035	GEW	202.7	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	202.7
2019	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT1	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT2	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT3	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT4	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	12	61166	Green Power Energy LLC	IPP	Cody Road Wind Farm	NY	61592	WT5	2.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.4
2019	12	60222	Haida Energy, Inc.	Electric Utility	Hiilangaay Hydro	AK	59037	GEN 1	5.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	478.0
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58684	Hop Bottom Energy LLC	IPP	Hop Bottom	PA	58800	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	49893	Invenergy Services LLC	IPP	Camilla Solar Energy Project	GA	61785	CAMSR	160.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	160.0
2019	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI01	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2019	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI02	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2019	12	60349	Juneau Hydropower, Inc	IPP	Sweetheart Lake Hydroelectric Facility	AK	60588	JHI03	6.6	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.6
2019	12	61421	LeGore Bridge Solar Center, LLC	IPP	LeGore Bridge Solar Center	MD	61796	LGBSC	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2019	12	56939	Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL	57622	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	56940	Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	55983	Luminant Generation Company LLC	IPP	Horseshoe Bend	TX	59806	SOLAR	140.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	140.0
2019	12	60340	M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642	1	11.7	All Other	WH	OT	(U) Under construction, less than or equal to 50 percent complete	14.3
2019	12	60340	M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642	2	11.7	All Other	WH	OT	(U) Under construction, less than or equal to 50 percent complete	14.3
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT1	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT2	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT3	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT4	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	61422	Mason Dixon Solar Center, LLC	IPP	Mason Dixon Solar Center	MD	61797	PV	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2019	12	59761	McLean Homestead, LLC	IPP	McLean Homestead	NC	60020	PV1	4.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.9
2019	12	12341	MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077	1	482.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	482.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	Plum Creek Wind	IA	61078	1	500.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	500.0
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60952	Mt. Jackson Solar LLC	IPP	Mt. Jackson Solar	VA	61318	SOLAR	15.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.7
2019	12	60442	New Colony Wind LLC	IPP	New Colony Wind Project	MT	60718	WT1	23.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	23.1
2019	12	56622	NextEra Energy Resources	IPP	Shaw Creek Solar, LLC	SC	61790	SHAWC	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	61480	Ontario Solar Center	IPP	Ontario Solar Center	OR	61860	ONTRO	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	14354	PacifiCorp	Electric Utility	Blundell	UT	299	3	35.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	30.0
2019	12	56545	Pattern Operators LP	IPP	Crazy Mountain Wind LLC	MT	61859	WT	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2019	12	59771	Pecan Solar LLC	IPP	Pecan Solar	NC	60030	PECAN	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV1	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV2	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV3	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	61589	RE Mustang Two LLC	IPP	Mustang Two	CA	62015	M2BAR	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2019	12	61589	RE Mustang Two LLC	IPP	Mustang Two	CA	62015	M2WHI	100.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	100.0
2019	12	61586	Rankin Solar Center, LLC	IPP	Rankin Solar Center, LLC	SC	61996	RANKI	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2019	12	60646	Reading Wind Energy, LLC	IPP	Reading Wind Project	KS	60999	READW	200.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.1
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60466	Rowan Solar NC LLC	IPP	Rowan Solar NC LLC	NC	60780	PV1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	12	60897	Salinas Valley Solid Waste Authority	IPP	Crazy Horse Solar Project	CA	61285	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	16609	San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366	TGES	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	61455	Scituate RI Solar, LLC	IPP	Scituate RI Solar, LLC	RI	61841	SCITU	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	61321	Seabrook Solar, LLC	IPP	Seabrook Solar	SC	61701	GEN1	70.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	72.5
2019	12	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN01	160.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	180.0
2019	12	17650	Southern Power Co	IPP	Wildhorse Mountain Wind Facility	OK	61866	1	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	17718	Southwestern Public Service Co	Electric Utility	Gaines County	TX	60697	GC-1	186.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	225.0
2019	12	60523	Springfield Project Development LLC	IPP	Homestead Wind LLC	IL	60871	HOMES	50.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	61668	Strauss Wind LLC	IPP	Strauss Wind Farm	CA	62113	ST-CA	98.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	98.8
2019	12	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2019	12	59056	Tri Global Energy, LLC	IPP	Cone Renewable Energy Project, LLC	TX	60272	WT1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2019	12	59056	Tri Global Energy, LLC	IPP	Easter	TX	59971	ESTR1	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2019	12	58796	Trishe Wind Colorado	IPP	Trishe Wind Colorado	CO	58928	1	30.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	12	56633	Trishe Wind Minnesota	IPP	Trishe Wind Minnesota	MN	57255	1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH2	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2019	12	58153	US Magnesium	Industrial	US Magnesium	UT	58191	GT4	24.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	30.0
2019	12	60597	Violet Solar, LLC	IPP	Violet Solar	NC	60961	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	60694	Washburn Wind Energy LLC	IPP	Washburn Wind Farm	IA	61071	WASH	70.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	70.0
2019	12	60599	Washington Solar, LLC	IPP	Washington Solar	NC	60948	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	59316	Whitetail Solar LLC	IPP	Whitetail Solar	SC	59569	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	1	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	90.0
2020	1	55918	Acciona Wind Energy USA LLC	IPP	Palmas Wind, LLC	TX	61773	PW	142.6	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	144.9
2020	1	60667	Aksamit Energy Development	IPP	Monument Road	NE	61033	MR001	66.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	66.0
2020	1	59365	Capital Power Corporation	IPP	Salt Springs Wind Farm	KS	60807	WT	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	1	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U001	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	1	61060	Cypress Creek Renewables	IPP	Thigpen Farms Solar, LLC	NC	60850	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	1	13478	Entergy New Orleans, LLC	Electric Utility	New Orleans Power	LA	60928	1	250.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	250.0
2020	1	56615	First Solar Project Development	IPP	White Wing Solar	AZ	60572	GEN01	200.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	200.0
2020	1	61429	Harvest Wind Energy, LLC	IPP	Harvest Wind Energy Project	IN	61823	1	600.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	600.0
2020	1	61594	Highlander Solar Station 1 LLC	IPP	Highlander Solar Station 1	VA	62014	HLND1	165.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	165.0
2020	1	9417	Interstate Power and Light Co	Electric Utility	Whispering Willow North	IA	62079	1	199.9	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	199.9
2020	1	61430	Summit Lake Wind, LLC	IPP	Summit Lake Wind Energy Project	MI	61812	1	120.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	120.0
2020	1	18454	Tampa Electric Co	Electric Utility	Alafia Solar	FL	61653	PV1	50.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	1	59056	Tri Global Energy, LLC	IPP	Changing Winds	TX	59243	CHAN1	288.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	288.0
2020	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT1	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.5
2020	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT2	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.5
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	232.9
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG4	225.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	232.9
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	PV1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	STG2	250.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	260.1
2020	2	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U002	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC10	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC5	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC6	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC7	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC8	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	2	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC9	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1A	226.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1B	226.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1S	192.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN1	1,100.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U003	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Columbia Solar Power Plant	FL	61982	PV	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN1	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN3	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60688	FGE Goodnight, LLC	IPP	Goodnight	TX	59246	GOOD1	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	3	9417	Interstate Power and Light Co	Electric Utility	Golden Plains	IA	62081	1	198.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	198.8
2020	3	61251	LA3 West Baton Rouge, L.L.C.	IPP	LA3 West Baton Rouge Solar Facility	LA	61646	LA3WB	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	3	60971	NYC ENERGY LLC	IPP	NISA Electric Generation Project	NY	61331	GEN1	59.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	70.5
2020	3	60971	NYC ENERGY LLC	IPP	NISA Electric Generation Project	NY	61331	STG1	20.2	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	22.0
2020	3	58718	Na Pua Makani Power Partners LLC	IPP	Na Pua Makani Wind Project	HI	58837	WT1	25.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	25.0
2020	3	14232	Otter Tail Power Co	Electric Utility	Merricourt Wind Project	ND	57048	1	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	3	59056	Tri Global Energy, LLC	IPP	Crosby County Wind Farm, LLC	TX	60273	WT1	120.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	120.0
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC1	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC2	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC3	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC4	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	1	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2
2020	3	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	2	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2
2020	4	60796	91MC 8me LLC	IPP	Peak Valley Solar Farm	CA	61167	91MC8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1A	226.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1B	226.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1S	192.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB001	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB002	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	58695	Coronal Development Services	IPP	Casper Solar Center	MD	61320	CSPSC	36.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	36.7
2020	4	61592	Pleinmont Solar 1 LLC	IPP	Pleinmont Solar 1	VA	62012	PLNM1	75.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	75.0
2020	4	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG1	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	5	61683	Amadeus Wind LLC	IPP	Amadeus Wind Farm	TX	62142	AM-TX	250.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	250.0
2020	5	60383	Henrietta D Energy Storage LLC	IPP	Henrietta D Energy Storage LLC	CA	60641	HDES1	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2020	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	4	282.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	321.0
2020	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG2	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	5	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG3	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	6	61524	226HC 8me LLC	IPP	Holstein 1 Solar Farm	TX	61962	HSF01	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	6	60799	33UI 8me LLC	IPP	Long Ridge Solar Farm	UT	61170	33UI8	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2020	6	59272	41MB 8me, LLC	IPP	Borden Solar Farm	CA	59531	BRDN	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2020	6	60798	69SV 8me LLC	IPP	Eland 2 Solar Farm	CA	61169	69SV8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	60395	California Ethanol Power, LLC	Industrial	CE&P Imperial Valley 1	CA	60670	1	50.0	All Other	OTH	CC	(T) Regulatory approvals received. Not under construction	50.0
2020	6	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS1	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS2	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	49846	Covanta Honolulu Resource Recovery	Commercial	H Power	HI	10334	PV1	2.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.1
2020	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCCA1	205.4	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	207.4
2020	6	59966	ESC Harrison County Power	IPP	ESC Harrison County Power	WV	60206	HCCT1	319.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	371.5
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	250.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	6	56615	First Solar Project Development	IPP	Morada del Sol, LLC	TX	61049	PV1	239.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	247.0
2020	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2020	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2020	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN1	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	177.0
2020	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	177.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG1	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG2	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	STG1	437.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	450.0
2020	6	60986	Imperial Valley Solar 2, LLC	IPP	Mount Signal Solar 2	CA	61353	IVS2	153.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	153.5
2020	6	56167	Imperial Valley Solar, LLC	IPP	Imperial Valley Solar, LLC	CA	56917	2	400.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	400.0
2020	6	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT5	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT6	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Lake Creek	TX	3502	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Tradinghouse	TX	3506	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Tradinghouse	TX	3506	CT2	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Clear Springs Energy Center	TX	59615	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-1	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-2	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Union Valley Energy Center	TX	59616	CTG-3	178.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-1	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-2	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	59357	Navasota Energy Generation Holdings	IPP	Van Alstyne Energy Center	TX	59617	CTG-3	177.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	183.0
2020	6	13402	Nevada Irrigation District	IPP	Loma Rica Hydroelectric Powerhouse	CA	60988	HY1	1.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.4
2020	6	60958	Ohio River Partners Shareholder LLC	IPP	Hannibal Port Power Project	OH	61322	HPPP1	485.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	485.0
2020	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT1	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2020	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT2	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2020	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT3	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2020	6	59489	Perennial-Wind Chaser LLC	IPP	Perennial Wind Chaser Station	OR	59721	GT4	98.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	106.0
2020	6	54866	Robinson Power Company LLC	IPP	Robinson Power Company LLC	PA	56453	CTG1	950.0	Natural Gas Fired Combined Cycle	NG	CC	(L) Regulatory approvals pending. Not under construction	1,025.0
2020	6	18414	TES Filer City Station LP	Electric CHP	TES Filer City Station	MI	50835	GEN2	228.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	253.0
2020	6	59056	Tri Global Energy, LLC	IPP	Canyon Wind Project, LLC	TX	60271	WT1	360.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	360.0
2020	6	54863	U S Power Generating Company LLC	IPP	Gowanus Gas Turbines Generating	NY	2494	SS	90.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	93.0
2020	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG1	172.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG2	172.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	58761	White Camp Solar LLC	IPP	White Camp Solar	TX	58888	WCAMP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	6	60519	Williams Solar, LLC	IPP	Williams Solar, LLC	TX	60859	PV1	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	7	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4A	122.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	122.0
2020	7	59137	Palmer Renewable Energy	IPP	Palmer Renewable Energy	MA	59336	PRE	42.0	Wood/Wood Waste Biomass	WDS	ST	(T) Regulatory approvals received. Not under construction	42.0
2020	7	61678	RE Rambler LLC	IPP	Rambler	TX	62141	RMBLR	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	8	60776	Aksamit Resource Management	IPP	Milligan III Wind Farm	NE	61159	M3001	73.4	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	73.4
2020	8	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	58146	Gaelectric LLC	IPP	Jawbone Wind Project	MT	58175	JWPI	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG1	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG2	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	9	7277	Calpine Corporation	IPP	Buckeye Geothermal Power Plant	CA	57180	1	49.9	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	56.9
2020	9	7277	Calpine Corporation	IPP	Wild Horse Power Plant	CA	57181	1	40.0	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	48.0
2020	9	56615	First Solar Project Development	IPP	Little Bear Solar 1, LLC	CA	59870	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	9	56615	First Solar Project Development	IPP	Little Bear Solar 2, LLC	CA	59885	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	9	9417	Interstate Power and Light Co	Electric Utility	Richland	IA	62080	1	130.1	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	130.1
2020	9	60388	Mission Rock Energy Center, LLC	IPP	Mission Rock Energy Center	CA	60650	GT1	275.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	275.0
2020	9	61534	Techren Solar III LLC	IPP	Techren Solar III LLC	NV	61931	TECH3	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	9	61535	Techren Solar IV LLC	IPP	Techren Solar IV LLC	NV	61932	TECH4	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	9	20856	Wisconsin Power & Light Co	Electric Utility	Kossuth	IA	62103	1	150.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	150.5
2020	10	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK3	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	10	58468	Dominion Renewable Energy	Electric Utility	Spring Grove I	VA	61986	SGIS	97.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	97.9
2020	10	5580	East Kentucky Power Coop, Inc	Electric Utility	Green Valley LFGTE	KY	56278	4	0.8	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	0.8
2020	10	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(OT) Other	5.3
2020	10	60569	Lincoln Land Wind, LLC	IPP	Lincoln Land Wind	IL	58925	SAN1	30.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	30.0
2020	10	61593	Pleinmont Solar 2 LLC	IPP	Pleinmont Solar 2	VA	62013	PLNM2	240.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	240.0
2020	10	61590	Richmond Spider Solar LLC	IPP	Richmond Spider Solar	VA	62011	RMDSS	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	10	60568	Sugar Creek Wind One LLC	IPP	Sugar Creek Wind One LLC	IL	58924	SUG1	175.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	175.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG1	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	61331	Popular Camp Wind Farm LLC	IPP	Poplar Camp Wind Farm	VA	61111	PC1	72.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	72.0
2020	11	61516	Stratford Solar Center, LLC	IPP	Stratford Solar Center, LLC	VA	61908	STRAT	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	11	19539	University of Iowa	Commercial	University of Iowa Main Power Plant	IA	54775	GEN12	5.8	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	5.8
2020	11	19539	University of Iowa	Commercial	University of Iowa Main Power Plant	IA	54775	GEN13	10.0	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	10.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Carter Solar One, LLC	ID	60896	CRTON	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar East, LLC	ID	60899	JPTEA	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar North, LLC	ID	60897	JPTNO	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar South, LLC	ID	60898	JPTSO	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60526	Alternative Power Development Northwest, LLC	IPP	Jackpot Solar West, LLC	ID	60900	JPTWE	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	15399	Avangrid Renewables LLC	IPP	La Joya NM	NM	61044	WT1	166.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	166.0
2020	12	15399	Avangrid Renewables LLC	IPP	Roaring Brook, LLC	NY	61041	WT1	78.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	78.0
2020	12	60560	Big Blue Wind Farm, LLC (TX)	IPP	Big Blue River Wind Farm	IN	60907	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	12	61257	Blazing Star 2 LLC	IPP	Blazing Star 2 Wind Farm	MN	61650	BLZS2	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2020	12	61030	Bluegrove Wind, LLC	IPP	Bluegrove Wind	TX	61400	BLUGR	100.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	100.0
2020	12	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK4	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	12	61031	Byers Wind, LLC	IPP	Byers Wind	TX	61401	BYERS	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	12	59365	Capital Power Corporation	IPP	Nolin Hills Wind, LLC	OR	60070	GEN	350.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	350.0
2020	12	59365	Capital Power Corporation	IPP	Tisch Mills Wind	WI	60674	TISCH	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	12	59432	Clear Creek Power	IPP	Highland Park Project	CO	59659	HPWT	181.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	181.0
2020	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT1	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2020	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT2	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2020	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	ST	191.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	227.7
2020	12	58672	Everpower Wind Holdings Inc	IPP	Coyote Crest Wind Farm	WA	58778	1	127.5	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	127.5
2020	12	56615	First Solar Project Development	IPP	Aiya Solar Project	NV	59869	GEN01	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	56615	First Solar Project Development	IPP	American Kings Solar, LLC	CA	60777	GEN01	123.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	123.0
2020	12	56615	First Solar Project Development	IPP	Snow Mountain Solar, LLC	NV	59935	GEN01	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2020	12	56615	First Solar Project Development	IPP	Willow Spring Solar 3, LLC	CA	60325	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	60888	GCL New Energy, Inc.	IPP	Pioneer Solar (CO), LLC	CO	61991	PI-QF	80.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	80.0
2020	12	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE2	240.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	240.0
2020	12	61638	Harrison Power LLC	Industrial	Cadiz Power Plant	OH	62153	GEN 1	550.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	660.0
2020	12	61638	Harrison Power LLC	Industrial	Cadiz Power Plant	OH	62153	GEN 2	550.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	660.0
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	8	218.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	230.0
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	9	110.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	116.0
2020	12	61010	Ord Mountain Solar, LLC	IPP	Ord Mountain Solar	CA	61372	ORDMT	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2020	12	56545	Pattern Operators LP	IPP	Summit Ridge I Wind Farm	OR	58894	SRWF	192.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	192.0
2020	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	687.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	687.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 2 LLC	CA	61446	PV2	45.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 3 LLC	CA	61447	PV3	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 4 LLC	CA	61448	PV4	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 5 LLC	CA	61449	PV5	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV4	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV5	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN02	20.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	20.0
2020	12	2782	Terra-Gen Operating Company	IPP	Dixie Valley Power Partnership	NV	10681	GEN1	25.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	28.0
2020	12	19316	Two Elk Generation Partners LP	IPP	Two Elk Generating Station	WY	55360	GEN1	275.0	Conventional Steam Coal	WC	ST	(U) Under construction, less than or equal to 50 percent complete	320.0
2020	12	60847	West Fork Wind, LLC	IPP	West Fork Wind	IN	61214	WT1	150.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	150.0
2021	1	61033	Boswell Wind Project I, LLC	IPP	Boswell Wind I	WY	61393	BOSW1	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61034	Boswell Wind Project II, LLC	IPP	Boswell Wind II	WY	61394	BOSW2	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61035	Boswell Wind Project III, LLC	IPP	Boswell Wind III	WY	61395	BOSW3	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	61036	Boswell Wind Project IV, LLC	IPP	Boswell Wind IV	WY	61396	BOSW4	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	CA1	249.9	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.2
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT1	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58702	Fluence	IPP	AES ES ALAMITOS, LLC	CA	61204	ALMTS	100.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	100.0
2021	1	60131	South Field Energy, LLC	IPP	South Field Energy	OH	60356	SFECC	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,105.0
2021	1	18454	Tampa Electric Co	Electric Utility	Lake Hancock Solar	FL	61657	PV1	49.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2021	1	19876	Virginia Electric & Power Co	Electric Utility	Coastal Virginia Offshore Wind (CVOW)	VA	59693	OSW1	12.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	12.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	STG	289.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	289.0
2021	3	56615	First Solar Project Development	IPP	Desert Quartzite	CA	59871	GEN01	450.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	580.0
2021	3	16609	San Diego Gas & Electric Co	Electric Utility	Fallbrook Energy Storage	CA	61365	FBES	40.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	40.0
2021	3	58846	Southeast Renewable Fuels, LLC	Industrial	SRF Sorghum to Ethanol Advanced Biorefin	FL	58997	G1001	12.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	15.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT11	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	CGT12	286.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	286.0
2021	4	59434	Mattawoman Energy, LLC	IPP	Mattawoman Energy Center	MD	59662	STG11	436.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	436.0
2021	4	14232	Otter Tail Power Co	Electric Utility	Astoria Station	SD	61144	1	260.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	260.0
2021	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	CTG	11.6	Other Waste Biomass	OBG	CT	(U) Under construction, less than or equal to 50 percent complete	12.0
2021	4	56789	TBE Montgomery LLC	IPP	TBE-Montgomery LLC	NY	57472	STG	7.4	Other Waste Biomass	OBG	CA	(U) Under construction, less than or equal to 50 percent complete	9.0
2021	5	14605	City of Peabody - (MA)	Electric Utility	Waters River	MA	1678	3	55.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	5	59677	Middlesex Energy Center LLC	IPP	Middlesex Energy Center LLC	NJ	59909	CT001	560.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	560.0
2021	6	61523	225DD 8me LLC	IPP	Galloway Solar Farm	TX	61920	GSM01	360.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	360.0
2021	6	61525	231RC 8me LLC	IPP	Norton Solar Farm	TX	61967	NSM01	125.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	125.0
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCA1	261.2	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT1	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59964	ESC Brooke County Power I	IPP	ESC Brooke County Power I	WV	60202	BCCT2	252.3	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCA1	302.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	331.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT1	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT2	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	58597	Enivromission, Inc	IPP	La Paz Solar Tower	AZ	58652	1	200.0	Solar Thermal without Energy Storage	SUN	OT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	500.0
2021	6	56615	First Solar Project Development	IPP	Portal Ridge Solar A, LLC	CA	60309	GEN01	18.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	18.5
2021	6	58880	Gallegos Wind Farm LLC	IPP	Gallegos Wind Farm, Phase 1	NM	59047	GEN 1	180.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	180.0
2021	6	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	CT1	386.8	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	386.8
2021	6	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	CT2	386.8	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	386.8
2021	6	61395	Indeck Niles, LLC	IPP	Indeck Niles Energy Center	MI	55460	ST1	397.8	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	397.8
2021	6	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC	338.9	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	406.0
2021	6	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC2	249.4	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	297.5
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	GT5	360.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	392.0
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	GT6	360.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	392.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-1	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	CTG-2	211.5	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	230.0
2021	7	59686	Coronado Power Ventures LLC	IPP	La Paloma Energy Center	TX	59924	STG-1	300.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	311.0
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	CA1	249.9	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.2
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	GT1	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	7	58766	FGE Texas II LLC	IPP	FGE Texas II	TX	58930	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	7	56615	First Solar Project Development	IPP	Sun Streams, LLC	AZ	60827	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
2021	9	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC1	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2021	9	58881	Apex Bethel Energy Center	IPP	Apex Bethel Energy Center	TX	59048	ABEC2	158.5	Natural Gas with Compressed Air Storage	NG	CE	(T) Regulatory approvals received. Not under construction	158.5
2021	10	60720	Martinsdale Wind Farm LLC	IPP	Martinsdale Wind Farm	MT	61108	MTD	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	11	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2021	11	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	4	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2021	12	61477	325MK 8me LLC	IPP	Eagle Shadow Mountain Solar Farm	NV	61852	ESMSF	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2021	12	60711	Battle Mountain SP, LLC	IPP	Battle Mountain Solar Project	NV	61098	BMSP	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	101.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	12	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	CT1	235.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	242.0
2021	12	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	ST1	198.5	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	214.0
2021	12	60064	Clean Path Energy Center, LLC	IPP	Clean Path Energy Center	NM	60289	PVGEN	55.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	55.0
2021	12	59380	Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61390	PMRDO	3.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
2021	12	60405	FDS Coke Plant, LLC	Electric CHP	FDS Co-Generation Facility	OH	60693	1	110.0	Other Gases	OG	ST	(P) Planned for installation, but regulatory approvals not initiated	135.0
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
2021	12	61301	Plum Creek Wind Farm LLC	IPP	Plum Creek	MN	61687	PLMCK	400.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	400.0
2021	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-B	813.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	813.0
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	1	0.5	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.5
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	2	0.5	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.5
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	3	0.5	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.5
2022	1	60835	NTE Carolinas II, LLC	IPP	Reidsville Energy Center	NC	61240	REC	259.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	310.2
2022	1	60835	NTE Carolinas II, LLC	IPP	Reidsville Energy Center	NC	61240	REC2	227.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	233.7
2022	1	60473	Renovo Energy Center	IPP	Renovo Energy Center	PA	60786	RECNY	480.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	513.0
2022	1	60473	Renovo Energy Center	IPP	Renovo Energy Center	PA	60786	RECPJ	480.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	513.0
2022	2	60797	68SF 8me LLC	IPP	Eland 1 Solar Farm	CA	61168	68SF8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	4	61596	Lincoln Land Energy Center LLC	IPP	Lincoln Land Energy Center	IL	62022	GEN1	520.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	638.4
2022	4	61596	Lincoln Land Energy Center LLC	IPP	Lincoln Land Energy Center	IL	62022	GEN2	520.0	Natural Gas Fired Combined Cycle	NG	CS	(P) Planned for installation, but regulatory approvals not initiated	638.4
2022	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCA1	319.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	321.6
2022	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT1	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2022	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT2	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2022	4	55927	Power4Georgians LLC	Electric Utility	Plant Washington	GA	56675	MAIN	850.0	Conventional Steam Coal	SUB	ST	(T) Regulatory approvals received. Not under construction	850.0
2022	6	61386	C4GT, LLC	IPP	C4GT	VA	61760	C4GT	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	1,060.0
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 Disposal	NC	57492	GEN7	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 Disposal	NC	57492	GEN8	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	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
2022	12	59380	Enel Green Power NA, Inc.	IPP	Cascade Energy Storage, LLC	CA	61801	10002	25.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	25.0
2022	12	59380	Enel Green Power NA, Inc.	IPP	Sierra Energy Storage, LLC	CA	61803	10003	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2022	12	60411	Friesian Holdings, LLC	IPP	Friesian Holdings	NC	60692	PV1	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2023	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS3	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2023	12	59380	Enel Green Power NA, Inc.	IPP	Kingston Energy Storage, LLC	CA	61802	10001	50.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	50.0
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-A	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
2024	1	2719	CalWind Resources Inc	IPP	Tehachapi Wind Resource II	CA	54909	PLAN	15.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	15.5
2024	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
2024	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
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS4	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2024	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS5	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2024	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	II-B	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
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	2	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	2	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	2	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
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS6	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS7	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
2025	5	16572	Salt River Project	Electric Utility	Copper Crossing Energy Center	AZ	58413	CCGS8	226.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	241.0
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	Mahoney 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 Code
2018	11	6306	Benson Power, LLC.	IPP	Benson Power Biomass Plant	MN	55867	G1	55.0	Wood/Wood Waste Biomass	WDS	ST
2018	11	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	1	76.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	11	13833	Northeastern Power Co	Electric CHP	Kline Township Cogen Facility	PA	50039	GEN1	51.0	Conventional Steam Coal	WC	ST
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	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	59173	City of Tulare Water Pollution Control	Commercial	City of Tulare Water Facility	CA	59395	C2550	0.4	Other Waste Biomass	OBG	IC
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1	324.0	Conventional Steam Coal	BIT	ST
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2	442.0	Conventional Steam Coal	BIT	ST
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
2019	1	19145	DTE Tuscola, LLC	Industrial	Tuscola Station	IL	55245	TG1	3.8	Natural Gas Steam Turbine	NG	ST
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	1	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2019	1	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2019	2	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	1	153.0	Conventional Steam Coal	BIT	ST
2019	2	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	2	159.0	Conventional Steam Coal	BIT	ST
2019	2	10171	Kentucky Utilities Co	Electric Utility	E W Brown	KY	1355	1	106.0	Conventional Steam Coal	BIT	ST
2019	2	10171	Kentucky Utilities Co	Electric Utility	E W Brown	KY	1355	2	166.0	Conventional Steam Coal	BIT	ST
2019	2	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	SAC	0.3	Solar Photovoltaic	SUN	PV
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	3	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	3	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	GT
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	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2019	5	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
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 L.P	Electric CHP	Marcus Hook Refinery Cogen	PA	50074	GEN1	48.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN1	3.3	Landfill Gas	LFG	GT
2019	5	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN2	3.3	Landfill Gas	LFG	GT
2019	5	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2019	5	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0	Conventional Steam Coal	SUB	ST
2019	8	14624	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	17583	South Texas Electric Coop, Inc	Electric Utility	Sam Rayburn	TX	3631	1	10.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	9	17583	South Texas Electric Coop, Inc	Electric Utility	Sam Rayburn	TX	3631	2	11.5	Natural Gas Fired Combustion Turbine	NG	GT
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	1752	Biola University	Commercial	Biola University	CA	54296	EG1	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	1752	Biola University	Commercial	Biola University	CA	54296	EG2	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	2LOT7	0.5	Solar Photovoltaic	SUN	PV
2019	10	16073	Riverview Energy Systems	IPP	Riverview Energy Systems	MI	54057	GEN1	2.8	Landfill Gas	LFG	GT
2019	10	16073	Riverview Energy Systems	IPP	Riverview Energy Systems	MI	54057	GEN2	2.8	Landfill Gas	LFG	GT
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

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	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	1	175.0	Natural Gas Steam Turbine	NG	ST
2019	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	2	175.0	Natural Gas Steam Turbine	NG	ST
2019	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	6	495.0	Natural Gas Steam Turbine	NG	ST
2019	12	23693	AES Huntington Beach LLC	IPP	AES Huntington Beach LLC	CA	335	1	225.8	Natural Gas Steam Turbine	NG	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	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN1	46.3	Conventional Steam Coal	BIT	ST
2019	12	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN2	46.3	Conventional Steam Coal	BIT	ST
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	1	2.1	Petroleum Liquids	DFO	IC
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	Natural Gas Steam Turbine	NG	ST
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	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	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV2	750.0	Conventional Steam Coal	BIT	ST
2019	12	16572	Salt River Project	Electric Utility	Navajo	AZ	4941	NAV3	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	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2020	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
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	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG1	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG2	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG3	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	4	6027	Entergy Nuclear Indian Point 2	IPP	Indian Point 2	NY	2497	2	1,000.4	Nuclear	NUC	ST
2020	4	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	CTG1	19.0	Natural Gas Fired Combustion Turbine	NG	GT
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	50161	FirstEnergy Nuclear Operating Company	IPP	Davis Besse	OH	6149	1	894.0	Nuclear	NUC	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	7483	City of Grand Haven - (MI)	Electric Utility	Grand Haven Diesel Plant	MI	1826	1	8.4	Natural Gas Internal Combustion Engine	NG	IC
2020	6	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	ST
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	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	5	485.0	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	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	4	56.0	Natural Gas Steam Turbine	NG	ST
2020	12	17833	City Utilities of Springfield - (MO)	Electric Utility	James River Power Station	MO	2161	5	97.0	Natural Gas Steam Turbine	NG	ST
2020	12	50006	Invista	Industrial	Camden South Carolina	SC	10795	GEN1	5.5	Natural Gas Steam Turbine	NG	ST
2020	12	50006	Invista	Industrial	Camden South Carolina	SC	10795	GEN2	5.5	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	15908	NRG California South LP	IPP	Ellwood	CA	8076	01	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	55269	NextEra Energy Duane Arnold LLC	IPP	Duane Arnold Energy Center	IA	1060	1	601.4	Nuclear	NUC	ST
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	4	0.8	Petroleum Liquids	DFO	IC
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	5	0.8	Petroleum Liquids	DFO	IC
2020	12	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2020	12	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2020	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	2	90.0	Natural Gas Steam Turbine	NG	ST
2020	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	1	670.0	Conventional Steam Coal	RC	ST
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	3	21.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	4	14.3	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	5	49.8	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	46.7	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	34.3	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	15908	NRG California South LP	IPP	Ormond Beach	CA	350	1	741.0	Natural Gas Steam Turbine	NG	ST
2021	1	15908	NRG California South LP	IPP	Ormond Beach	CA	350	2	750.0	Natural Gas Steam Turbine	NG	ST
2021	1	15248	Portland General Electric Co	Electric Utility	Boardman	OR	6106	1	585.0	Conventional Steam Coal	SUB	ST
2021	4	6028	Entergy Nuclear Indian Point 3	IPP	Indian Point 3	NY	8907	3	1,041.3	Nuclear	NUC	ST
2021	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2021	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2021	5	58435	Collinwood BioEnergy	Industrial	Collinwood BioEnergy Facility	OH	58439	CBE01	1.0	Other Waste Biomass	OBG	IC
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	1	907.0	Nuclear	NUC	ST
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Perry	OH	6020	1	1,240.0	Nuclear	NUC	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	58.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	3	80.0	Conventional Steam Coal	SUB	ST
2021	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	ST
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	2	901.0	Nuclear	NUC	ST
2021	12	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	1	0.8	Conventional Hydroelectric	WAT	HY
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	6	56192	Entergy Nuclear Palisades LLC	IPP	Palisades	MI	1715	1	801.8	Nuclear	NUC	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	1	307.0	Conventional Steam Coal	SUB	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	2	307.0	Conventional Steam Coal	SUB	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	9	177	AES Hawaii Inc	Electric CHP	AES Hawaii	HI	10673	GEN1	180.0	Conventional Steam Coal	SUB	ST
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	2	140.0	Conventional Steam Coal	BIT	ST
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	4	140.0	Conventional Steam Coal	BIT	ST
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN1	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN2	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN3	55.0	Petroleum Liquids	JF	GT
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	2	76.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0	Natural Gas Steam Turbine	NG	ST
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	4	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	2	682.0	Conventional Steam Coal	SUB	ST

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
2022	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	1	325.0	Conventional Steam Coal	SUB	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	1	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	2	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	3	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	ST4	64.0	Conventional Steam Coal	BIT	ST
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY1	0.7	Conventional Hydroelectric	WAT	HY
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY2	0.7	Conventional Hydroelectric	WAT	HY
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT2	1.8	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT3	1.8	Landfill Gas	LFG	IC
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTA	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTB	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTC	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	STM	24.0	Natural Gas Fired Combined Cycle	NG	CA
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0	Natural Gas Fired Combined Cycle	NG	CA
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	1	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	2	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	3	2.0	Petroleum Liquids	DFO	IC
2023	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	1	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Laverne Battery	MN	58579	1	1.0	Batteries	MWH	BA
2023	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	6	167.0	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	1	64.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	2	90.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	3	86.0	Natural Gas Steam Turbine	NG	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	1	245.0	Conventional Steam Coal	BIT	ST
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	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	1	4.7	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	2	4.8	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	3	11.0	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	4	11.9	Petroleum Liquids	RFO	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	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	111.8	Natural Gas Steam Turbine	NG	ST
2024	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	2	156.3	Natural Gas Steam Turbine	NG	ST
2024	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	884	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	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
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

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
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	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	2	268.0	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	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
2025	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Craig (CO)	CO	6021	1	428.0	Conventional Steam Coal	SUB	ST
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	15.2	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	13.4	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	16.1	Natural Gas Fired Combustion Turbine	NG	GT
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	3	102.0	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
2026	12	56997	Marina Energy LLC	Industrial	L'Oreal Piscataway	NJ	57868	UNIT1	1.1	Solar Photovoltaic	SUN	PV
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	1	900.0	Conventional Steam Coal	BIT	ST
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	2	900.0	Conventional Steam Coal	BIT	ST
2029	10	56667	Loraine Windpower Project	IPP	Loraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2031	1	803	Arizona Public Service Co	Electric Utility	Four Corners	NM	2442	4	770.0	Conventional Steam Coal	SUB	ST
2031	1	803	Arizona Public Service Co	Electric Utility	Four Corners	NM	2442	5	770.0	Conventional Steam Coal	SUB	ST
2047	1	60304	Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0	Solar Photovoltaic	SUN	PV
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
2052	1	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA

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

Table 6.7.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels, January 2013-October 2018

	Coal	Natural Gas				Petroleum		
Period		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	53.7%	51.3%	6.7%	10.5%	9.9%	13.5%	0.9%	2.3%
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	59.9%	46.7%	5.3%	4.3%	9.2%	11.6%	0.7%	3.0%
February	49.7%	44.4%	5.4%	3.8%	7.9%	10.3%	0.8%	2.4%
March	46.3%	44.8%	6.5%	7.2%	7.8%	13.0%	0.8%	2.7%
April	43.6%	42.5%	5.6%	8.7%	8.0%	10.1%	0.6%	1.9%
May	48.4%	45.8%	6.0%	9.1%	8.2%	15.9%	0.8%	2.0%
June	58.5%	56.0%	7.3%	14.1%	10.3%	15.8%	0.8%	2.0%
July	67.1%	67.0%	9.1%	20.8%	13.0%	18.5%	0.9%	2.1%
August	62.9%	65.5%	8.0%	16.1%	12.3%	14.9%	0.9%	2.3%
Sept	53.8%	55.7%	7.8%	13.3%	10.9%	14.2%	1.1%	2.3%
October	47.5%	48.2%	6.6%	12.4%	10.2%	11.7%	0.9%	2.1%
November	49.3%	45.6%	5.8%	7.0%	10.1%	12.3%	0.7%	2.1%
December	56.2%	52.3%	6.4%	8.5%	10.3%	14.3%	1.4%	2.4%
Year 2018								
January	64.2%	54.0%	11.9%	13.1%	NA	19.0%	5.0%	NA
February	49.3%	55.1%	6.9%	6.5%	NA	11.8%	0.9%	NA
March	43.9%	51.5%	9.3%	8.4%	NA	10.9%	1.4%	NA
April	41.7%	48.0%	11.4%	8.5%	NA	12.7%	1.9%	NA
May	47.0%	52.3%	11.8%	16.7%	NA	9.2%	2.3%	NA
June	58.4%	61.9%	12.0%	17.7%	NA	15.2%	3.0%	NA
July	64.3%	73.0%	18.9%	25.5%	NA	14.3%	3.6%	NA
August	64.3%	72.2%	18.9%	22.3%	NA	15.8%	2.6%	NA
Sept	56.0%	66.3%	14.5%	16.5%	NA	17.8%	3.1%	NA
October	48.9%	55.3%	12.0%	13.8%	NA	13.9%	2.2%	NA

Values for 2017 and prior years are final. Values for 2018 are preliminary. NA = Not Available

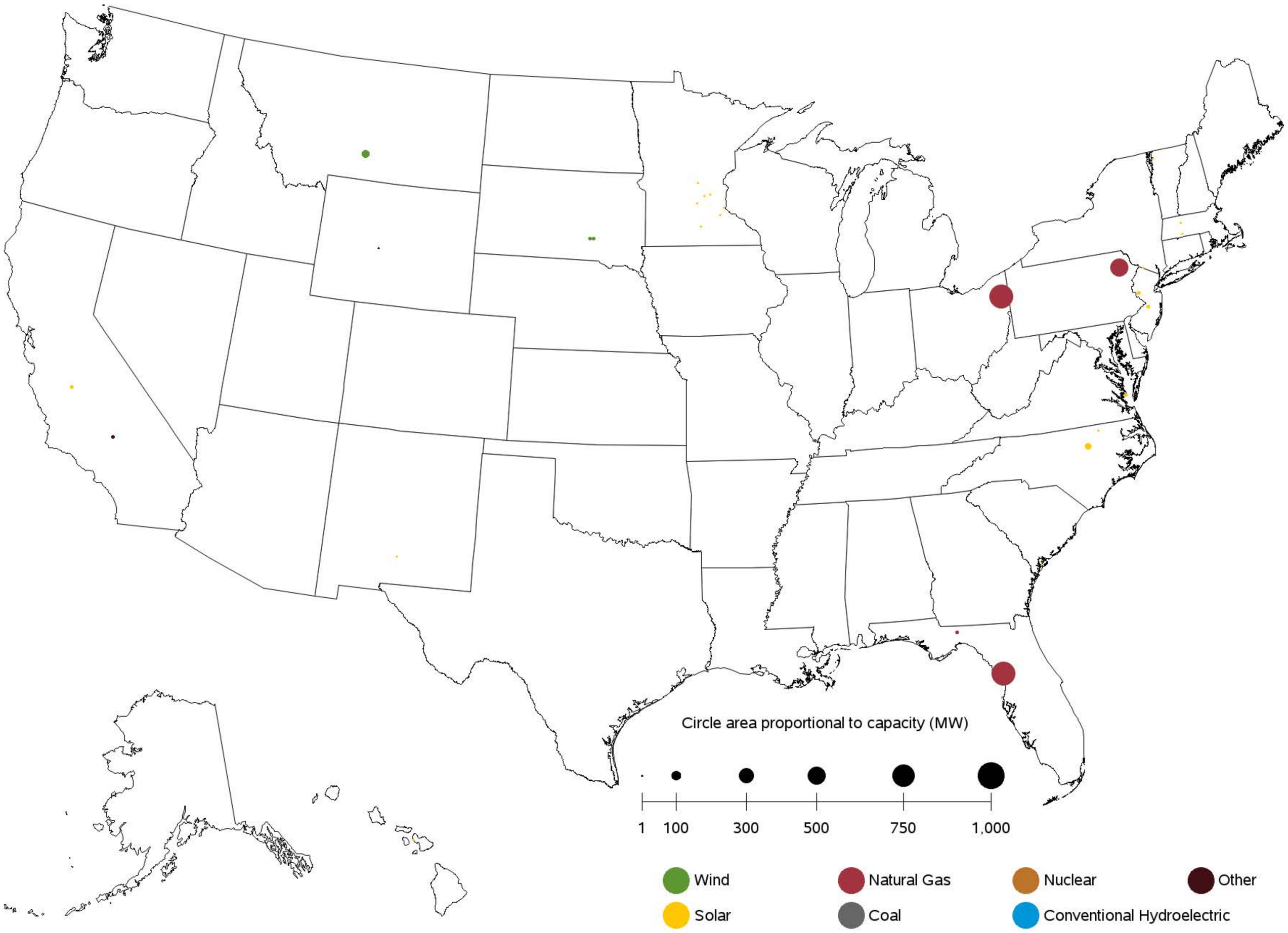
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-October 2018

Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Muncipal 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%	43.1%	34.6%	25.7%	21.8%	68.0%	57.8%	74.0%
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%	45.4%	32.6%	12.7%	7.3%	73.0%	59.7%	75.9%
February	95.0%	44.1%	38.6%	17.2%	11.7%	69.2%	59.9%	75.3%
March	87.8%	49.1%	40.6%	25.1%	22.9%	66.7%	60.7%	74.1%
April	79.1%	51.1%	41.1%	28.4%	24.9%	66.4%	52.3%	75.9%
May	82.7%	54.7%	36.2%	32.5%	31.0%	68.7%	49.9%	70.5%
June	93.4%	52.7%	32.9%	35.9%	37.9%	69.7%	56.7%	68.9%
July	96.2%	45.1%	25.6%	32.7%	25.4%	67.4%	60.4%	74.4%
August	97.7%	37.3%	21.8%	30.4%	27.6%	68.2%	60.8%	73.9%
Sept	94.9%	33.4%	29.5%	29.1%	29.2%	65.7%	55.2%	73.6%
October	89.0%	31.0%	40.2%	26.4%	24.1%	63.8%	54.1%	67.5%
November	92.9%	36.0%	39.1%	19.4%	10.3%	67.8%	59.9%	73.2%
December	99.4%	37.7%	38.0%	17.7%	9.0%	69.6%	63.3%	85.1%
Year 2018								
January	100.7%	45.0%	42.5%	18.7%	10.0%	72.1%	58.7%	76.6%
February	96.8%	49.2%	41.9%	22.9%	16.1%	76.7%	57.4%	80.5%
March	90.4%	45.0%	44.0%	26.3%	19.3%	73.2%	52.2%	78.2%
April	82.4%	49.9%	44.9%	31.2%	24.4%	71.6%	43.9%	70.3%
May	90.8%	54.1%	38.8%	31.9%	33.0%	68.9%	48.7%	78.8%
June	97.1%	51.6%	42.1%	34.5%	41.7%	76.5%	54.6%	76.2%
July	97.7%	43.3%	25.4%	31.6%	30.1%	75.6%	51.1%	78.0%
August	97.5%	37.7%	32.0%	31.0%	32.5%	75.3%	49.6%	78.0%
Sept	90.4%	32.8%	29.9%	27.7%	34.8%	70.2%	43.8%	78.4%
October	80.5%	31.1%	33.7%	23.1%	20.8%	71.9%	44.8%	72.6%

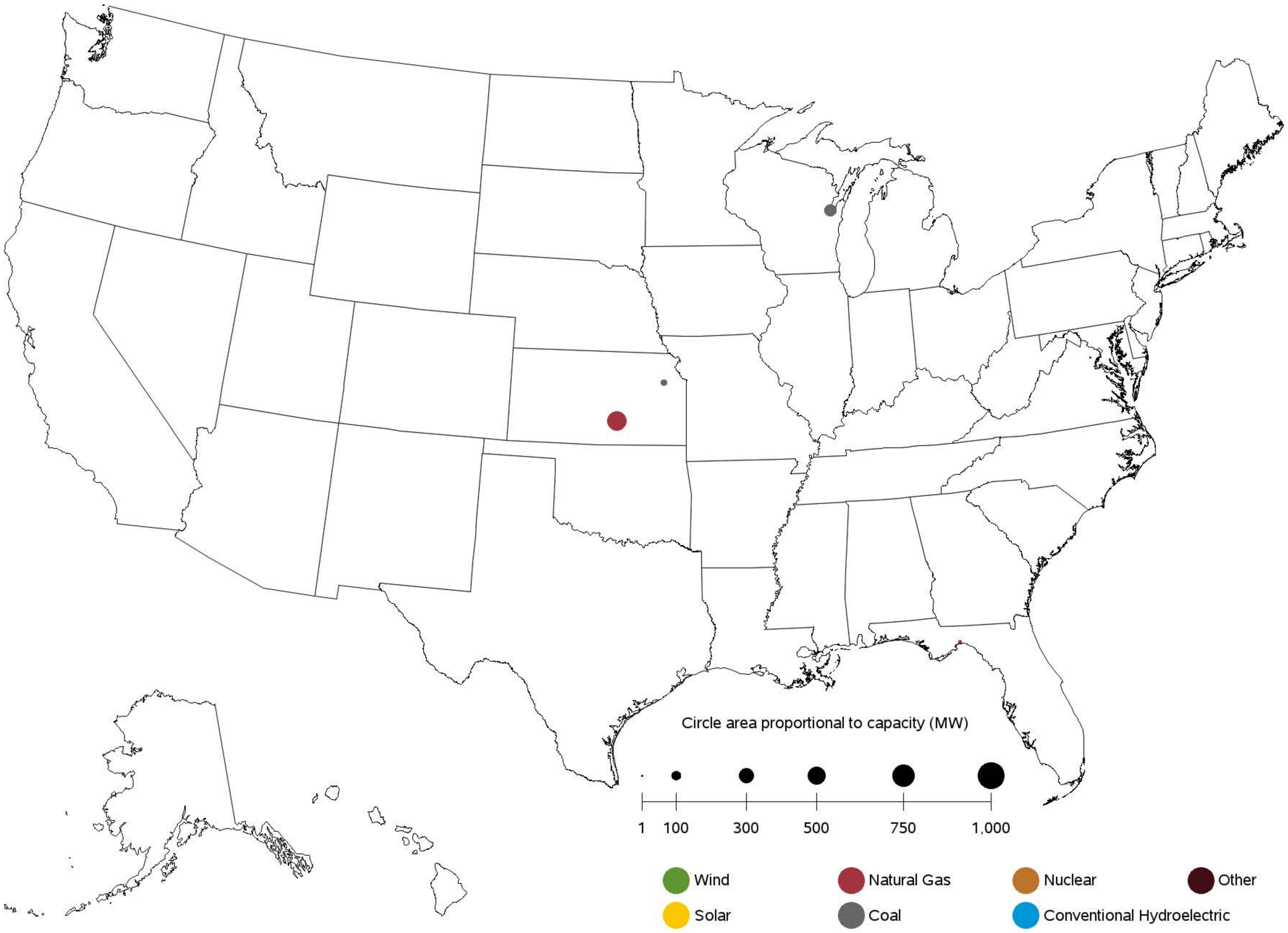
Values for 2017 and prior years are final. Values for 2018 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.A. Utility-Scale Generating Units Added in October 2018



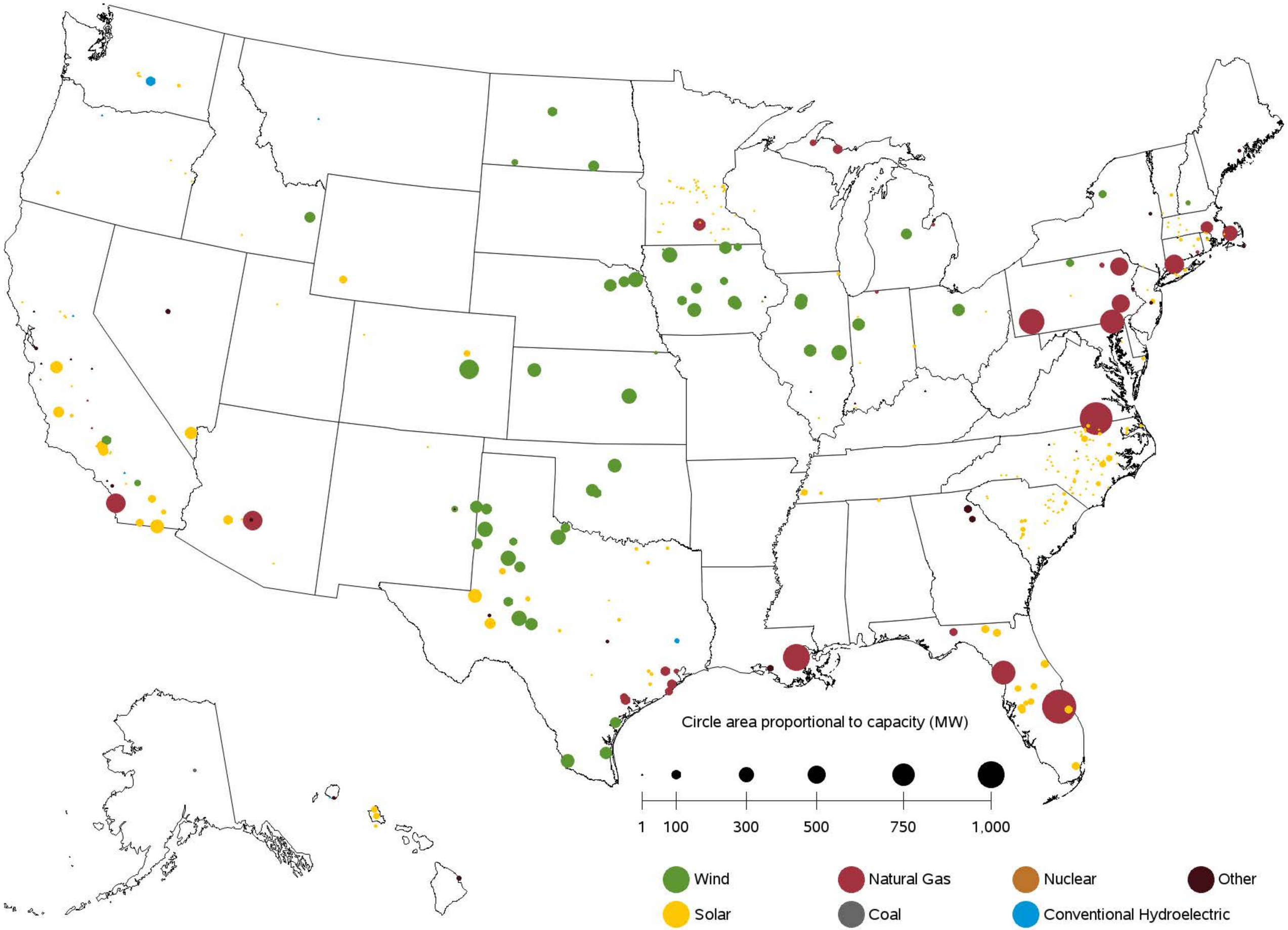
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in October 2018



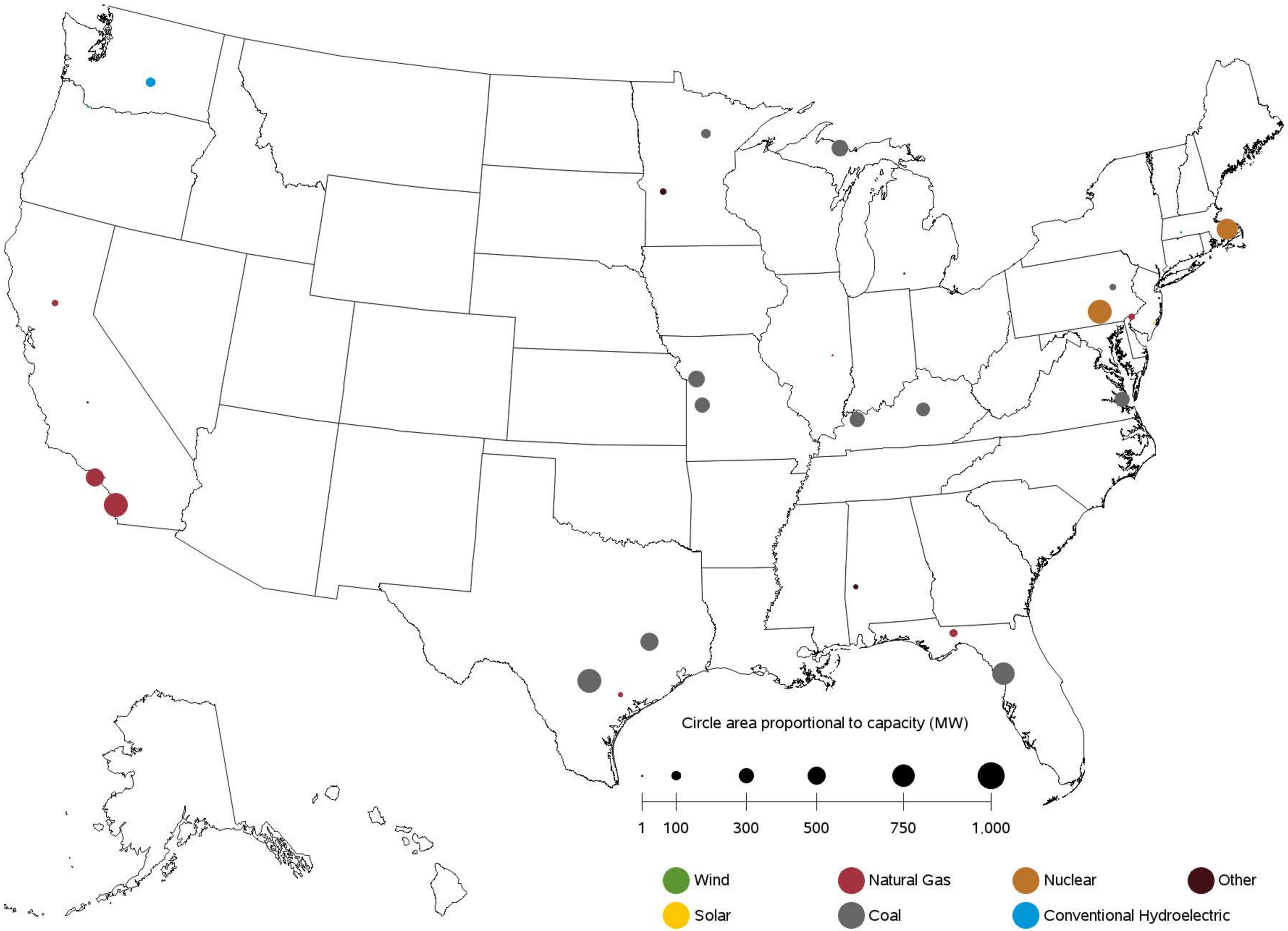
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from November 2018 to October 2019



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

Figure 6.1.D. Utility-Scale Generating Units Planned to Retire from November 2018 to October 2019



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.'

Chapter 7

Imports and Exports

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

	Canada		Mexico		U.S. Total		
Period	Imports from	Exports to	Imports from	Exports to	Imports	Exports	Net Imports
Annual Totals							
2016	65,173,818	2,682,381	7,542,445	3,531,636	72,716,263	6,214,017	66,502,246
2017	59,909,320	3,312,798	5,775,597	6,058,005	65,684,917	9,370,803	56,314,114
Year 2016							
January	5,886,417	227,589	636,613	161,007	6,523,030	388,596	6,134,434
February	4,927,541	384,301	505,252	167,788	5,432,793	552,089	4,880,704
March	5,210,412	410,645	598,334	260,086	5,808,746	670,731	5,138,015
April	4,092,342	358,746	610,099	91,608	4,702,441	450,354	4,252,087
May	4,977,621	142,398	583,132	227,227	5,560,753	369,625	5,191,128
June	6,162,812	94,538	585,652	515,952	6,748,464	610,490	6,137,974
July	6,969,110	78,459	704,978	496,360	7,674,088	574,819	7,099,269
August	6,577,610	149,565	771,285	437,154	7,348,895	586,719	6,762,176
Sept	4,631,320	161,183	666,113	425,652	5,297,433	586,835	4,710,598
October	4,989,801	320,694	761,195	111,790	5,750,996	432,484	5,318,512
November	5,809,773	109,219	611,189	307,814	6,420,962	417,033	6,003,929
December	4,939,059	245,044	508,603	329,198	5,447,662	574,242	4,873,420
Year 2017							
January	6,345,401	172,909	673,166	310,843	7,018,567	483,752	6,534,815
February	5,120,144	359,401	552,254	330,610	5,672,398	690,011	4,982,387
March	5,612,473	663,648	410,568	334,509	6,023,041	998,157	5,024,884
April	5,262,194	619,414	299,908	486,903	5,562,102	1,106,317	4,455,785
May	4,912,110	341,657	171,906	489,911	5,084,016	831,568	4,252,448
June	5,637,814	242,997	355,162	568,400	5,992,976	811,397	5,181,579
July	5,328,084	65,828	585,167	642,440	5,913,251	708,268	5,204,983
August	5,874,172	63,435	634,751	709,103	6,508,923	772,538	5,736,385
Sept	4,715,752	139,000	512,536	553,042	5,228,288	692,042	4,536,246
October	3,504,501	165,550	447,906	544,420	3,952,407	709,970	3,242,437
November	3,379,626	263,999	550,385	558,909	3,930,011	822,908	3,107,103
December	4,217,049	214,960	581,888	528,915	4,798,937	743,875	4,055,062
Year 2018							
January	4,738,934	680,100	485,831	459,404	5,224,765	1,139,504	4,085,261
February	4,314,276	926,822	473,386	340,682	4,787,662	1,267,504	3,520,158
March	5,045,055	707,032	553,462	488,339	5,598,517	1,195,371	4,403,146
April	4,067,648	1,134,937	461,095	486,681	4,528,743	1,621,618	2,907,125
May	4,865,120	569,954	374,033	571,444	5,239,153	1,141,398	4,097,755
June	5,002,142	534,488	491,763	680,851	5,493,905	1,215,339	4,278,566
July	4,669,081	176,762	701,543	758,502	5,370,624	935,264	4,435,360
August	5,430,607	272,018	705,309	862,128	6,135,916	1,134,146	5,001,770
Sept	3,648,158	437,073	602,500	623,925	4,250,658	1,060,998	3,189,660

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

Chapter 8

Puerto Rico

Table 8.1 Puerto Rico- Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2008 - October 2018 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	6,473	9,023	3,544	0	19,040
2009	6,673	8,937	3,094	0	18,704
2010	6,975	9,041	2,968	0	18,984
2011	6,587	8,832	2,832	0	18,251
2012	6,771	8,879	2,500	0	18,150
2013	6,320	8,969	2,504	0	17,793
2014	6,218	8,761	2,376	0	17,356
2015	6,314	8,586	2,355	0	17,255
2016	6,524	8,569	2,251	0	17,344
2017	5,045	6,820	1,747	0	13,611
Year 2016					
January	515	648	158	0	1,321
February	447	647	176	0	1,270
March	499	738	208	0	1,445
April	506	665	176	0	1,346
May	556	746	202	0	1,504
June	594	742	201	0	1,537
July	621	773	193	0	1,587
August	604	722	205	0	1,530
Sept	594	751	187	0	1,532
October	540	704	180	0	1,424
November	541	723	190	0	1,454
December	509	709	176	0	1,394
Year 2017					
January	508	650	159	0	1,317
February	395	575	154	0	1,125
March	490	698	191	0	1,380
April	494	628	184	0	1,306
May	525	675	182	0	1,382
June	595	692	184	0	1,472
July	590	710	200	0	1,501
August	632	719	187	0	1,537
Sept	520	372	127	0	1,020
October	16	224	11	0	252
November	42	569	28	0	639
December	237	306	138	0	682
Year 2018					
January	389	558	142	0	1,089
February	393	760	175	0	1,328
March	450	531	98	0	1,080
April	466	784	273	0	1,524
May	566	802	165	0	1,533
June	507	592	208	0	1,308
July	578	680	145	0	1,404
August	577	688	209	0	1,475
Sept	527	722	186	0	1,436
October	698	847	191	0	1,736
Year to Date					
2016	5,474	7,136	1,885	0	14,496
2017	4,767	5,944	1,580	0	12,291
2018	5,152	6,965	1,794	0	13,911
Rolling 12 Months Ending in October					
2017	5,816	7,376	1,946	0	15,139
2018	5,431	7,840	1,961	0	15,232

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

Table 8.2 Puerto Rico- Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2008 - October 2018 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	1,574	2,285	734	0	4,593
2009	1,313	1,868	518	0	3,699
2010	1,521	2,103	564	0	4,188
2011	1,748	2,483	663	0	4,894
2012	1,690	2,605	647	0	4,942
2013	1,633	2,474	570	0	4,678
2014	1,636	2,394	551	0	4,581
2015	1,282	1,850	417	0	3,549
2016	1,170	1,677	356	0	3,203
2017	1,123	1,549	344	0	3,016
Year 2016					
January	86	120	23	0	229
February	75	118	25	0	218
March	79	131	29	0	239
April	86	124	26	0	235
May	91	139	29	0	259
June	103	141	30	0	274
July	110	150	30	0	291
August	118	154	36	0	308
Sept	111	146	31	0	288
October	108	155	33	0	296
November	102	147	32	0	282
December	101	152	31	0	284
Year 2017					
January	112	142	30	0	284
February	99	143	32	0	274
March	105	151	34	0	291
April	109	144	34	0	287
May	119	157	35	0	311
June	129	152	34	0	314
July	130	161	37	0	327
August	143	166	35	0	345
Sept	101	74	21	0	196
October	6	46	4	0	56
November	19	115	15	0	150
December	50	98	34	0	182
Year 2018					
January	86	159	32	0	277
February	76	171	32	0	279
March	110	149	22	0	280
April	84	161	54	0	300
May	104	165	23	0	292
June	108	133	40	0	281
July	122	166	29	0	317
August	114	149	39	0	302
Sept	109	161	34	0	303
October	137	169	36	0	342
Year to Date					
2016	967	1,378	292	0	2,637
2017	1,054	1,336	295	0	2,685
2018	1,050	1,583	340	0	2,973
Rolling 12 Months Ending in October					
2017	1,257	1,635	359	0	3,251
2018	1,119	1,796	389	0	3,304

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

Table 8.3 Puerto Rico- Number of Ultimate Customers Served by Sector: Total by End-Use Sector, 2008 - October 2018

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	1,318,498	133,223	1,225	0	1,452,946
2009	1,330,507	132,620	828	0	1,463,955
2010	1,339,703	133,029	790	0	1,473,522
2011	1,341,708	132,738	750	0	1,475,196
2012	1,349,750	131,264	721	0	1,481,735
2013	1,340,989	131,034	694	0	1,472,717
2014	1,328,546	129,122	662	0	1,458,330
2015	1,326,631	127,365	647	0	1,454,643
2016	1,332,152	127,179	633	0	1,459,964
2017	1,337,756	127,065	618	0	1,465,439
Year 2016					
January	1,327,936	127,058	640	0	1,455,634
February	1,328,227	127,040	637	0	1,455,904
March	1,329,387	127,155	636	0	1,457,178
April	1,331,140	127,236	635	0	1,459,011
May	1,332,103	127,264	636	0	1,460,003
June	1,332,712	127,158	635	0	1,460,505
July	1,333,672	127,327	633	0	1,461,632
August	1,333,858	127,218	631	0	1,461,707
Sept	1,331,317	126,967	627	0	1,458,911
October	1,334,555	127,221	626	0	1,462,402
November	1,335,163	127,237	629	0	1,463,029
December	1,335,753	127,265	627	0	1,463,645
Year 2017					
January	1,336,481	127,251	627	0	1,464,359
February	1,337,101	127,229	626	0	1,464,956
March	1,335,413	127,147	620	0	1,463,180
April	1,337,164	127,086	620	0	1,464,870
May	1,337,956	127,048	618	0	1,465,622
June	1,339,373	127,119	616	0	1,467,108
July	1,338,891	127,049	614	0	1,466,554
August	1,337,758	127,026	615	0	1,465,399
Sept	1,338,973	127,056	615	0	1,466,644
October	1,337,261	126,948	615	0	1,464,824
November	1,338,117	126,941	613	0	1,465,671
December	1,338,583	126,877	612	0	1,466,072
Year 2018					
January	1,338,417	126,681	611	0	1,465,709
February	1,337,561	126,422	612	0	1,464,595
March	1,338,960	126,367	613	0	1,465,940
April	1,339,727	126,216	612	0	1,466,555
May	1,340,002	126,123	610	0	1,466,735
June	1,339,841	126,006	610	0	1,466,457
July	1,340,490	125,949	607	0	1,467,046
August	1,341,417	126,011	604	0	1,468,032
Sept	1,342,332	126,102	605	0	1,469,039
October	1,343,883	126,219	603	0	1,470,705
Rolling 12 Months Ending in October					
2017	1,337,274	127,122	620	0	1,465,016
2018	1,339,944	126,326	609	0	1,466,880

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

Table 8.4 Puerto Rico- Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2008 - October 2018 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	24.32	25.32	20.72	--	24.12
2009	19.68	20.91	16.73	--	19.78
2010	21.80	23.26	19.01	--	22.06
2011	26.54	28.11	23.39	--	26.82
2012	24.96	29.34	25.89	--	27.23
2013	25.84	27.59	22.77	--	26.29
2014	26.31	27.33	23.18	--	26.39
2015	20.31	21.55	17.71	--	20.57
2016	17.93	19.57	15.83	--	18.47
2017	22.26	22.72	19.70	--	22.16
Year 2016					
January	16.78	18.54	14.39	--	17.36
February	16.74	18.31	14.23	--	17.19
March	15.90	17.70	14.02	--	16.55
April	16.91	18.58	14.52	--	17.42
May	16.33	18.63	14.61	--	17.24
June	17.32	19.01	15.12	--	17.85
July	17.78	19.39	15.74	--	18.31
August	19.50	21.38	17.42	--	20.11
Sept	18.66	19.42	16.61	--	18.78
October	20.07	22.02	18.35	--	20.82
November	18.88	20.34	17.04	--	19.37
December	19.79	21.45	17.90	--	20.40
Year 2017					
January	22.10	21.89	18.77	--	21.60
February	25.09	24.84	20.48	--	24.33
March	21.46	21.69	17.76	--	21.06
April	22.16	22.89	18.43	--	21.99
May	22.66	23.27	19.03	--	22.48
June	21.69	21.91	18.18	--	21.35
July	22.01	22.62	18.43	--	21.82
August	22.62	23.17	18.91	--	22.42
Sept	19.36	19.90	16.35	--	19.18
October	37.23	20.39	40.29	--	22.36
November	45.99	20.27	53.04	--	23.39
December	21.07	31.94	24.72	--	26.70
Year 2018					
January	22.11	28.53	22.32	--	25.43
February	19.32	22.48	18.45	--	21.02
March	24.40	27.97	22.42	--	25.97
April	18.09	20.56	19.86	--	19.68
May	18.38	20.61	13.77	--	19.05
June	21.24	22.46	19.23	--	21.47
July	21.17	24.32	19.78	--	22.56
August	19.81	21.63	18.51	--	20.48
Sept	20.59	22.33	18.04	--	21.13
October	19.58	19.99	18.69	--	19.68
Year to Date					
2016	17.66	19.31	15.51	--	18.19
2017	22.11	22.48	18.67	--	21.85
2018	20.38	22.73	18.95	--	21.37
Rolling 12 Months Ending in October					
2017	21.61	22.17	18.44	--	21.47
2018	20.61	22.91	19.84	--	21.69

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

Table 8.5. Net Summer Capacity (MW) of Existing Utility Scale Units by Technology for Puerto Rico, 2007-October 2018

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,335	0	2,792	0	0	4,679
2008	454	98	1,335	0	3,104	0	0	4,991
2009	454	98	1,335	0	3,169	0	0	5,056
2010	454	98	1,335	0	3,169	0	0	5,056
2011	454	98	1,335	0	3,169	5	0	5,061
2012	454	98	1,335	0	3,169	23	98	5,177
2013	454	98	1,335	0	3,169	26	98	5,180
2014	454	98	1,335	0	3,169	38	99	5,192
2015	454	98	1,335	9	3,173	70	99	5,237
2016	454	98	1,335	33	3,173	145	99	5,336
2017	454	98	1,335	33	3,173	145	99	5,336
Year 2018								
January	454	0	558	33	728	145	99	2,017
February	454	0	558	33	728	145	99	2,017
March	454	0	558	33	728	145	99	2,017
April	454	0	558	33	728	145	99	2,017
May	454	0	558	33	728	145	99	2,017
June	454	0	558	33	728	145	99	2,017
July	454	0	558	33	728	145	99	2,017
August	454	0	569	33	728	145	99	2,028
Sept	454	0	569	33	728	145	99	2,028
October	454	0	569	33	728	145	99	2,028

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

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.'

Appendices

Table A.1.A. Relative Standard Error (Percent) for Net Generation by Fuel Type: Total (All Sectors) by Census Division and State, October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**85**	**23**	**0**	**2**	**0**	**0**	**9**
Connecticut	0	36	0	2	0	0	31
Maine	90	16	0	11	0	0	11
Massachusetts	0	33	0	5	0	0	20
New Hampshire	0	28	0	0	0	0	18
Rhode Island	0	150	0	9	0	0	0
Vermont	0	112	0	0	0	0	18
Middle Atlantic	**5**	**25**	**59**	**1**	**18**	**0**	**3**
New Jersey	0	93	0	3	0	0	0
New York	0	40	0	2	0	0	2
Pennsylvania	5	22	159	1	29	0	12
East North Central	**1**	**3**	**0**	**2**	**7**	**0**	**14**
Illinois	0	7	0	11	0	0	34
Indiana	0	2	0	3	11	0	35
Michigan	4	4	0	3	0	0	27
Ohio	0	8	0	2	17	0	37
Wisconsin	1	26	0	5	0	0	21
West North Central	**1**	**8**	**0**	**8**	**0**	**0**	**9**
Iowa	0	19	0	10	0	0	36
Kansas	3	16	0	28	0	0	0
Minnesota	3	29	0	15	0	0	28
Missouri	0	4	0	10	0	0	18
Nebraska	4	104	0	41	0	0	29
North Dakota	0	7	0	48	0	0	22
South Dakota	0	55	0	46	0	0	15
South Atlantic	**1**	**5**	**12**	**1**	**0**	**0**	**7**
Delaware	0	114	0	5	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	4	0	1	0	0	42
Georgia	0	20	101	4	0	0	14
Maryland	0	8	0	3	0	0	2
North Carolina	0	19	0	2	0	0	10
South Carolina	0	27	0	3	0	0	17
Virginia	12	11	0	4	0	0	17
West Virginia	2	0	0	11	0	0	16
East South Central	**0**	**4**	**0**	**2**	**0**	**0**	**5**
Alabama	0	22	0	2	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	11	0	3	0	0	0
Tennessee	0	6	0	9	0	0	7
West South Central	**0**	**16**	**2**	**1**	**4**	**0**	**9**
Arkansas	0	23	0	5	0	0	12
Louisiana	0	73	0	2	8	0	21
Oklahoma	0	2	0	4	0	0	14
Texas	0	10	62	2	3	0	19
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	2	0	2	0	0	4
Colorado	0	46	0	4	0	0	21
Idaho	197	0	0	31	0	0	11
Montana	3	28	0	32	0	0	11
Nevada	0	0	0	1	0	0	3
New Mexico	0	10	0	7	0	0	71
Utah	0	0	0	4	0	0	31
Wyoming	4	1	0	13	0	0	32
Pacific Contiguous	**0**	**8**	**0**	**2**	**2**	**0**	**2**
California	0	12	0	2	2	0	8
Oregon	0	39	0	4	0	0	4
Washington	0	11	0	8	0	0	1
Pacific Noncontiguous	**20**	**1**	**0**	**26**	**0**	**0**	**24**
Alaska	61	3	0	26	0	0	26
Hawaii	0	1	0	0	0	0	34
U.S. Total	**0**	**1**	**3**	**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, October 2018 (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**	**7**	**5**	**0**	**1**	**2**
Connecticut	0	0	0	25	12	0	0	1
Maine	0	0	0	89	7	0	0	5
Massachusetts	0	0	0	7	6	0	2	3
New Hampshire	0	0	0	0	17	0	0	5
Rhode Island	0	0	0	46	7	0	0	8
Vermont	0	0	0	21	13	0	0	12
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	2
New York	0	0	0	13	5	0	1	1
Pennsylvania	0	0	0	24	5	0	0	1
East North Central	**0**	**0**	**0**	**9**	**3**	**0**	**2**	**1**
Illinois	0	0	0	22	4	0	0	1
Indiana	0	0	0	13	5	0	0	1
Michigan	0	0	0	20	6	0	9	2
Ohio	0	0	0	22	5	0	0	1
Wisconsin	0	0	0	44	8	0	33	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**5**	**1**
Iowa	0	0	0	72	4	0	0	2
Kansas	0	0	0	96	2	0	0	3
Minnesota	0	0	0	7	5	0	3	2
Missouri	0	0	0	24	6	0	0	1
Nebraska	0	0	0	50	6	0	0	4
North Dakota	0	0	0	0	4	0	38	2
South Dakota	0	0	0	157	10	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Delaware	0	0	0	30	31	0	0	5
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	2	3	0	1	1
Georgia	0	0	0	4	3	0	0	2
Maryland	0	0	0	9	8	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	11	5	0	0	1
Virginia	0	0	0	8	7	0	0	2
West Virginia	0	0	0	0	10	0	0	2
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**15**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	35	16	0	0	1
Mississippi	0	0	0	3	4	0	0	2
Tennessee	0	0	0	20	7	0	67	2
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	6	6	0	0	2
Louisiana	0	0	0	146	5	0	1	1
Oklahoma	0	0	0	39	2	0	0	2
Texas	0	0	0	3	1	0	4	1
Mountain	**0**	**8**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	1
Idaho	0	35	0	11	8	0	0	8
Montana	0	0	0	51	10	0	0	3
Nevada	0	9	0	2	4	0	0	1
New Mexico	0	0	0	7	3	0	0	2
Utah	0	16	0	5	5	0	9	1
Wyoming	0	0	0	0	8	0	0	4
Pacific Contiguous	**0**	**3**	**0**	**2**	**2**	**0**	**1**	**1**
California	0	3	0	2	2	0	1	1
Oregon	0	23	0	11	7	0	0	3
Washington	0	0	0	0	6	0	0	1
Pacific Noncontiguous	**0**	**20**	**0**	**13**	**8**	**0**	**0**	**5**
Alaska	0	0	0	0	35	0	0	16
Hawaii	0	20	0	13	8	0	0	1
U.S. Total	**0**	**4**	**0**	**1**	**1**	**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.1.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Total (All Sectors) by Census Division and State, Year-to-Date through October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**85**	**23**	**0**	**2**	**0**	**0**	**9**
Connecticut	0	36	0	2	0	0	31
Maine	90	16	0	11	0	0	11
Massachusetts	0	33	0	5	0	0	20
New Hampshire	0	28	0	0	0	0	18
Rhode Island	0	150	0	9	0	0	0
Vermont	0	112	0	0	0	0	18
Middle Atlantic	**5**	**25**	**59**	**1**	**18**	**0**	**3**
New Jersey	0	93	0	3	0	0	0
New York	0	40	0	2	0	0	2
Pennsylvania	5	22	159	1	29	0	12
East North Central	**1**	**3**	**0**	**2**	**7**	**0**	**14**
Illinois	0	7	0	11	0	0	34
Indiana	0	2	0	3	11	0	35
Michigan	4	4	0	3	0	0	27
Ohio	0	8	0	2	17	0	37
Wisconsin	1	26	0	5	0	0	21
West North Central	**1**	**8**	**0**	**8**	**0**	**0**	**9**
Iowa	0	19	0	10	0	0	36
Kansas	3	16	0	28	0	0	0
Minnesota	3	29	0	15	0	0	28
Missouri	0	4	0	10	0	0	18
Nebraska	4	104	0	41	0	0	29
North Dakota	0	7	0	48	0	0	22
South Dakota	0	55	0	46	0	0	15
South Atlantic	**1**	**5**	**12**	**1**	**0**	**0**	**7**
Delaware	0	114	0	5	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	4	0	1	0	0	42
Georgia	0	20	101	4	0	0	14
Maryland	0	8	0	3	0	0	2
North Carolina	0	19	0	2	0	0	10
South Carolina	0	27	0	3	0	0	17
Virginia	12	11	0	4	0	0	17
West Virginia	2	0	0	11	0	0	16
East South Central	**0**	**4**	**0**	**2**	**0**	**0**	**5**
Alabama	0	22	0	2	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	11	0	3	0	0	0
Tennessee	0	6	0	9	0	0	7
West South Central	**0**	**16**	**2**	**1**	**4**	**0**	**9**
Arkansas	0	23	0	5	0	0	12
Louisiana	0	73	0	2	8	0	21
Oklahoma	0	2	0	4	0	0	14
Texas	0	10	62	2	3	0	19
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	2	0	2	0	0	4
Colorado	0	46	0	4	0	0	21
Idaho	197	0	0	31	0	0	11
Montana	3	28	0	32	0	0	11
Nevada	0	0	0	1	0	0	3
New Mexico	0	10	0	7	0	0	71
Utah	0	0	0	4	0	0	31
Wyoming	4	1	0	13	0	0	32
Pacific Contiguous	**0**	**8**	**0**	**2**	**2**	**0**	**2**
California	0	12	0	2	2	0	8
Oregon	0	39	0	4	0	0	4
Washington	0	11	0	8	0	0	1
Pacific Noncontiguous	**20**	**1**	**0**	**26**	**0**	**0**	**24**
Alaska	61	3	0	26	0	0	26
Hawaii	0	1	0	0	0	0	34
U.S. Total	**0**	**1**	**3**	**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 October 2018 (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**	**7**	**5**	**0**	**1**	**2**
Connecticut	0	0	0	25	12	0	0	1
Maine	0	0	0	89	7	0	0	5
Massachusetts	0	0	0	7	6	0	2	3
New Hampshire	0	0	0	0	17	0	0	5
Rhode Island	0	0	0	46	7	0	0	8
Vermont	0	0	0	21	13	0	0	12
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	2
New York	0	0	0	13	5	0	1	1
Pennsylvania	0	0	0	24	5	0	0	1
East North Central	**0**	**0**	**0**	**9**	**3**	**0**	**2**	**1**
Illinois	0	0	0	22	4	0	0	1
Indiana	0	0	0	13	5	0	0	1
Michigan	0	0	0	20	6	0	9	2
Ohio	0	0	0	22	5	0	0	1
Wisconsin	0	0	0	44	8	0	33	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**5**	**1**
Iowa	0	0	0	72	4	0	0	2
Kansas	0	0	0	96	2	0	0	3
Minnesota	0	0	0	7	5	0	3	2
Missouri	0	0	0	24	6	0	0	1
Nebraska	0	0	0	50	6	0	0	4
North Dakota	0	0	0	0	4	0	38	2
South Dakota	0	0	0	157	10	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Delaware	0	0	0	30	31	0	0	5
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	2	3	0	1	1
Georgia	0	0	0	4	3	0	0	2
Maryland	0	0	0	9	8	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	11	5	0	0	1
Virginia	0	0	0	8	7	0	0	2
West Virginia	0	0	0	0	10	0	0	2
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**15**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	35	16	0	0	1
Mississippi	0	0	0	3	4	0	0	2
Tennessee	0	0	0	20	7	0	67	2
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	6	6	0	0	2
Louisiana	0	0	0	146	5	0	1	1
Oklahoma	0	0	0	39	2	0	0	2
Texas	0	0	0	3	1	0	4	1
Mountain	**0**	**8**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	1
Idaho	0	35	0	11	8	0	0	8
Montana	0	0	0	51	10	0	0	3
Nevada	0	9	0	2	4	0	0	1
New Mexico	0	0	0	7	3	0	0	2
Utah	0	16	0	5	5	0	9	1
Wyoming	0	0	0	0	8	0	0	4
Pacific Contiguous	**0**	**3**	**0**	**2**	**2**	**0**	**1**	**1**
California	0	3	0	2	2	0	1	1
Oregon	0	23	0	11	7	0	0	3
Washington	0	0	0	0	6	0	0	1
Pacific Noncontiguous	**0**	**20**	**0**	**13**	**8**	**0**	**0**	**5**
Alaska	0	0	0	0	35	0	0	16
Hawaii	0	20	0	13	8	0	0	1
U.S. Total	**0**	**4**	**0**	**1**	**1**	**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.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**1**	**.**	**0**
Connecticut	0	0	0	.	0
Maine	1	2	0	.	1
Massachusetts	0	0	1	.	0
New Hampshire	0	0	0	.	0
Rhode Island	0	0	0	.	0
Vermont	1	5	55	.	2
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	2	.	0
New York	0	0	1	.	0
Pennsylvania	0	1	0	.	1
East North Central	**1**	**2**	**2**	**.**	**1**
Illinois	3	8	0	.	5
Indiana	3	1	0	.	1
Michigan	2	13	18	.	5
Ohio	3	3	3	.	2
Wisconsin	5	8	2	.	4
West North Central	**2**	**1**	**5**	**.**	**1**
Iowa	5	2	38	.	2
Kansas	9	5	0	.	6
Minnesota	5	6	4	.	3
Missouri	2	1	0	.	1
Nebraska	12	23	35	.	10
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	3	2	10	.	2
District of Columbia	0	0	0	.	0
Florida	3	4	2	.	2
Georgia	71	69	0	.	51
Maryland	1	1	1	.	0
North Carolina	5	1	0	.	3
South Carolina	2	2	0	.	2
Virginia	6	5	4	.	4
West Virginia	0	0	0	.	0
East South Central	**3**	**4**	**0**	**.**	**2**
Alabama	0	0	0	.	0
Kentucky	3	4	0	.	3
Mississippi	4	9	0	.	4
Tennessee	0	0	0	.	0
West South Central	**1**	**3**	**0**	**.**	**1**
Arkansas	9	11	0	.	7
Louisiana	1	5	0	.	1
Oklahoma	8	9	0	.	6
Texas	2	4	0	.	2
Mountain	**0**	**1**	**4**	**.**	**0**
Arizona	0	1	10	.	0
Colorado	1	2	71	.	1
Idaho	2	8	0	.	2
Montana	7	11	0	.	6
Nevada	0	0	0	.	0
New Mexico	2	4	0	.	2
Utah	1	4	0	.	1
Wyoming	13	37	0	.	13
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	1	6	6	.	2
Washington	1	22	45	.	3
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	7	7	0	.	5
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, October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**104**	**0**	**119**	**0**	**0**	**19**
Connecticut	0	52	0	0	0	0	27
Maine	0	0	0	0	0	0	0
Massachusetts	0	163	0	153	0	0	39
New Hampshire	0	120	0	0	0	0	34
Rhode Island	0	0	0	0	0	0	0
Vermont	0	119	0	0	0	0	29
Middle Atlantic	**0**	**61**	**0**	**11**	**0**	**0**	**1**
New Jersey	0	0	0	90	0	0	0
New York	0	66	0	11	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**4**	**0**	**4**	**0**	**0**	**15**
Illinois	0	21	0	73	0	0	42
Indiana	0	2	0	8	0	0	35
Michigan	4	5	0	10	0	0	28
Ohio	3	21	0	7	0	0	37
Wisconsin	0	27	0	5	0	0	23
West North Central	**1**	**7**	**0**	**10**	**0**	**0**	**9**
Iowa	0	19	0	11	0	0	37
Kansas	3	16	0	28	0	0	0
Minnesota	3	21	0	19	0	0	39
Missouri	0	4	0	13	0	0	18
Nebraska	4	104	0	41	0	0	29
North Dakota	0	7	0	49	0	0	22
South Dakota	0	55	0	46	0	0	15
South Atlantic	**0**	**7**	**0**	**1**	**0**	**0**	**9**
Delaware	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	42
Georgia	0	22	0	4	0	0	14
Maryland	0	59	0	0	0	0	0
North Carolina	0	20	0	2	0	0	10
South Carolina	0	35	0	4	0	0	16
Virginia	17	38	0	7	0	0	17
West Virginia	0	0	0	0	0	0	23
East South Central	**0**	**4**	**0**	**2**	**0**	**0**	**5**
Alabama	0	8	0	5	0	0	6
Kentucky	0	0	0	4	0	0	8
Mississippi	0	12	0	3	0	0	0
Tennessee	0	6	0	10	0	0	7
West South Central	**0**	**18**	**0**	**3**	**0**	**0**	**9**
Arkansas	0	29	0	5	0	0	12
Louisiana	0	73	0	3	0	0	0
Oklahoma	0	2	0	5	0	0	14
Texas	0	9	0	5	0	0	19
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**5**
Arizona	0	2	0	3	0	0	4
Colorado	0	46	0	4	0	0	22
Idaho	0	0	0	70	0	0	11
Montana	0	620	0	54	0	0	11
Nevada	0	0	0	1	0	0	0
New Mexico	0	10	0	11	0	0	71
Utah	0	0	0	4	0	0	32
Wyoming	4	1	0	40	0	0	32
Pacific Contiguous	**0**	**7**	**0**	**3**	**0**	**0**	**2**
California	0	15	0	3	0	0	7
Oregon	0	0	0	10	0	0	4
Washington	0	6	0	11	0	0	1
Pacific Noncontiguous	**97**	**1**	**0**	**26**	**0**	**0**	**28**
Alaska	97	3	0	26	0	0	28
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**0**	**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.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Electric Utilities by Census Division and State, October 2018 (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**	**26**	**9**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	43	45	0	0	47
New Hampshire	0	0	0	0	0	0	0	19
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	34	13	0	0	16
Middle Atlantic	**0**	**0**	**0**	**24**	**24**	**0**	**0**	**2**
New Jersey	0	0	0	24	24	0	0	60
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**	**16**	**9**	**0**	**4**	**1**
Illinois	0	0	0	66	40	0	0	15
Indiana	0	0	0	23	21	0	0	1
Michigan	0	0	0	23	12	0	0	2
Ohio	0	0	0	71	68	0	0	4
Wisconsin	0	0	0	0	17	0	37	2
West North Central	**0**	**0**	**0**	**52**	**4**	**0**	**7**	**1**
Iowa	0	0	0	78	4	0	0	2
Kansas	0	0	0	211	5	0	0	3
Minnesota	0	0	0	125	9	0	0	3
Missouri	0	0	0	0	61	0	0	1
Nebraska	0	0	0	0	32	0	0	4
North Dakota	0	0	0	0	7	0	38	2
South Dakota	0	0	0	0	17	0	0	13
South Atlantic	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**0**
Delaware	0	0	0	85	85	0	0	11
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	9	9	0	0	1
Maryland	0	0	0	73	73	0	0	0
North Carolina	0	0	0	10	10	0	0	1
South Carolina	0	0	0	0	12	0	0	1
Virginia	0	0	0	18	25	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**29**	**30**	**0**	**0**	**1**
Alabama	0	0	0	50	50	0	0	2
Kentucky	0	0	0	35	36	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	0	0	0	0	2
West South Central	**0**	**0**	**0**	**35**	**8**	**0**	**0**	**1**
Arkansas	0	0	0	167	167	0	0	2
Louisiana	0	0	0	146	146	0	0	2
Oklahoma	0	0	0	39	8	0	0	4
Texas	0	0	0	122	28	0	0	3
Mountain	**0**	**22**	**0**	**7**	**7**	**0**	**25**	**1**
Arizona	0	0	0	8	8	0	0	1
Colorado	0	0	0	126	23	0	0	1
Idaho	0	0	0	0	38	0	0	11
Montana	0	0	0	0	34	0	0	10
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	14	14	0	0	2
Utah	0	22	0	0	22	0	37	1
Wyoming	0	0	0	0	13	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**10**	**5**	**0**	**0**	**1**
California	0	0	0	10	4	0	0	2
Oregon	0	0	0	89	12	0	0	4
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**8**
Alaska	0	0	0	0	58	0	0	17
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**5**	**0**	**2**	**3**	**0**	**3**	**0**

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

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

Electric Utilities by Census Division and State, Year-to-Date through October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**104**	**0**	**119**	**0**	**0**	**19**
Connecticut	0	52	0	0	0	0	27
Maine	0	0	0	0	0	0	0
Massachusetts	0	163	0	153	0	0	39
New Hampshire	0	120	0	0	0	0	34
Rhode Island	0	0	0	0	0	0	0
Vermont	0	119	0	0	0	0	29
Middle Atlantic	**0**	**61**	**0**	**11**	**0**	**0**	**1**
New Jersey	0	0	0	90	0	0	0
New York	0	66	0	11	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**4**	**0**	**4**	**0**	**0**	**15**
Illinois	0	21	0	73	0	0	42
Indiana	0	2	0	8	0	0	35
Michigan	4	5	0	10	0	0	28
Ohio	3	21	0	7	0	0	37
Wisconsin	0	27	0	5	0	0	23
West North Central	**1**	**7**	**0**	**10**	**0**	**0**	**9**
Iowa	0	19	0	11	0	0	37
Kansas	3	16	0	28	0	0	0
Minnesota	3	21	0	19	0	0	39
Missouri	0	4	0	13	0	0	18
Nebraska	4	104	0	41	0	0	29
North Dakota	0	7	0	49	0	0	22
South Dakota	0	55	0	46	0	0	15
South Atlantic	**0**	**7**	**0**	**1**	**0**	**0**	**9**
Delaware	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	42
Georgia	0	22	0	4	0	0	14
Maryland	0	59	0	0	0	0	0
North Carolina	0	20	0	2	0	0	10
South Carolina	0	35	0	4	0	0	16
Virginia	17	38	0	7	0	0	17
West Virginia	0	0	0	0	0	0	23
East South Central	**0**	**4**	**0**	**2**	**0**	**0**	**5**
Alabama	0	8	0	5	0	0	6
Kentucky	0	0	0	4	0	0	8
Mississippi	0	12	0	3	0	0	0
Tennessee	0	6	0	10	0	0	7
West South Central	**0**	**18**	**0**	**3**	**0**	**0**	**9**
Arkansas	0	29	0	5	0	0	12
Louisiana	0	73	0	3	0	0	0
Oklahoma	0	2	0	5	0	0	14
Texas	0	9	0	5	0	0	19
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**5**
Arizona	0	2	0	3	0	0	4
Colorado	0	46	0	4	0	0	22
Idaho	0	0	0	70	0	0	11
Montana	0	620	0	54	0	0	11
Nevada	0	0	0	1	0	0	0
New Mexico	0	10	0	11	0	0	71
Utah	0	0	0	4	0	0	32
Wyoming	4	1	0	40	0	0	32
Pacific Contiguous	**0**	**7**	**0**	**3**	**0**	**0**	**2**
California	0	15	0	3	0	0	7
Oregon	0	0	0	10	0	0	4
Washington	0	6	0	11	0	0	1
Pacific Noncontiguous	**97**	**1**	**0**	**26**	**0**	**0**	**28**
Alaska	97	3	0	26	0	0	28
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**0**	**0**	**2**

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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 October 2018 (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**	**26**	**9**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	43	45	0	0	47
New Hampshire	0	0	0	0	0	0	0	19
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	34	13	0	0	16
Middle Atlantic	**0**	**0**	**0**	**24**	**24**	**0**	**0**	**2**
New Jersey	0	0	0	24	24	0	0	60
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**	**16**	**9**	**0**	**4**	**1**
Illinois	0	0	0	66	40	0	0	15
Indiana	0	0	0	23	21	0	0	1
Michigan	0	0	0	23	12	0	0	2
Ohio	0	0	0	71	68	0	0	4
Wisconsin	0	0	0	0	17	0	37	2
West North Central	**0**	**0**	**0**	**52**	**4**	**0**	**7**	**1**
Iowa	0	0	0	78	4	0	0	2
Kansas	0	0	0	211	5	0	0	3
Minnesota	0	0	0	125	9	0	0	3
Missouri	0	0	0	0	61	0	0	1
Nebraska	0	0	0	0	32	0	0	4
North Dakota	0	0	0	0	7	0	38	2
South Dakota	0	0	0	0	17	0	0	13
South Atlantic	**0**	**0**	**0**	**2**	**5**	**0**	**0**	**0**
Delaware	0	0	0	85	85	0	0	11
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	9	9	0	0	1
Maryland	0	0	0	73	73	0	0	0
North Carolina	0	0	0	10	10	0	0	1
South Carolina	0	0	0	0	12	0	0	1
Virginia	0	0	0	18	25	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**29**	**30**	**0**	**0**	**1**
Alabama	0	0	0	50	50	0	0	2
Kentucky	0	0	0	35	36	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	0	0	0	0	2
West South Central	**0**	**0**	**0**	**35**	**8**	**0**	**0**	**1**
Arkansas	0	0	0	167	167	0	0	2
Louisiana	0	0	0	146	146	0	0	2
Oklahoma	0	0	0	39	8	0	0	4
Texas	0	0	0	122	28	0	0	3
Mountain	**0**	**22**	**0**	**7**	**7**	**0**	**25**	**1**
Arizona	0	0	0	8	8	0	0	1
Colorado	0	0	0	126	23	0	0	1
Idaho	0	0	0	0	38	0	0	11
Montana	0	0	0	0	34	0	0	10
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	14	14	0	0	2
Utah	0	22	0	0	22	0	37	1
Wyoming	0	0	0	0	13	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**10**	**5**	**0**	**0**	**1**
California	0	0	0	10	4	0	0	2
Oregon	0	0	0	89	12	0	0	4
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**8**
Alaska	0	0	0	0	58	0	0	17
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**5**	**0**	**2**	**3**	**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, October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**28**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	38	0	2	0	0	35
Maine	0	14	0	12	0	0	12
Massachusetts	0	31	0	5	0	0	23
New Hampshire	0	936	0	0	0	0	21
Rhode Island	0	150	0	9	0	0	0
Vermont	0	0	0	0	0	0	22
Middle Atlantic	**5**	**30**	**0**	**1**	**0**	**0**	**9**
New Jersey	0	110	0	3	0	0	0
New York	0	70	0	2	0	0	9
Pennsylvania	5	25	0	1	0	0	12
East North Central	**0**	**6**	**0**	**2**	**8**	**0**	**44**
Illinois	0	7	0	11	0	0	53
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	104
Ohio	0	8	0	2	24	0	70
Wisconsin	0	0	0	0	0	0	102
West North Central	**0**	**542**	**0**	**13**	**0**	**0**	**58**
Iowa	0	81	0	2,358	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	824	0	26	0	0	79
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**6**	**0**	**2**	**0**	**0**	**5**
Delaware	0	114	0	6	0	0	0
Florida	0	105	0	7	0	0	0
Georgia	0	301	0	9	0	0	264
Maryland	0	8	0	3	0	0	2
North Carolina	0	123	0	7	0	0	75
South Carolina	0	0	0	2	0	0	86
Virginia	4	2	0	3	0	0	59
West Virginia	10	0	0	16	0	0	32
East South Central	**0**	**98**	**0**	**0**	**0**	**0**	**194**
Alabama	0	127	0	1	0	0	0
Kentucky	0	0	0	0	0	0	194
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**25**	**0**	**1**	**0**	**0**	**20**
Arkansas	0	0	0	0	0	0	51
Louisiana	0	0	0	14	0	0	21
Oklahoma	0	0	0	0	0	0	0
Texas	0	48	0	2	0	0	0
Mountain	**3**	**11**	**0**	**2**	**0**	**0**	**28**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	13	0	0	69
Idaho	0	0	0	38	0	0	35
Montana	4	20	0	7	0	0	89
Nevada	0	0	0	0	0	0	90
New Mexico	0	0	0	8	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**5**	**0**	**2**	**0**	**0**	**33**
California	0	0	0	2	0	0	44
Oregon	0	0	0	1	0	0	62
Washington	0	7	0	13	0	0	54
Pacific Noncontiguous	**8**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	71	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**3**	**0**	**1**	**4**	**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, October 2018 (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**	**7**	**6**	**0**	**1**	**2**
Connecticut	0	0	0	26	12	0	0	1
Maine	0	0	0	89	9	0	0	6
Massachusetts	0	0	0	8	6	0	2	3
New Hampshire	0	0	0	0	20	0	0	5
Rhode Island	0	0	0	46	8	0	0	8
Vermont	0	0	0	26	22	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	2
New York	0	0	0	13	5	0	0	1
Pennsylvania	0	0	0	27	6	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**17**	**1**
Illinois	0	0	0	21	4	0	0	1
Indiana	0	0	0	15	5	0	0	1
Michigan	0	0	0	35	7	0	24	2
Ohio	0	0	0	23	5	0	0	1
Wisconsin	0	0	0	46	10	0	0	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**2**
Iowa	0	0	0	185	6	0	0	4
Kansas	0	0	0	107	2	0	0	2
Minnesota	0	0	0	7	5	0	0	5
Missouri	0	0	0	25	6	0	0	4
Nebraska	0	0	0	50	6	0	0	6
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	157	12	0	0	12
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	33	38	0	0	6
Florida	0	0	0	9	6	0	1	5
Georgia	0	0	0	5	6	0	0	8
Maryland	0	0	0	9	9	0	0	1
North Carolina	0	0	0	3	3	0	0	4
South Carolina	0	0	0	11	15	0	0	3
Virginia	0	0	0	9	9	0	0	3
West Virginia	0	0	0	0	10	0	0	8
East South Central	**0**	**0**	**0**	**5**	**8**	**0**	**0**	**0**
Alabama	0	0	0	9	11	0	0	1
Kentucky	0	0	0	201	68	0	0	4
Mississippi	0	0	0	3	6	0	0	0
Tennessee	0	0	0	21	24	0	0	24
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	6	15	0	0	1
Louisiana	0	0	0	0	54	0	0	8
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	3	1	0	0	1
Mountain	**0**	**8**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	2	0	0	4
Idaho	0	35	0	11	9	0	0	12
Montana	0	0	0	51	11	0	0	3
Nevada	0	9	0	2	4	0	0	3
New Mexico	0	0	0	7	3	0	0	4
Utah	0	22	0	5	5	0	0	4
Wyoming	0	0	0	0	11	0	0	11
Pacific Contiguous	**0**	**4**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	3	0	2	2	0	0	2
Oregon	0	23	0	11	8	0	0	2
Washington	0	0	0	0	10	0	0	3
Pacific Noncontiguous	**0**	**20**	**0**	**17**	**11**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	58
Hawaii	0	20	0	17	12	0	0	3
U.S. Total	**0**	**5**	**0**	**2**	**1**	**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 October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**28**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	38	0	2	0	0	35
Maine	0	14	0	12	0	0	12
Massachusetts	0	31	0	5	0	0	23
New Hampshire	0	936	0	0	0	0	21
Rhode Island	0	150	0	9	0	0	0
Vermont	0	0	0	0	0	0	22
Middle Atlantic	**5**	**30**	**0**	**1**	**0**	**0**	**9**
New Jersey	0	110	0	3	0	0	0
New York	0	70	0	2	0	0	9
Pennsylvania	5	25	0	1	0	0	12
East North Central	**0**	**6**	**0**	**2**	**8**	**0**	**44**
Illinois	0	7	0	11	0	0	53
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	104
Ohio	0	8	0	2	24	0	70
Wisconsin	0	0	0	0	0	0	102
West North Central	**0**	**542**	**0**	**13**	**0**	**0**	**58**
Iowa	0	81	0	2,358	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	824	0	26	0	0	79
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**6**	**0**	**2**	**0**	**0**	**5**
Delaware	0	114	0	6	0	0	0
Florida	0	105	0	7	0	0	0
Georgia	0	301	0	9	0	0	264
Maryland	0	8	0	3	0	0	2
North Carolina	0	123	0	7	0	0	75
South Carolina	0	0	0	2	0	0	86
Virginia	4	2	0	3	0	0	59
West Virginia	10	0	0	16	0	0	32
East South Central	**0**	**98**	**0**	**0**	**0**	**0**	**194**
Alabama	0	127	0	1	0	0	0
Kentucky	0	0	0	0	0	0	194
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**25**	**0**	**1**	**0**	**0**	**20**
Arkansas	0	0	0	0	0	0	51
Louisiana	0	0	0	14	0	0	21
Oklahoma	0	0	0	0	0	0	0
Texas	0	48	0	2	0	0	0
Mountain	**3**	**11**	**0**	**2**	**0**	**0**	**28**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	13	0	0	69
Idaho	0	0	0	38	0	0	35
Montana	4	20	0	7	0	0	89
Nevada	0	0	0	0	0	0	90
New Mexico	0	0	0	8	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**5**	**0**	**2**	**0**	**0**	**33**
California	0	0	0	2	0	0	44
Oregon	0	0	0	1	0	0	62
Washington	0	7	0	13	0	0	54
Pacific Noncontiguous	**8**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	71	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**3**	**0**	**1**	**4**	**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 October 2018 (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**	**7**	**6**	**0**	**1**	**2**
Connecticut	0	0	0	26	12	0	0	1
Maine	0	0	0	89	9	0	0	6
Massachusetts	0	0	0	8	6	0	2	3
New Hampshire	0	0	0	0	20	0	0	5
Rhode Island	0	0	0	46	8	0	0	8
Vermont	0	0	0	26	22	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	2
New York	0	0	0	13	5	0	0	1
Pennsylvania	0	0	0	27	6	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**17**	**1**
Illinois	0	0	0	21	4	0	0	1
Indiana	0	0	0	15	5	0	0	1
Michigan	0	0	0	35	7	0	24	2
Ohio	0	0	0	23	5	0	0	1
Wisconsin	0	0	0	46	10	0	0	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**2**
Iowa	0	0	0	185	6	0	0	4
Kansas	0	0	0	107	2	0	0	2
Minnesota	0	0	0	7	5	0	0	5
Missouri	0	0	0	25	6	0	0	4
Nebraska	0	0	0	50	6	0	0	6
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	157	12	0	0	12
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	33	38	0	0	6
Florida	0	0	0	9	6	0	1	5
Georgia	0	0	0	5	6	0	0	8
Maryland	0	0	0	9	9	0	0	1
North Carolina	0	0	0	3	3	0	0	4
South Carolina	0	0	0	11	15	0	0	3
Virginia	0	0	0	9	9	0	0	3
West Virginia	0	0	0	0	10	0	0	8
East South Central	**0**	**0**	**0**	**5**	**8**	**0**	**0**	**0**
Alabama	0	0	0	9	11	0	0	1
Kentucky	0	0	0	201	68	0	0	4
Mississippi	0	0	0	3	6	0	0	0
Tennessee	0	0	0	21	24	0	0	24
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	6	15	0	0	1
Louisiana	0	0	0	0	54	0	0	8
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	3	1	0	0	1
Mountain	**0**	**8**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	2	0	0	4
Idaho	0	35	0	11	9	0	0	12
Montana	0	0	0	51	11	0	0	3
Nevada	0	9	0	2	4	0	0	3
New Mexico	0	0	0	7	3	0	0	4
Utah	0	22	0	5	5	0	0	4
Wyoming	0	0	0	0	11	0	0	11
Pacific Contiguous	**0**	**4**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	3	0	2	2	0	0	2
Oregon	0	23	0	11	8	0	0	2
Washington	0	0	0	0	10	0	0	3
Pacific Noncontiguous	**0**	**20**	**0**	**17**	**11**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	58
Hawaii	0	20	0	17	12	0	0	3
U.S. Total	**0**	**5**	**0**	**2**	**1**	**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, October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**25**	**0**	**13**	**0**	**0**	**0**
Connecticut	0	4,083	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	72	0	21	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**	**102**	**0**	**13**	**0**	**0**	**0**
New Jersey	0	0	0	28	0	0	0
New York	0	152	0	16	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**100**	**1**	**0**	**6**	**0**	**0**	**0**
Illinois	157	0	0	18	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	9	0	0	0
West North Central	**0**	**24**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	30	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	5,442	0	0	0	0	0
South Atlantic	**0**	**11**	**0**	**8**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	29	0	0	0	0	0
Maryland	0	273	0	6	0	0	0
North Carolina	0	373	0	54	0	0	0
South Carolina	0	380	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**22**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	22	0	0	0
West South Central	**0**	**0**	**0**	**17**	**0**	**0**	**438**
Arkansas	0	0	0	105	0	0	0
Louisiana	0	0	0	21	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	22	0	0	438
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	38	0	0	0
Utah	0	0	0	7	0	0	0
Pacific Contiguous	**0**	**324**	**0**	**3**	**0**	**0**	**648**
California	0	51	0	3	0	0	648
Oregon	0	3,645	0	31	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**84**	**4**	**0**	**0**	**0**	**0**	**79**
Alaska	84	7	0	0	0	0	79
Hawaii	0	0	0	0	0	0	0
U.S. Total	**41**	**16**	**0**	**3**	**0**	**0**	**61**

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

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

Commercial Sector by Census Division and State, October 2018 (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**	**66**	**8**	**0**	**0**	**10**
Connecticut	0	0	0	221	221	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	66	24	0	0	18
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**	**18**	**5**	**0**	**3**	**6**
New Jersey	0	0	0	18	10	0	0	9
New York	0	0	0	99	7	0	6	10
Pennsylvania	0	0	0	76	6	0	0	3
East North Central	**0**	**0**	**0**	**88**	**14**	**0**	**0**	**6**
Illinois	0	0	0	149	143	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	5
Ohio	0	0	0	123	28	0	0	2
Wisconsin	0	0	0	193	56	0	0	17
West North Central	**0**	**0**	**0**	**0**	**20**	**0**	**71**	**6**
Iowa	0	0	0	0	17	0	0	3
Kansas	0	0	0	0	105	0	0	105
Minnesota	0	0	0	0	49	0	71	17
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	5,442
South Atlantic	**0**	**0**	**0**	**19**	**6**	**0**	**0**	**4**
Delaware	0	0	0	165	51	0	0	51
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	94	20	0	0	14
Georgia	0	0	0	124	124	0	0	90
Maryland	0	0	0	80	29	0	0	5
North Carolina	0	0	0	21	19	0	0	20
South Carolina	0	0	0	0	0	0	0	4
Virginia	0	0	0	0	2	0	0	1
East South Central	**0**	**0**	**0**	**99**	**99**	**0**	**0**	**22**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	99	99	0	0	22
West South Central	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**16**
Arkansas	0	0	0	0	0	0	0	89
Louisiana	0	0	0	0	0	0	0	21
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	19	0	0	19
Mountain	**0**	**0**	**0**	**22**	**18**	**0**	**0**	**8**
Arizona	0	0	0	48	48	0	0	6
Colorado	0	0	0	58	66	0	0	48
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	27	27	0	0	15
New Mexico	0	0	0	0	247	0	0	37
Utah	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**19**	**5**	**0**	**0**	**3**
California	0	0	0	19	5	0	0	3
Oregon	0	0	0	0	22	0	0	22
Washington	0	0	0	0	47	0	0	46
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**
Alaska	0	0	0	0	0	0	0	49
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**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 October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**25**	**0**	**13**	**0**	**0**	**0**
Connecticut	0	4,083	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	72	0	21	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**	**102**	**0**	**13**	**0**	**0**	**0**
New Jersey	0	0	0	28	0	0	0
New York	0	152	0	16	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**100**	**1**	**0**	**6**	**0**	**0**	**0**
Illinois	157	0	0	18	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	9	0	0	0
West North Central	**0**	**24**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	30	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	5,442	0	0	0	0	0
South Atlantic	**0**	**11**	**0**	**8**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	29	0	0	0	0	0
Maryland	0	273	0	6	0	0	0
North Carolina	0	373	0	54	0	0	0
South Carolina	0	380	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**22**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	22	0	0	0
West South Central	**0**	**0**	**0**	**17**	**0**	**0**	**438**
Arkansas	0	0	0	105	0	0	0
Louisiana	0	0	0	21	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	22	0	0	438
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	38	0	0	0
Utah	0	0	0	7	0	0	0
Pacific Contiguous	**0**	**324**	**0**	**3**	**0**	**0**	**648**
California	0	51	0	3	0	0	648
Oregon	0	3,645	0	31	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**84**	**4**	**0**	**0**	**0**	**0**	**79**
Alaska	84	7	0	0	0	0	79
Hawaii	0	0	0	0	0	0	0
U.S. Total	**41**	**16**	**0**	**3**	**0**	**0**	**61**

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

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

Commercial Sector by Census Division and State, Year-to-Date through October 2018 (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**	**66**	**8**	**0**	**0**	**10**
Connecticut	0	0	0	221	221	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	66	24	0	0	18
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**	**18**	**5**	**0**	**3**	**6**
New Jersey	0	0	0	18	10	0	0	9
New York	0	0	0	99	7	0	6	10
Pennsylvania	0	0	0	76	6	0	0	3
East North Central	**0**	**0**	**0**	**88**	**14**	**0**	**0**	**6**
Illinois	0	0	0	149	143	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	5
Ohio	0	0	0	123	28	0	0	2
Wisconsin	0	0	0	193	56	0	0	17
West North Central	**0**	**0**	**0**	**0**	**20**	**0**	**71**	**6**
Iowa	0	0	0	0	17	0	0	3
Kansas	0	0	0	0	105	0	0	105
Minnesota	0	0	0	0	49	0	71	17
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	5,442
South Atlantic	**0**	**0**	**0**	**19**	**6**	**0**	**0**	**4**
Delaware	0	0	0	165	51	0	0	51
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	94	20	0	0	14
Georgia	0	0	0	124	124	0	0	90
Maryland	0	0	0	80	29	0	0	5
North Carolina	0	0	0	21	19	0	0	20
South Carolina	0	0	0	0	0	0	0	4
Virginia	0	0	0	0	2	0	0	1
East South Central	**0**	**0**	**0**	**99**	**99**	**0**	**0**	**22**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	99	99	0	0	22
West South Central	**0**	**0**	**0**	**0**	**18**	**0**	**0**	**16**
Arkansas	0	0	0	0	0	0	0	89
Louisiana	0	0	0	0	0	0	0	21
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	19	0	0	19
Mountain	**0**	**0**	**0**	**22**	**18**	**0**	**0**	**8**
Arizona	0	0	0	48	48	0	0	6
Colorado	0	0	0	58	66	0	0	48
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	27	27	0	0	15
New Mexico	0	0	0	0	247	0	0	37
Utah	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**19**	**5**	**0**	**0**	**3**
California	0	0	0	19	5	0	0	3
Oregon	0	0	0	0	22	0	0	22
Washington	0	0	0	0	47	0	0	46
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**18**
Alaska	0	0	0	0	0	0	0	49
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**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, October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**211**	**28**	**0**	**10**	**0**	**0**	**32**
Connecticut	0	0	0	15	0	0	0
Maine	211	30	0	26	0	0	32
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	38	0	0	0
Middle Atlantic	**51**	**12**	**59**	**7**	**18**	**0**	**36**
New Jersey	0	0	0	8	0	0	0
New York	0	1	0	6	0	0	36
Pennsylvania	51	51	159	12	28	0	0
East North Central	**11**	**8**	**0**	**7**	**9**	**0**	**36**
Illinois	10	0	0	16	0	0	0
Indiana	0	1	0	12	11	0	0
Michigan	143	44	0	14	0	0	84
Ohio	0	0	0	9	0	0	0
Wisconsin	40	138	0	18	0	0	39
West North Central	**6**	**0**	**0**	**6**	**0**	**0**	**27**
Iowa	3	0	0	8	0	0	0
Kansas	0	0	0	17	0	0	0
Minnesota	26	0	0	0	0	0	27
Missouri	0	0	0	0	0	0	0
Nebraska	17	0	0	0	0	0	0
North Dakota	98	0	0	0	0	0	0
South Atlantic	**16**	**21**	**101**	**5**	**0**	**0**	**27**
Delaware	0	0	0	0	0	0	0
Florida	35	53	0	11	0	0	0
Georgia	48	37	101	20	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	38	0	27	0	0	380
South Carolina	0	0	0	6	0	0	0
Virginia	24	98	0	7	0	0	0
West Virginia	0	0	0	0	0	0	27
East South Central	**0**	**68**	**0**	**8**	**0**	**0**	**0**
Alabama	0	102	0	14	0	0	0
Kentucky	0	0	0	9	0	0	0
Mississippi	0	0	0	21	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**0**	**23**	**1**	**6**	**0**	**0**
Arkansas	0	0	0	21	0	0	0
Louisiana	0	0	0	2	8	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	62	2	7	0	0
Mountain	**32**	**0**	**0**	**5**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	197	0	0	38	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	34	0	0	7	0	0	0
Pacific Contiguous	**0**	**66**	**0**	**1**	**2**	**0**	**0**
California	0	30	0	1	2	0	0
Oregon	0	0	0	46	0	0	0
Washington	0	76	0	46	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**98**
Alaska	0	11	0	0	0	0	0
Hawaii	0	0	0	0	0	0	98
U.S. Total	**5**	**7**	**25**	**1**	**4**	**0**	**16**

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

Industrial Sector by Census Division and State, October 2018 (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**	**78**	**9**	**0**	**0**	**7**
Connecticut	0	0	0	598	598	0	0	15
Maine	0	0	0	0	9	0	0	10
Massachusetts	0	0	0	0	0	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	38
Middle Atlantic	**0**	**0**	**0**	**52**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	71	71	0	0	4
New York	0	0	0	0	16	0	0	6
Pennsylvania	0	0	0	74	7	0	0	9
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	18	0	0	7
Michigan	0	0	0	0	10	0	0	8
Ohio	0	0	0	0	19	0	0	8
Wisconsin	0	0	0	0	10	0	0	12
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	16
Minnesota	0	0	0	0	0	0	0	8
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	17
North Dakota	0	0	0	0	63	0	0	53
South Atlantic	**0**	**0**	**0**	**153**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	45	0	0	0
Florida	0	0	0	153	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	4
South Carolina	0	0	0	0	3	0	0	3
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	14
East South Central	**0**	**0**	**0**	**122**	**3**	**0**	**67**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	18	0	0	11
Mississippi	0	0	0	0	4	0	0	6
Tennessee	0	0	0	122	6	0	67	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	6	0	0	6
Louisiana	0	0	0	0	5	0	1	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	4	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	12
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	8
Pacific Contiguous	**0**	**0**	**0**	**36**	**6**	**0**	**2**	**1**
California	0	0	0	36	10	0	2	1
Oregon	0	0	0	0	14	0	0	14
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**125**	**0**	**0**	**9**
Alaska	0	0	0	0	125	0	0	4
Hawaii	0	0	0	0	0	0	0	12
U.S. Total	**0**	**0**	**0**	**27**	**2**	**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 October 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**211**	**28**	**0**	**10**	**0**	**0**	**32**
Connecticut	0	0	0	15	0	0	0
Maine	211	30	0	26	0	0	32
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	38	0	0	0
Middle Atlantic	**51**	**12**	**59**	**7**	**18**	**0**	**36**
New Jersey	0	0	0	8	0	0	0
New York	0	1	0	6	0	0	36
Pennsylvania	51	51	159	12	28	0	0
East North Central	**11**	**8**	**0**	**7**	**9**	**0**	**36**
Illinois	10	0	0	16	0	0	0
Indiana	0	1	0	12	11	0	0
Michigan	143	44	0	14	0	0	84
Ohio	0	0	0	9	0	0	0
Wisconsin	40	138	0	18	0	0	39
West North Central	**6**	**0**	**0**	**6**	**0**	**0**	**27**
Iowa	3	0	0	8	0	0	0
Kansas	0	0	0	17	0	0	0
Minnesota	26	0	0	0	0	0	27
Missouri	0	0	0	0	0	0	0
Nebraska	17	0	0	0	0	0	0
North Dakota	98	0	0	0	0	0	0
South Atlantic	**16**	**21**	**101**	**5**	**0**	**0**	**27**
Delaware	0	0	0	0	0	0	0
Florida	35	53	0	11	0	0	0
Georgia	48	37	101	20	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	38	0	27	0	0	380
South Carolina	0	0	0	6	0	0	0
Virginia	24	98	0	7	0	0	0
West Virginia	0	0	0	0	0	0	27
East South Central	**0**	**68**	**0**	**8**	**0**	**0**	**0**
Alabama	0	102	0	14	0	0	0
Kentucky	0	0	0	9	0	0	0
Mississippi	0	0	0	21	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**0**	**23**	**1**	**6**	**0**	**0**
Arkansas	0	0	0	21	0	0	0
Louisiana	0	0	0	2	8	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	62	2	7	0	0
Mountain	**32**	**0**	**0**	**5**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	197	0	0	38	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	34	0	0	7	0	0	0
Pacific Contiguous	**0**	**66**	**0**	**1**	**2**	**0**	**0**
California	0	30	0	1	2	0	0
Oregon	0	0	0	46	0	0	0
Washington	0	76	0	46	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**98**
Alaska	0	11	0	0	0	0	0
Hawaii	0	0	0	0	0	0	98
U.S. Total	**5**	**7**	**25**	**1**	**4**	**0**	**16**

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

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

Industrial Sector by Census Division and State, Year-to-Date through October 2018 (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**	**78**	**9**	**0**	**0**	**7**
Connecticut	0	0	0	598	598	0	0	15
Maine	0	0	0	0	9	0	0	10
Massachusetts	0	0	0	0	0	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	38
Middle Atlantic	**0**	**0**	**0**	**52**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	71	71	0	0	4
New York	0	0	0	0	16	0	0	6
Pennsylvania	0	0	0	74	7	0	0	9
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	18	0	0	7
Michigan	0	0	0	0	10	0	0	8
Ohio	0	0	0	0	19	0	0	8
Wisconsin	0	0	0	0	10	0	0	12
West North Central	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	16
Minnesota	0	0	0	0	0	0	0	8
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	17
North Dakota	0	0	0	0	63	0	0	53
South Atlantic	**0**	**0**	**0**	**153**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	45	0	0	0
Florida	0	0	0	153	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	4
South Carolina	0	0	0	0	3	0	0	3
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	14
East South Central	**0**	**0**	**0**	**122**	**3**	**0**	**67**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	18	0	0	11
Mississippi	0	0	0	0	4	0	0	6
Tennessee	0	0	0	122	6	0	67	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	6	0	0	6
Louisiana	0	0	0	0	5	0	1	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	4	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**5**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	12
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	8
Pacific Contiguous	**0**	**0**	**0**	**36**	**6**	**0**	**2**	**1**
California	0	0	0	36	10	0	2	1
Oregon	0	0	0	0	14	0	0	14
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**125**	**0**	**0**	**9**
Alaska	0	0	0	0	125	0	0	4
Hawaii	0	0	0	0	0	0	0	12
U.S. Total	**0**	**0**	**0**	**27**	**2**	**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, October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**1**
Connecticut	0	1	3	0	1
Maine	0	1	2	0	1
Massachusetts	1	1	5	0	1
New Hampshire	0	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	2	8	8	0	4
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	1
Indiana	1	3	2	0	1
Michigan	0	2	3	0	1
Ohio	0	1	1	0	1
Wisconsin	1	3	5	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	1	7	5	0	3
Kansas	2	1	7	0	2
Minnesota	1	5	7	0	3
Missouri	1	3	7	0	2
Nebraska	1	8	9	0	4
North Dakota	1	4	9	0	4
South Dakota	2	9	13	0	5
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	1	2	5	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	6	0	1
Georgia	2	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	3	0	1
Kentucky	1	4	3	0	2
Mississippi	2	2	5	0	2
Tennessee	1	3	5	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	2	4	0	2
Louisiana	1	1	1	0	1
Oklahoma	2	1	5	0	2
Texas	2	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	3	4	0	1
Colorado	2	5	6	0	3
Idaho	1	5	5	0	2
Montana	2	8	5	0	3
Nevada	1	2	1	0	1
New Mexico	4	8	8	0	4
Utah	3	5	3	0	2
Wyoming	2	8	4	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	1	1	2	0	1
Oregon	1	4	9	0	3
Washington	1	4	7	0	3
Pacific Noncontiguous	**1**	**5**	**4**	**0**	**2**
Alaska	2	11	17	0	6
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 October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**0**
Connecticut	0	1	3	0	1
Maine	0	1	2	0	1
Massachusetts	0	1	5	0	1
New Hampshire	0	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	1	6	6	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	0
Indiana	1	3	2	0	1
Michigan	0	1	2	0	1
Ohio	0	1	1	0	0
Wisconsin	1	3	4	0	2
West North Central	**0**	**1**	**2**	**0**	**1**
Iowa	1	6	4	0	2
Kansas	1	1	5	0	1
Minnesota	1	3	5	0	2
Missouri	1	2	5	0	1
Nebraska	1	6	6	0	3
North Dakota	1	3	6	0	3
South Dakota	1	7	9	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	2	4	0	1
District of Columbia	0	0	0	0	0
Florida	0	0	4	0	0
Georgia	1	1	3	0	1
Maryland	0	0	2	0	0
North Carolina	0	0	2	0	1
South Carolina	1	1	2	0	1
Virginia	0	0	3	0	0
West Virginia	0	1	0	0	0
East South Central	**0**	**1**	**1**	**0**	**1**
Alabama	1	1	2	0	1
Kentucky	1	3	3	0	1
Mississippi	1	1	4	0	1
Tennessee	1	3	4	0	1
West South Central	**1**	**0**	**1**	**0**	**0**
Arkansas	1	1	3	0	1
Louisiana	1	1	1	0	0
Oklahoma	1	1	3	0	1
Texas	1	1	1	0	1
Mountain	**0**	**1**	**1**	**0**	**1**
Arizona	0	2	3	0	1
Colorado	1	4	5	0	2
Idaho	1	4	3	0	1
Montana	1	6	4	0	2
Nevada	0	2	1	0	1
New Mexico	1	6	6	0	3
Utah	1	4	2	0	2
Wyoming	1	6	3	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	1	0	0
Oregon	1	3	6	0	2
Washington	0	3	5	0	2
Pacific Noncontiguous	**0**	**4**	**3**	**0**	**2**
Alaska	1	8	11	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, October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**0**
Connecticut	0	1	2	0	1
Maine	5	1	2	0	2
Massachusetts	0	1	3	0	1
New Hampshire	0	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	2	7	6	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	1
Indiana	1	4	2	0	1
Michigan	0	1	4	0	1
Ohio	0	1	1	0	1
Wisconsin	1	2	6	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	8	0	3
Kansas	2	2	6	0	2
Minnesota	1	3	8	0	2
Missouri	1	4	6	0	2
Nebraska	2	6	12	0	4
North Dakota	1	4	8	0	4
South Dakota	2	6	14	0	4
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	3	6	0	2
District of Columbia	0	0	0	0	0
Florida	0	1	6	0	0
Georgia	1	1	5	0	1
Maryland	0	1	0	0	0
North Carolina	1	1	4	0	1
South Carolina	1	1	4	0	1
Virginia	1	1	4	0	1
West Virginia	0	2	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	1	1	3	0	1
Kentucky	1	5	3	0	2
Mississippi	2	2	6	0	2
Tennessee	1	4	6	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	1	3	5	0	2
Louisiana	1	1	2	0	1
Oklahoma	1	2	6	0	1
Texas	1	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	2	3	4	0	1
Colorado	4	5	7	0	3
Idaho	1	4	6	0	2
Montana	2	5	5	0	3
Nevada	2	3	2	0	1
New Mexico	7	9	11	0	5
Utah	5	6	3	0	3
Wyoming	2	7	5	0	3
Pacific Contiguous	**1**	**1**	**1**	**0**	**0**
California	1	1	1	0	0
Oregon	1	3	10	0	2
Washington	1	3	8	0	2
Pacific Noncontiguous	**1**	**2**	**3**	**0**	**1**
Alaska	2	7	15	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**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 October 2018

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

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

Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**1**	**0**	**0**
Connecticut	0	0	2	0	0
Maine	5	1	1	0	2
Massachusetts	0	0	3	0	0
New Hampshire	0	0	1	0	0
Rhode Island	0	0	0	0	0
Vermont	2	2	2	0	1
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**0**	**0**	**0**	**0**
Illinois	0	0	0	0	0
Indiana	1	1	1	0	1
Michigan	0	1	1	0	0
Ohio	0	0	0	0	0
Wisconsin	1	1	2	0	1
West North Central	**1**	**1**	**1**	**0**	**0**
Iowa	1	3	3	0	1
Kansas	2	1	3	0	1
Minnesota	1	2	3	0	1
Missouri	1	1	2	0	1
Nebraska	1	2	5	0	2
North Dakota	1	1	3	0	1
South Dakota	2	4	5	0	2
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	1	2	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	3	0	0
Georgia	1	1	2	0	1
Maryland	0	0	2	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	2	0	0
West Virginia	0	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	3	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	**1**	**1**	**1**	**0**	**0**
Arizona	1	1	1	0	1
Colorado	2	2	2	0	1
Idaho	1	2	2	0	1
Montana	2	3	2	0	1
Nevada	1	1	1	0	1
New Mexico	4	3	4	0	2
Utah	3	2	1	0	1
Wyoming	2	3	2	0	1
Pacific Contiguous	**0**	**1**	**1**	**0**	**0**
California	0	0	1	0	0
Oregon	1	2	3	0	1
Washington	1	2	2	0	1
Pacific Noncontiguous	**1**	**3**	**2**	**0**	**1**
Alaska	2	6	7	0	3
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**0**	**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 October 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**0**	**1**
Connecticut	3	1	2	0	1
Maine	1	1	2	0	1
Massachusetts	0	1	4	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	1	7	7	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	1	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	0
Indiana	1	4	2	0	1
Michigan	0	2	3	0	1
Ohio	0	1	1	0	0
Wisconsin	1	3	5	0	2
West North Central	**0**	**2**	**3**	**0**	**1**
Iowa	1	6	6	0	3
Kansas	1	2	6	0	2
Minnesota	1	4	7	0	2
Missouri	1	3	6	0	1
Nebraska	1	7	9	0	4
North Dakota	1	4	8	0	4
South Dakota	1	8	12	0	4
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	3	5	0	2
District of Columbia	0	0	0	0	0
Florida	0	1	5	0	0
Georgia	1	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	1	1	3	0	1
Virginia	1	1	4	0	1
West Virginia	0	1	0	0	0
East South Central	**0**	**2**	**2**	**0**	**1**
Alabama	1	1	3	0	1
Kentucky	1	5	3	0	2
Mississippi	1	2	5	0	2
Tennessee	1	4	5	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	1	2	4	0	1
Louisiana	1	1	1	0	1
Oklahoma	1	2	5	0	1
Texas	2	1	2	0	1
Mountain	**0**	**2**	**2**	**0**	**1**
Arizona	0	2	4	0	1
Colorado	1	5	7	0	2
Idaho	1	4	3	0	2
Montana	1	6	6	0	3
Nevada	0	2	1	0	1
New Mexico	2	7	10	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	0
Oregon	1	4	9	0	2
Washington	1	4	7	0	2
Pacific Noncontiguous	**1**	**4**	**3**	**0**	**2**
Alaska	2	9	13	0	5
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 2018

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
2018	1	01/01/2018 5:43 PM	. .	. Hours, . Minutes	American Electric Power - Texas	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	Unknown	Unknown
2018	1	01/01/2018 6:21 PM	01/02/2018 6:11 PM	23 Hours, 50 Minutes	Tennessee Valley Authority	SERC	Tennessee:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	Unknown	Unknown
2018	1	01/01/2018 9:37 PM	01/02/2018 10:30 AM	12 Hours, 53 Minutes	Memphis Light Gas and Water Division	SERC	Tennessee:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2018	1	01/02/2018 6:45 AM	01/02/2018 9:00 AM	2 Hours, 15 Minutes	Duke Energy Progress	SERC	North Carolina: South Carolina:	System-wide voltage reductions of 3 percent or more-Severe Weather	14998	Unknown
2018	1	01/02/2018 7:30 AM	. .	. Hours, . Minutes	South Carolina Electric and Gas	SERC	South Carolina:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	0	717000
2018	1	01/02/2018 10:00 AM	02/12/2018 8:00 AM	982 Hours, 0 Minutes	Somerset Operating Company, LLC	NPCC	New York: Niagara County;	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	675	Unknown
2018	1	01/15/2018 4:20 AM	01/18/2018 5:48 AM	73 Hours, 28 Minutes	American Electric Power - Texas	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	Unknown	Unknown
2018	1	01/16/2018 1:57 PM	01/16/2018 2:32 PM	0 Hours, 35 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
2018	1	01/16/2018 3:00 PM	01/18/2018 1:00 PM	46 Hours, 0 Minutes	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2018	1	01/16/2018 3:00 PM	01/18/2018 1:00 PM	46 Hours, 0 Minutes	Tennessee Valley Authority	SERC	Tennessee:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	Unknown	Unknown
2018	1	01/17/2018 5:10 AM	01/17/2018 1:00 PM	7 Hours, 50 Minutes	Cooperative Energy	SERC	Mississippi:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	1788	420000
2018	1	01/17/2018 6:10 AM	01/17/2018 2:00 PM	7 Hours, 50 Minutes	Louisiana Generating LLC	SERC	Louisiana:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2018	1	01/18/2018 5:00 AM	01/18/2018 9:45 AM	4 Hours, 45 Minutes	Cooperative Energy	SERC	Mississippi:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	1760	420000
2018	1	01/18/2018 5:00 AM	01/18/2018 11:00 AM	6 Hours, 0 Minutes	Entergy Services, Inc.	SERC	Arkansas: Mississippi: Louisiana: Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	31500	Unknown
2018	1	01/18/2018 6:00 AM	. .	. Hours, . Minutes	Louisiana Generating LLC	SERC	Louisiana:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2018	2	02/08/2018 1:25 PM	02/08/2018 1:31 PM	0 Hours, 6 Minutes	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-System Operations	30	10900
2018	3	03/01/2018 11:43 AM	03/01/2018 11:56 AM	0 Hours, 13 Minutes	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	38	10898
2018	3	03/01/2018 9:57 PM	03/02/2018 10:14 AM	12 Hours, 17 Minutes	The Illuminating Company	RF	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	86501
2018	3	03/01/2018 10:20 PM	03/04/2018 8:00 PM	69 Hours, 40 Minutes	Detroit Edison Co	RF	Michigan: Wayne County, Washtenaw County, Oakland County, Macomb County, Monroe County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	95000
2018	3	03/02/2018 7:00 AM	. .	. Hours, . Minutes	Central Hudson Gas & Elec Corp	NPCC	New York: Dutchess County, Orange County, Greene County, Ulster County, Putnam County, Sullivan County, Albany County, Columbia County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	90000
2018	3	03/02/2018 8:00 AM	03/03/2018 11:00 PM	39 Hours, 0 Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RF	Virginia: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	65198
2018	3	03/02/2018 8:42 AM	. .	. Hours, . 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	Unknown	63331

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2018

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
2018	3	03/02/2018 11:34 AM	. .	. Hours, . Minutes	New York State Electric & Gas	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	50000
2018	3	03/02/2018 11:58 AM	. .	. Hours, . Minutes	PPL Electric Utilities Corp	RF	Pennsylvania: Berks County, Bucks County, Carbon County, Chester County, Clinton County, Columbia County, Cumberland County, Dauphin County, Juniata County, Lackawanna County, Lancaster County, Lebanon County, Lehigh County, Luzerne County, Lycoming County, Monroe County, Montgomery County, Montour County, Northampton County, Northumberland County, Pike County, Schuylkill County, Snyder 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	Unknown	126000
2018	3	03/02/2018 12:00 PM	. .	. Hours, . Minutes	Baltimore Gas and Electric	RF	Maryland:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	670	474019
2018	3	03/02/2018 12:00 PM	03/05/2018 12:00 AM	60 Hours, 0 Minutes	Exelon Corporation/PECO	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	630000
2018	3	03/02/2018 1:51 PM	03/04/2018 12:11 PM	46 Hours, 20 Minutes	Metropolitan Edison Co	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	233136
2018	3	03/02/2018 1:51 PM	03/05/2018 1:18 PM	71 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-Severe Weather	Unknown	325000
2018	3	03/02/2018 3:10 PM	03/06/2018 4:57 AM	85 Hours, 47 Minutes	Jersey Central Power & Lt Co	RF	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	249322
2018	3	03/02/2018 3:46 PM	03/04/2018 7:46 PM	52 Hours, 0 Minutes	Consolidated Edison Co-NY Inc	NPCC	New York: New York County, Westchester County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	72353
2018	3	03/02/2018 5:00 PM	03/06/2018 11:00 AM	90 Hours, 0 Minutes	Delmarva Power & Light Company	RF	Delaware: Maryland:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	60000
2018	3	03/07/2018 12:00 PM	03/07/2018 5:00 PM	5 Hours, 0 Minutes	Exelon Corporation/PECO	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	120000
2018	3	03/07/2018 4:10 PM	03/10/2018 11:32 AM	67 Hours, 22 Minutes	Jersey Central Power & Lt Co	RF	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	216800
2018	3	03/07/2018 5:15 PM	. .	. Hours, . Minutes	Public Service Electric & Gas	RF	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	50	58000
2018	3	03/07/2018 7:37 PM	03/10/2018 4:35 PM	68 Hours, 58 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Maine: New Hampshire: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	102000
2018	3	03/13/2018 8:50 AM	03/14/2018 11:22 PM	38 Hours, 32 Minutes	ISO New England	NPCC	Massachusetts: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	123629
2018	3	03/19/2018 11:29 PM	03/20/2018 3:37 AM	4 Hours, 8 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	261	78220
2018	3	03/20/2018 7:00 PM	03/25/2018 6:30 AM	107 Hours, 30 Minutes	Atlantic City Electric Co	RF	New Jersey: Atlantic County, Camden County, Cape May County, Gloucester County, Salem County, Cumberland County, Burlington County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	80	124000
2018	3	03/24/2018 10:30 PM	03/26/2018 8:00 PM	45 Hours, 30 Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RF	Virginia: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	81227
2018	4	04/04/2018 4:42 PM	04/07/2018 6:22 AM	61 Hours, 40 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	Unknown	72896
2018	4	04/05/2018 12:50 AM	04/05/2018 4:00 PM	15 Hours, 10 Minutes	ISO New England	NPCC	Connecticut: Maine: Massachusetts: New Hampshire: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	65932
2018	4	04/09/2018 11:16 AM	. .	. Hours, . Minutes	Peak Reliability	WECC	Utah:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	300	250000
2018	4	04/09/2018 12:16 PM	04/09/2018 1:52 PM	1 Hours, 36 Minutes	Pacificorp	WECC	Utah: Salt Lake County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	806	57000
2018	4	04/14/2018 9:30 AM	04/14/2018 10:00 AM	0 Hours, 30 Minutes	Entergy Corp	SERC	Louisiana: Arkansas: Mississippi: Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	56350
2018	4	04/15/2018 7:30 AM	04/18/2018 7:30 AM	72 Hours, 0 Minutes	DTE Energy	RF	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	389591
2018	4	04/15/2018 5:14 PM	04/15/2018 11:25 PM	6 Hours, 11 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	Unknown	78100
2018	5	05/04/2018 12:00 PM	05/06/2018 1:00 PM	49 Hours, 0 Minutes	DTE Energy	RF	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	300000
2018	5	05/04/2018 2:00 PM	05/05/2018 9:30 AM	19 Hours, 30 Minutes	Consumers Energy Co	RF	Michigan: Calhoun County, Genesee County, Ingham County, Kent County, Macomb County, Midland County, Saginaw County, Gratiot County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	90000

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2018

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
2018	5	05/04/2018 8:10 PM	. .	. Hours, . 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	Unknown	106150
2018	5	05/04/2018 11:10 PM	05/05/2018 12:40 AM	1 Hours, 30 Minutes	ISO New England	NPCC	New Hampshire: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	56000
2018	5	05/05/2018 4:30 AM	05/05/2018 3:30 PM	11 Hours, 0 Minutes	ISO New England	NPCC	Vermont: New Hampshire: Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	31900
2018	5	05/14/2018 7:08 PM	. .	. Hours, . Minutes	Dominion Energy VA	SERC	Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	112000
2018	5	05/15/2018 2:50 PM	. .	. Hours, . Minutes	PPL Electric Utilities Corp	RF	Pennsylvania: Lehigh County, Schuylkill County, Cumberland County, Lancaster County, Northampton County, Berks County, Clinton County, Susquehanna County, Bucks County, Carbon County, Chester County, Columbia County, Juniata County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	114000
2018	5	05/15/2018 4:00 PM	. .	. Hours, . Minutes	Central Hudson Gas & Electric	NPCC	New York: Dutchess County, Ulster County, Orange County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	72000
2018	5	05/15/2018 5:15 PM	. .	. Hours, . Minutes	New York State Electric & Gas	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	49999
2018	5	05/15/2018 5:25 PM	. .	. Hours, . Minutes	Jersey Central Power & Lt Co	RF	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	82372
2018	5	05/15/2018 6:14 PM	05/15/2018 7:00 PM	0 Hours, 46 Minutes	Metropolitan Edison Co	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	52872
2018	5	05/15/2018 6:35 PM	05/18/2018 3:57 PM	69 Hours, 22 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	120000
2018	5	05/17/2018 1:11 AM	. .	. Hours, . Minutes	Peak Reliability	WECC	California: Contra Costa County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	70	70000
2018	5	05/17/2018 1:11 AM	05/18/2018 12:38 AM	23 Hours, 27 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Transmission Disruption	124	70000
2018	5	05/26/2018 6:40 PM	05/27/2018 11:50 PM	29 Hours, 10 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	163932
2018	6	06/02/2018 5:00 AM	06/02/2018 11:00 AM	6 Hours, 0 Minutes	Kansas City Power & Light Co.	SPP RE	Missouri: Jackson County, Clay County, Platte County, Andrew County; Kansas: Johnson County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103535
2018	6	06/18/2018 6:20 PM	06/19/2018 12:15 AM	5 Hours, 55 Minutes	ISO New England	NPCC	Connecticut: Maine: Massachusetts: New Hampshire: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	112927
2018	6	06/20/2018 10:58 PM	06/21/2018 6:05 AM	7 Hours, 7 Minutes	Lake Worth Utilities	FRCC	Florida: Palm Beach County;	Complete operational failure or shut-down of the transmission and/or distribution of electrical system-Transmission Interruption	73	27000
2018	6	06/22/2018 2:38 PM	. .	. Hours, . Minutes	Peak Reliability	WECC	Washington:	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system-Severe Weather	10000	4200000
2018	6	06/28/2018 2:50 PM	06/29/2018 9:00 AM	18 Hours, 10 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	160	48109
2018	6	06/28/2018 6:36 PM	07/01/2018 7:00 AM	60 Hours, 24 Minutes	Ameren Missouri	SERC	Missouri: Illinois:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	112000
2018	6	06/29/2018 7:35 AM	06/29/2018 9:30 AM	1 Hours, 55 Minutes	Minnesota Power	MRO	Minnesota: St. Louis County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident-Severe Weather	350	Unknown
2018	7	07/11/2018 12:58 AM	. .	. Hours, . 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
2018	7	07/11/2018 3:40 PM	07/11/2018 4:00 PM	0 Hours, 20 Minutes	Tennessee Valley Authority	SERC	Tennessee:	Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident-Transmission Interruption	425	26195
2018	7	07/16/2018 5:15 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	0	0
2018	7	07/18/2018 4:00 AM	. .	. Hours, . Minutes	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
2018	7	07/18/2018 5:28 PM	07/18/2018 5:31 PM	0 Hours, 3 Minutes	Bonneville Power Administration	WECC	Oregon:	Total generation loss, within one minute of: greater than or equal to 2,000 Megawatts in the Eastern or Western Interconnection or greater than or equal to 1,400 Megawatts in the ERCOT Interconnection.-Severe Weather/Transmission Interruption	Unknown	Unknown
2018	7	07/20/2018 4:19 PM	07/20/2018 4:48 PM	0 Hours, 29 Minutes	Tennessee Valley Authority	SERC	Kentucky:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	87833

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2018

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
2018	7	07/21/2018 4:45 AM	07/21/2018 11:15 AM	6 Hours, 30 Minutes	Entergy Corp	SERC	Arkansas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	64930
2018	7	07/21/2018 7:20 AM	07/21/2018 11:30 AM	4 Hours, 10 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	143	42901
2018	7	07/23/2018 4:16 AM	07/23/2018 4:29 AM	0 Hours, 13 Minutes	Duke Energy Florida	FRCC	Florida: Pinellas County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Severe Weather/Transmission Interruption	40	Unknown
2018	7	07/26/2018 8:24 PM	. .	. Hours, . Minutes	Redding Electric Utility	WECC	California: Shasta County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System-Natural Disaster	Unknown	Unknown
2018	7	07/27/2018 9:34 AM	07/27/2018 9:51 AM	0 Hours, 17 Minutes	Peak Reliability	WECC	Washington: Clark County;	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system-System Operations	Unknown	Unknown
2018	7	07/27/2018 4:28 PM	07/27/2018 4:33 PM	0 Hours, 5 Minutes	Consolidated Edison Co-NY Inc	NPCC	New York: New York County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Severe Weather/Transmission Interruption	0	0
2018	7	07/29/2018 2:33 PM	07/29/2018 6:23 PM	3 Hours, 50 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Natural Disaster	83	57670
2018	7	07/30/2018 6:30 AM	07/30/2018 11:00 PM	16 Hours, 30 Minutes	Arizona Public Service Co	WECC	Arizona: Maricopa County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	82000
2018	8	08/07/2018 1:22 AM	08/07/2018 1:59 AM	0 Hours, 37 Minutes	Pacific Gas & Electric Co	WECC	California: Butte County;	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system.-Natural Disaster	5	485
2018	8	08/07/2018 1:22 AM	08/07/2018 7:04 PM	17 Hours, 42 Minutes	Pacific Gas & Electric Co	WECC	California: Butte County;	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system.-Natural Disaster	27	11383
2018	8	08/26/2018 10:00 PM	08/27/2018 4:56 AM	6 Hours, 56 Minutes	Consumers Energy Co	RF	Michigan: Muskegon County, Newaygo County, Oceana County, Mason County, Kent County, Mecosta County, Montcalm County, Isabella County, Midland County, Saginaw County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	67000
2018	8	08/28/2018 8:00 PM	08/30/2018 2:59 PM	42 Hours, 59 Minutes	Consumers Energy Co	RF	Michigan: Benzie County, Barry County, Grand Traverse County, Kalkaska County, Mason County, Oceana County, Muskegon County, Kent County, Newaygo County, Montcalm County, Mecosta County, Antrim County, Eaton County, Ionia County, Isabella County, Clare County, Saginaw County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	110000
2018	8	08/29/2018 12:00 AM	08/30/2018 12:00 AM	24 Hours, 0 Minutes	ComEd	SERC	Illinois:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	100000
2018	8	08/31/2018 3:07 PM	08/31/2018 3:31 PM	0 Hours, 24 Minutes	Pacificorp	WECC	Oregon:	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Natural Disaster/Transmission Interruption	96	50000
2018	9	09/06/2018 2:26 AM	09/06/2018 2:27 AM	0 Hours, 1 Minutes	Tampa Electric Co	FRCC	Florida: Hillsborough County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2018	9	09/13/2018 8:30 PM	09/19/2018 5:00 PM	140 Hours, 30 Minutes	North Carolina El Member Corp	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	300	325000
2018	9	09/13/2018 8:56 PM	09/20/2018 7:00 PM	166 Hours, 4 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	1457583
2018	9	09/15/2018 1:05 AM	09/17/2018 4:00 PM	62 Hours, 55 Minutes	South Carolina Pub Serv Auth	SERC	South Carolina: Horry County, Chesterfield County, Dillon County, Georgetown County, Marlboro County, Darlington County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50100
2018	9	09/15/2018 3:00 PM	09/15/2018 6:00 PM	3 Hours, 0 Minutes	Louisiana Generating LLC	SERC	Louisiana:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-System Operations	Unknown	Unknown

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2018

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
2018	9	09/15/2018 3:00 PM	09/15/2018 6:00 PM	3 Hours, 0 Minutes	Cooperative Energy	SERC	Mississippi: Forrest County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-System Operations	1322	420000
2018	9	09/16/2018 8:00 AM	09/18/2018 7:40 PM	59 Hours, 40 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	Unknown	50000
2018	9	09/22/2018 3:23 PM	09/22/2018 11:00 PM	7 Hours, 37 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Natural Disaster	3507	2500
2018	9	09/26/2018 1:54 PM	09/26/2018 5:58 PM	4 Hours, 4 Minutes	CenterPoint Energy	TRE	Texas: Harris County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2018	10	10/10/2018 11:59 AM	. .	. Hours, . Minutes	Southern Company	FRCC	Florida: Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	152	45604
2018	10	10/10/2018 2:00 PM	10/11/2018 6:00 AM	16 Hours, 0 Minutes	Seminole Electric Cooperative Inc.	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	135	60717
2018	10	10/10/2018 4:00 PM	10/19/2018 6:00 AM	206 Hours, 0 Minutes	City of Tallahassee	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	330	55000
2018	10	10/11/2018 7:21 AM	10/11/2018 3:00 PM	7 Hours, 39 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	Unknown	71654
2018	10	10/11/2018 1:15 PM	. .	. Hours, . 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	Unknown	240807
2018	10	10/11/2018 4:42 PM	10/12/2018 9:00 PM	28 Hours, 18 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	170222
2018	10	10/11/2018 6:55 PM	10/12/2018 12:00 PM	17 Hours, 5 Minutes	North Carolina El Member Corp	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	117000
2018	10	10/12/2018 3:36 AM	10/12/2018 1:56 PM	10 Hours, 20 Minutes	PJM Interconnection	RF	Maryland: Garrett County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2018	10	10/14/2018 10:11 PM	. .	. Hours, . Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Natural Disaster	Unknown	60000
2018	10	10/16/2018 4:15 AM	10/16/2018 5:11 PM	12 Hours, 56 Minutes	ISO New England	NPCC	Connecticut: Rhode Island: Massachusetts: Vermont: New Hampshire: Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	18000
2018	10	10/21/2018 12:16 AM	10/21/2018 4:14 PM	15 Hours, 58 Minutes	American Electric Power	RF	West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	63408
2018	10	10/31/2018 7:30 PM	11/01/2018 6:55 PM	23 Hours, 25 Minutes	CenterPoint Energy	TRE	Texas: Harris County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	402	140932

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, 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	. .	. Hours, . 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
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	. .	. Hours, . 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
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	. .	. Hours, . 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-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:	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	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	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	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	97734
2017	3	03/08/2017 9:30 AM	03/11/2017 5:00 AM	67 Hours, 30 Minutes	Consumers Energy Co	RFC	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	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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.2 Major Disturbances and Unusual Occurrences, 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	. .	. Hours, . 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	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	. .	. Hours, . Minutes	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: Daviess 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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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, Oceana 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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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.2 Major Disturbances and Unusual Occurrences, 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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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, Po	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	. .	. 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	452555
2017	9	09/11/2017 12:30 AM	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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	. .	. Hours, . Minutes	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.2 Major Disturbances and Unusual Occurrences, 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	. .	. Hours, . Minutes	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	. .	. Hours, . 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

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 approxi-mately 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 approxi-mately 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 sample21,24. 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:

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

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 estimates[1].

Some electric utilities provide service in more than one State. To facilitate the estimation, the State service area is actually used as the sampling unit. For each State served by each utility, there is a utility State part, or "State service area." This approach allows for an explicit calculation of estimates for sales, revenue, and average price of electricity to ultimate consumers by end use sector at State, Census division, and national level. Estimation procedures include imputation to account for nonresponse. Non-sampling error must also be considered. The non-sampling error is not estimated directly, although attempts are made to minimize the non-sampling error.

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

The electric revenue used to calculate the average price of electricity to ultimate consumers is the operating revenue reported by the electric utility. Operating revenue includes energy charges, demand charges, consumer service charges, environmental surcharges, fuel adjustments, and other miscellaneous charges. Electric utility operating revenues also include State and Federal income taxes and taxes other than income taxes paid by the utility.

The average price of electricity to ultimate consumers reported in this publication by sector represents a weighted average of consumer revenue and sales within sectors and across sectors for all consumers, and does not reflect the per kWh rate charged by the electric utility to the individual consumers. Electric utilities typically employ a number of rate schedules within a single sector. These alternative rate schedules reflect the varying consumption levels and patterns of consumers and their associated impact on the costs to the electric utility for providing electrical service.

Adjusting monthly data to annual data: As a final adjustment based on our most complete data, use is made of final Form EIA-861 data, when available. The annual totals for Form EIA-826 data by State and end-use sector are compared to the corresponding Form EIA-861 values for sales and revenue. The ratio of these two values in each case is then used to adjust each corresponding monthly value.

Sensitive data: Most of the data collected on the Form EIA-826 are not considered business sensitive. However, revenue, sales, and customer data collected from energy service providers (Schedule 1, Part B), which do not also provide energy delivery, are considered business sensitive and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

Form EIA-860

The Form EIA 860, "Annual Electric Generator Report," is a mandatory annual census of all existing and planned electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts. The survey is used to collect data on existing power plants and 10 year plans for constructing new plants, as well as generating unit additions, modifications, and retirements in existing plants. Data on the survey are collected at the generator level. Certain power plant environmental-related data are collected at the boiler level. These data include environmental equipment design parameters, boiler air emission standards, and boiler emission controls The Form EIA-860 is made available in January to collect data related to the previous year.

Instrument and design history: The Form EIA-860 was originally implemented in January 1985 to collect data as of year-end 1984. It was preceded by several Federal Power Commission (FPC) forms including the FPC Form 4, Form 12 and 12E, Form 67, and Form EIA-411. In January 1999, the Form EIA-860 was renamed the Form EIA-860A, "Annual Electric Generator Report – Utility" and was implemented to collect data from electric utilities as of January 1, 1999.

In 1989, the Form EIA-867, "Annual Nonutility Power Producer Report," was initiated to collect plant data on unregulated entities with a total generator nameplate capacity of 5 or more megawatts. In 1992, the reporting threshold of the Form EIA-867 was lowered to include all facilities with a combined nameplate capacity of 1 or more megawatts. Previously, data were collected every 3 years from facilities with a nameplate capacity between 1 and 5 megawatts. In 1998, the Form EIA-867, was renamed Form EIA-860B, "Annual Electric Generator Report – Nonutility." The Form EIA-860B was a mandatory survey of all existing and planned nonutility electric generating facilities in the United States with a total generator nameplate capacity of 1 or more megawatts.

Beginning with data collected for the year 2001, the infrastructure data collected on the Form EIA-860A and the Form EIA-860B were combined into the new Form EIA-860 and the monthly and annual versions of the Form EIA-906.

Starting with 2007, design parameters data formerly collected on Form EIA-767 were collected on Form EIA-860. These include design parameters associated with certain steam-electric plants' boilers, cooling systems, flue gas particulate collectors, flue gas desulfurization units, and stacks and flues.

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

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

Prime Movers: The Form EIA-860 sometimes represents a generator's prime mover by using the abbreviations in the table below.

Prime Mover Code	Prime Mover Description
BA	Energy Storage, Battery
CE	Energy Storage, Compressed Air
CP	Energy Storage, Concentrated Solar Power
FW	Energy Storage, Flywheel
PS	Energy Storage, Reversible Hydraulic Turbine (Pumped Storage)
ES	Energy Storage, Other
ST	Steam Turbine, including nuclear, geothermal and solar steam (does not include combined cycle)
GT	Combustion (Gas) Turbine (including jet engine design)
IC	Internal Combustion Engine (diesel, piston, reciprocating)
CA	Combined Cycle Steam Part
CT	Combined Cycle Combustion Turbine Part
CS	Combined Cycle Single Shaft
CC	Combined Cycle Total Unit
HA	Hydrokinetic, Axial Flow Turbine
HB	Hydrokinetic, Wave Buoy
HK	Hydrokinetic, Other
HY	Hydroelectric Turbine (including turbines associated with delivery of water by pipeline)
BT	Turbines Used in a Binary Cycle (including those used for geothermal applications)
PV	Photovoltaic
WT	Wind Turbine, Onshore
WS	Wind Turbine, Offshore
FC	Fuel Cell
OT	Other

Energy Sources: The Form EIA-860 sometimes represents the energy sources associated with generators by using the abbreviations and/or groupings in the table below.

Energy Source Grouping	Energy Source Code	Energy Source Description
Coal	ANT	Anthracite Coal
	BIT	Bituminous Coal
	LIG	Lignite Coal
	SUB	Subbituminous Coal
	SGC	Coal-Derived Synthesis Gas
	WC	Waste/Other Coal (including anthracite culm, bituminous gob, fine coal, lignite waste, waste coal)
Petroleum Products	DFO	Distillate Fuel Oil (including diesel, No. 1, No. 2, and No. 4 fuel oils)
	JF	Jet Fuel
	KER	Kerosene
	PC	Petroleum Coke
	PG	Gaseous Propane
	RFO	Residual Fuel Oil (including No. 5, and No. 6 fuel oils, and bunker C fuel oil)
	SG	Synthesis Gas from Petroleum Coke
	WO	Waste/Other Oil (including crude oil, liquid butane, liquid propane, naphtha, oil waste, re-refined motor oil, sludge oil, tar oil, or other petroleum-based liquid wastes)
Natural Gas and Other Gases	BFG	Blast Furnace Gas
	NG	Natural Gas
	OG	Other Gas
Nuclear	NUC	Nuclear (including Uranium, Plutonium, and Thorium)
Hydroelectric Conventional	WAT (Prime Mover = HY)	Water at a Conventional Hydroelectric Turbine, and water used in Wave Buoy Hydrokinetic Technology, Current Hydrokinetic Technology, and Tidal Hydrokinetic Technology
Hydroelectric Pumped Storage	WAT (Prime Mover = PS)	Pumping Energy for Reversible (Pumped Storage) Hydroelectric Turbine
Wood and Wood-Derived Fuels	WDS	Wood/Wood Waste Solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids)
	WDL	Wood Waste Liquids (excluding Black Liquor but including red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids)
	BLQ	Black Liquor
Other Biomass	AB	Agricultural By-Products
	MSW	Municipal Solid Waste
	OBG	Other Biomass Gas (including digester gas, methane, and other biomass gases)
	OBL	Other Biomass Liquids
	OBS	Other Biomass Solids
	LFG	Landfill Gas
	SLW	Sludge Waste
Other Renewable Energy Sources	SUN	Solar (including solar thermal)
	WND	Wind
	GEO	Geothermal
Other Energy Sources	PUR	Purchased Steam
	WH	Waste heat not directly attributed to a fuel source
	TDF	Tire-Derived Fuels
	MWH	Electricity used for energy storage
	OTH	Other

Sensitive data: The tested heat rate data collected on the Form EIA-860 are considered business sensitive.

Form EIA-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 per-formed 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
Prime Movers:
Combined Cycle Steam - 0.97
Combined Cycle Single Shaft - 0.97
Combined Cycle Combustion Turbine - 0.97
Compressed Air - 0.97
Fuel Cell - 0.99
Gas Turbine - 0.98
Hydroelectric Turbine - 0.99
Hydroelectric Pumped Storage - 0.99
Internal Combustion Engine - 0.98
Other - 0.97
Photovoltaic - 0.99
Steam Turbine - 0.97
Wind Turbine - 0.99
Environmental Equipment:
Flue Gas Desulfurization - 0.97
Flue Gas Particulate 0.99
All Others - 0.97

For stocks, a linear combination of the prior month's ending stocks value and the current month's consumption and receipts values 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 waste[2]: 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 kilowatthour.

Second, to calculate the amount of fuel for electric power, the gross generation in Btu is multiplied by the efficiency factor. The fuel for UTO is the difference between the total fuel reported and the fuel for electric power generation. UTO is calculated by multiplying the fuel for UTO by the efficiency factor.

In addition, if the total fuel reported is less than the estimated fuel for electric power generation, then the fuel for electric power generation is equal to the total fuel consumed, and the UTO will be zero.

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

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

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

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

Issues within historical data series:

Receipts and cost and quality of fossil fuels
Values for receipts of natural gas for 2001 forward do not include blast furnace gas or other gas.

Historical data collected on FERC Form 423 and published by EIA have been reviewed for consistency between volumes and prices and for their consistency over time. However, these data were collected by FERC for regulatory rather than statistical and publication purposes. EIA did not attempt to resolve any late filing issues in the FERC Form 423 data. In 2003, EIA introduced a procedure to estimate for late or non-responding entities due to report on the FERC Form 423. Due to the introduction of this procedure, 2003 and later data cannot be directly compared to previous years' data. In January 2013, this estimation procedure was dropped.

Prior to 2008, regulated plants reported receipts data on the FERC Form 423. These plants, along with unregulated plants, now report receipts data on Schedule 2 of Form EIA-923. Because FERC issued waivers to the FERC Form 423 filing requirements to some plants who met certain criteria, and because not all types of generators were required to report (only steam turbines and combined-cycle units reported), a significant number of plants either did not submit fossil fuel receipts data or submitted only a portion of their fossil fuel receipts. Since Form EIA-923 does not have exemptions based on generator type or reporting waivers, receipts data from 2008 and later cannot be directly compared to previous years' data for the regulated sector. Furthermore, there may be a notable increase in fuel receipts beginning with January 2008 data.

Starting with the revised data for 2008, tables for total receipts begin to reflect estimation for all plants with capacity over 1 megawatt, to be consistent with other electric power data. Previous receipts data published have been a legacy of their original collection as information for a regulatory agency, not as a survey to provide more meaningful estimates of totals for statistical purposes. Totals appeared to become smaller as more electric production came from unregulated plants, until the Form EIA-423 was created to help fill that gap. As a further improvement, estimation of all receipts for the universe normally depicted in the EPM (i.e., 1 megawatt and above), with associated relative standard errors, provides a more complete assessment of the market.

Generation and consumption
Beginning in 2008, a new method of allocating fuel consumption between electric power generation and useful thermal output (UTO) was implemented. This new methodology evenly distributes a combined heat and power (CHP) plant's losses between the two output products (electric power and UTO). In the historical data, UTO was consistently assumed to be 80 percent efficient and all other losses at the plant were allocated to electric power. This change causes the fuel for electric power to be decreased while the fuel for UTO is increased as both are given the same efficiency. This results in the appearance of an increase in efficiency of production of electric power between periods.

Sensitive data: Most of the data collected on the Form EIA-923 are not considered business sensitive. However, the cost of fuel delivered to nonutilities, commodity cost of fossil fuels, and reported fuel stocks at the end of the reporting period are considered business sensitive and must adhere to EIA's "Policy on the Disclosure of Individually Identifiable Energy Information in the Possession of the EIA" (45Federal Register 59812 (1980)).

Average Capacity Factors

This section describes the methodology for calculating capacity factors by fuel and technology type for operating electric power plants. Capacity factor is a measure (expressed as a percent) of how often an electric generator operates over a specific period of time, using a ratio of the actual output to the maximum possible output over that time period.

The capacity factor calculation only includes operating electric generators in the Electric Power Sector (sectors 1, 2 and 3) using the net generation reported on the Form EIA-923 and the net summer capacity reported on the Form EIA-860. The capacity factor for a particular fuel/technology type is given by:

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

Where x represents generators of that fuel/technology combination and m represents the period of time (month or year). Generation and capacity are specific to a generator, and the generator is categorized by its primary fuel type as reported on the EIA-860. All generation from that generator is included, regardless of other fuels consumed. Available time is also specific to the generator in order to account for differing online and retirement dates. Therefore, these published capacity factors will differ from a simple calculation using annual generation and capacity totals from the appropriate tables in this publication.

NERC classification

The Florida Reliability Coordinating Council (FRCC) separated itself from the Southeastern Electric Reliability Council (SERC) in the mid-1990s. In 1998, several utilities realigned from Southwest Power Pool (SPP) to SERC. Name changes altered both the Mid-Continent Area Power Pool (MAPP) to the Midwest Reliability Organization (MRO) and the Western Systems Coordinating Council (WSCC) to the Western Energy Coordinating Council (WECC). The MRO membership boundaries have altered over time, but WECC membership boundaries have not. The utilities in the associated regional entity identified as the Alaska System Coordination Council (ASCC) dropped their formal participation in NERC. Both the States of Alaska and Hawaii are not contiguous with the other continental States and have no electrical interconnections. At the close of calendar year 2005, the following reliability regional councils were dissolved: East Central Area Reliability Coordinating Agreement (ECAR), Mid-Atlantic Area Council (MAAC), and Mid-America Interconnected Network (MAIN).

On January 1, 2006, the ReliabilityFirst Corporation (RFC) came into existence as a new regional reliability council. Individual utility membership in the former ECAR, MAAC, and MAIN councils mostly shifted to RFC. However, adjustments in membership as utilities joined or left various reliability councils impacted MRO, SERC, and SPP. The Texas Regional Entity (TRE) was formed from a delegation of authority from NERC to handle the regional responsibilities of the Electric Reliability Council of Texas (ERCOT). The revised delegation agreements covering all the regions were approved by the Federal Energy Regulatory Commission on March 21, 2008. Reliability Councils that are unchanged include: Florida Reliability Coordinating Council (FRCC), Northeast Power Coordinating Council (NPCC), and the Western Energy Coordinating Council (WECC

The new NERC Regional Council names are as follows:

- Florida Reliability Coordinating Council (FRCC),
- Midwest Reliability Organization (MRO),
- Northeast Power Coordinating Council (NPCC),
- ReliabilityFirst Corporation (RFC),
- Southeastern Electric Reliability Council (SERC),
- Southwest Power Pool (SPP),
- Texas Regional Entity (TRE), and
- Western Energy Coordinating Council (WECC).

Business classification

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

Agriculture, Forestry, and Fishing

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

Mining

211 Oil and gas extraction
2121 Coal mining
2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

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

Transportation and Public Utilities

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

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

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

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

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

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

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

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

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

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

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

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

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

e_i is the error term

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

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

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

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

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

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

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

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

Appendix 1- MSAs

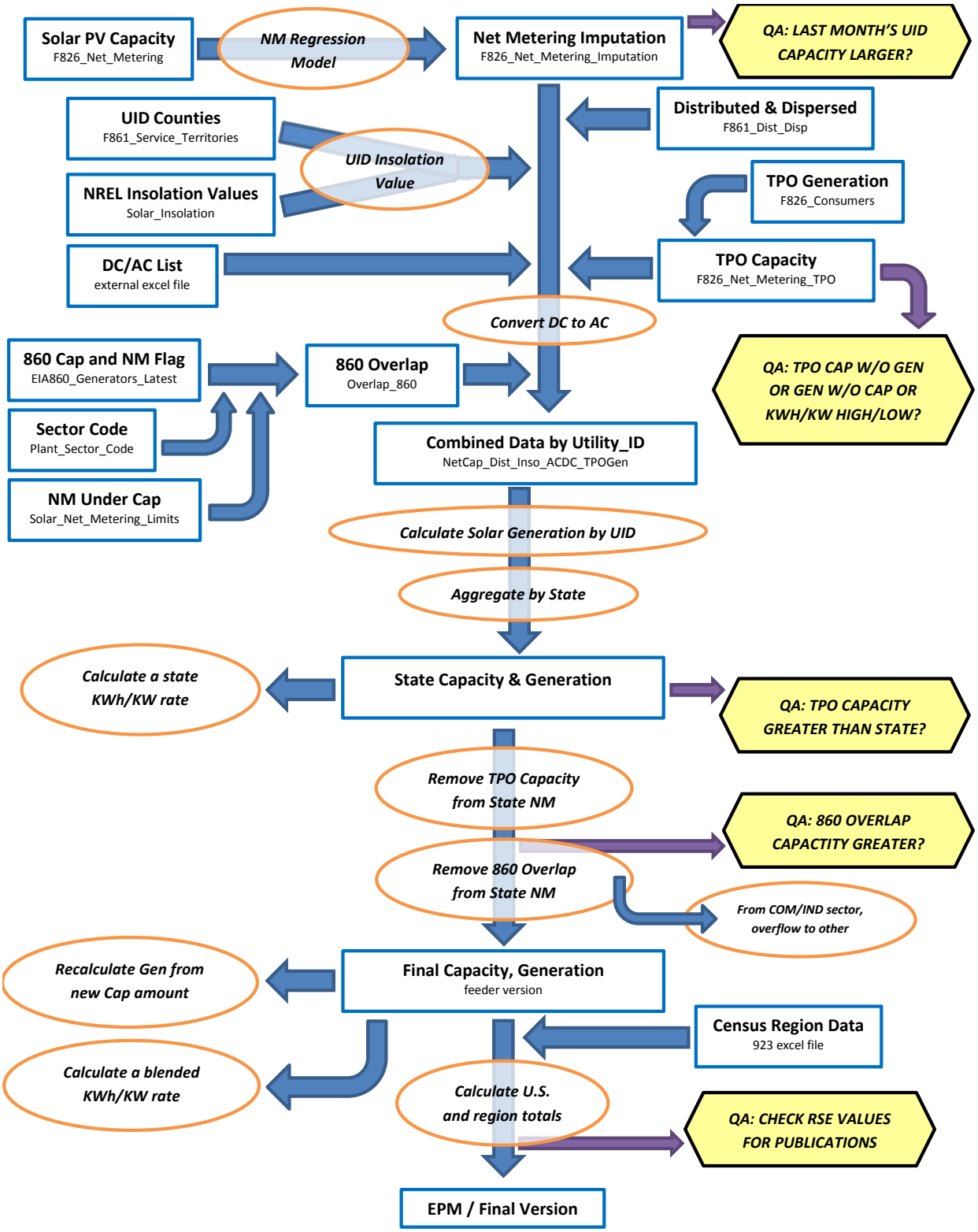
TMY3 (1991-2005) Weather Stations by MSA

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

37	USA VA Norfolk Int'l Airport	Virginia Beach-Norfolk-Newport News, VA-NC MSA
38	USA RI Providence T F Green State	Providence-Warwick, RI-MA MSA
39	USA WI Milwaukee Mitchell Intl Airport	Milwaukee-Waukesha-West Allis, WI MSA
40	USA FL Jacksonville Craig	Jacksonville, FL MSA
41	USA TN Memphis Int'l Airport	Memphis, TN-MS-AR MSA
42	USA OK Oklahoma City Will Rogers	Oklahoma City, OK MSA
43	USA KY Louisville Bowman Field	Louisville/Jefferson County, KY-IN MSA
44	USA VA Richmond Int'l Airport	Richmond, VA MSA
45	USA LA New Orleans Alvin Callender	New Orleans-Metairie, LA MSA
46	USA CT Hartford Bradley Intl Airport	Hartford-West Hartford-East Hartford, CT MSA
47	USA NC Raleigh Durham Int'l	Raleigh, NC MSA
48	USA UT Salt Lake City Int'l Airport	Salt Lake City, UT MSA
49	USA AL Birmingham Municipal Airport	Birmingham-Hoover, AL MSA
50	USA NY Buffalo Niagara Intl Airport	Buffalo-Cheektowaga-Niagara Falls, NY MSA
51	USA NY Rochester Greater Rochester	Rochester, NY MSA
52	USA MI Grand Rapids Kent County Int'l Airport	Grand Rapids-Wyoming, MI MSA
53	USA AZ Tucson Int'l Airport	Tucson, AZ MSA
54	USA HI Honolulu Intl Airport	Urban Honolulu, HI MSA
55	USA OK Tulsa Int'l Airport	Tulsa, OK MSA
56	USA CA Fresno Yosemite Intl Airport	Fresno, CA MSA
57	USA CT Bridgeport Sikorsky Memorial	Bridgeport-Stamford-Norwalk, CT MSA
58	USA MA Worchester 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 Worchester Regional Airport	Springfield, MA MSA
87	USA FL Lakeland Linder Regional Airport	Lakeland-Winter Haven, FL MSA
88	USA UT Ogden Hinkley Airport	Ogden-Clearfield, UT MSA
89	USA OH Toledo Express Airport	Toledo, OH MSA
90	USA FL Daytona Beach Intl Airport	Deltona-Daytona Beach-Ormond Beach, FL MSA
91	USA IA Des Moines Intl Airport	Des Moines-West Des Moines, IA MSA
92	USA GA Augusta Bush Field	Augusta-Richmond County, GA-SC MSA
93	USA MS Jackson Int'l Airport	Jackson, MS MSA
94	USA UT Provo Muni	Provo-Orem, UT MSA
95	USA PA Wilkes-Barre Scranton Intl Airport	Scranton–Wilkes-Barre–Hazleton, PA MSA
96	USA PA Harrisburg Capital City Airport	Harrisburg-Carlisle, PA MSA
97	USA OH Youngstown Regional Airport	Youngstown-Warren-Boardman, OH-PA MSA
98	USA FL Melbourne Regional Airport	Palm Bay-Melbourne-Titusville, FL MSA
99	USA TN Chattanooga Lovell Field Airport	Chattanooga, TN-GA MSA
100	USA WA Spokane Int'l Airport	Spokane-Spokane Valley, WA MSA

Appendix 2 – Flow diagram of data sources and analysis



[1] The basic technique employed is described in the paper "Model-Based Sampling and Inference," on the EIA website. Additional references can be found on the InterStat website (http://interstat.statjournals.net/). See the following sources: Knaub, J.R., Jr. (1999a), "Using Prediction-Oriented Software for Survey Estimation," InterStat, August 1999, http://interstat.statjournals.net/; Knaub, J.R. Jr. (1999b), "Model-Based Sampling, Inference and Imputation," EIA web site: http://www.eia.gov/cneaf/electricity/forms/eiawebme.pdf; Knaub, J.R., Jr. (2005), "Classical Ratio Estimator," InterStat, October 2005, http://interstat.statjournals.net/; Knaub, J.R., Jr. (2007a), "Cutoff Sampling and Inference," InterStat, April 2007, http://interstat.statjournals.net/; Knaub, J.R., Jr. (2008), "Cutoff Sampling." Definition in Encyclopedia of Survey Research Methods, Editor: Paul J. Lavrakas, Sage, to appear; Knaub, J.R., Jr. (2000), "Using Prediction-Oriented Software for Survey Estimation - Part II: Ratios of Totals," InterStat, June 2000, http://interstat.statjournals.net/; Knaub, J.R., Jr. (2001), "Using Prediction-Oriented Software for Survey Estimation - Part III: Full-Scale Study of Variance and Bias," InterStat, June 2001, http://interstat.statjournals.net/.

[2] See the following sources: Bahillo, A. et al. Journal of Energy Resources Technology, "NOx and N2O Emissions During Fluidized Bed Combustion of Leather Wastes." Volume 128, Issue 2, June 2006. pp. 99-103; U.S. Energy Information Administration. *Renewable Energy Annual 2004*. "Average Heat Content of Selected Biomass Fuels." Washington, DC, 2005; Penn State Agricultural College Agricultural and Biological Engineering and Council for Solid Waste Solutions. Garth, J. and Kowal, P. Resource Recovery, Turning Waste into Energy, University Park, PA, 1993; Utah State University Recycling Center Frequently Asked Questions. Published at http://www.usu.edu/recycle/faq.htm. Accessed December 2006.

[3] Biogenic components include newsprint, paper, containers and packaging, leather, textiles, yard trimmings, food wastes, and wood. Non-biogenic components include plastics, rubber and other miscellaneous non-biogenic waste.

Table C.1 Average Heat Content of Fossil-Fuel Receipts, October 2018

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	25.50	5.85	--	1.03
Connecticut	--	5.80	--	1.03
Maine	25.50	6.25	--	1.06
Massachusetts	--	5.82	--	1.03
New Hampshire	--	5.77	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.92	6.01	--	1.03
New Jersey	26.07	5.77	--	1.03
New York	--	5.88	--	1.03
Pennsylvania	22.83	6.07	--	1.04
East North Central	20.11	5.80	27.05	1.05
Illinois	17.69	5.79	--	1.01
Indiana	22.08	5.75	--	1.05
Michigan	18.44	5.88	27.13	1.05
Ohio	24.68	5.78	--	1.06
Wisconsin	17.93	5.88	26.51	1.03
West North Central	16.60	5.80	27.83	1.05
Iowa	17.51	5.76	27.83	1.09
Kansas	17.07	5.80	--	1.01
Minnesota	17.72	5.80	--	1.09
Missouri	17.63	5.78	--	1.02
Nebraska	16.96	--	--	1.07
North Dakota	13.00	5.90	--	1.01
South Dakota	16.43	6.00	--	--
South Atlantic	23.74	5.84	--	1.03
Delaware	25.93	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.64	5.82	--	1.02
Georgia	19.63	5.81	--	1.03
Maryland	25.66	5.81	--	1.03
North Carolina	25.06	6.16	--	1.04
South Carolina	24.58	5.91	--	1.03
Virginia	25.09	5.80	--	1.05
West Virginia	25.07	5.77	--	1.07
East South Central	20.83	5.78	--	1.03
Alabama	19.45	5.63	--	1.03
Kentucky	22.07	5.81	--	1.02
Mississippi	14.59	5.80	--	1.02
Tennessee	22.45	5.76	--	1.00
West South Central	16.10	5.84	28.69	1.03
Arkansas	17.38	5.88	--	1.02
Louisiana	16.78	--	28.69	1.03
Oklahoma	17.21	5.80	--	1.02
Texas	15.64	5.80	--	1.02
Mountain	18.53	5.82	--	1.05
Arizona	19.37	5.79	--	1.04
Colorado	18.43	--	--	1.13
Idaho	--	--	--	--
Montana	17.11	5.92	--	1.05
Nevada	18.85	5.81	--	1.04
New Mexico	18.29	5.66	--	1.04
Utah	21.59	5.87	--	1.04
Wyoming	17.66	5.88	--	1.05
Pacific Contiguous	17.26	6.00	--	1.04
California	22.83	--	--	1.03
Oregon	17.36	--	--	1.05
Washington	16.89	6.00	--	1.09
Pacific Noncontiguous	18.16	6.15	--	1.00
Alaska	14.14	5.60	--	1.00
Hawaii	19.45	6.15	--	--
U.S. Total	19.13	6.05	28.31	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, 2015 through 2017

	Mean Absolute Value of Percent Change Total (All Sectors)		
Item	**2015**	**2016**	**2017**
Net Generation			
Coal	0.33%	0.09%	0.17%
Petroleum Liquids	1.00%	3.08%	3.76%
Petroleum Coke	1.60%	1.46%	5.79%
Natural Gas	0.18%	0.30%	1.93%
Other Gases	3.90%	3.76%	11.64%
Hydroelectric	1.08%	0.76%	2.47%
Nuclear	0.01%	0.05%	0.00%
Other	0.80%	0.76%	2.50%
Total	**0.23%**	**0.08%**	**0.63%**
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.24%	0.11%	0.13%
Petroleum Liquids	2.28%	5.81%	4.01%
Petroleum Coke	1.50%	0.87%	4.95%
Natural Gas	0.32%	2.26%	1.08%
Fuel Stocks for Electric Power Sector			
Coal	0.40%	0.72%	0.18%
Petroleum Liquids	2.92%	3.19%	1.97%
Petroleum Coke	0.04%	0.27%	14.42%
Retail Sales			
Residential	0.30%	0.26%	0.31%
Commercial	0.18%	0.55%	0.28%
Industrial	2.92%	4.31%	4.00%
Transportation	0.37%	0.06%	0.12%
Total	**0.93%**	**1.40%**	**1.12%**
Revenue			
Residential	0.15%	0.28%	0.26%
Commercial	0.62%	1.21%	0.28%
Industrial	3.15%	4.54%	3.52%
Transportation	1.09%	1.53%	0.21%
Total	**0.83%**	**1.34%**	**0.57%**
Average Retail Price			
Residential	0.15%	0.05%	0.21%
Commercial	0.44%	0.65%	0.20%
Industrial	0.31%	0.24%	0.51%
Transportation	0.83%	1.57%	0.20%
Total	**0.11%**	**0.10%**	**0.53%**
Receipt of Fossil Fuels			
Coal	1.70%	1.92%	1.30%
Petroleum Liquids	1.86%	1.16%	3.18%
Petroleum Coke	2.47%	0.01%	0.00%
Natural Gas	0.25%	0.21%	19.49%
Cost of Fossil Fuels			
Coal	0.04%	0.12%	0.83%
Petroleum Liquids	0.25%	0.26%	0.34%
Petroleum Coke	1.42%	0.12%	0.00%
Natural Gas	0.14%	0.12%	0.47%

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 cahnges.
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, 2015 through 2017

Item	2015			2016			2017		
	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	1,356,057	1,352,398	-0.27%	1,240,108	1,239,149	-0.08%	1,207,901	1,205,835	-0.17%
Petroleum Liquids	17,456	17,372	-0.48%	12,675	13,008	2.63%	12,583	12,414	-1.34%
Petroleum Coke	10,987	10,877	-1.00%	11,232	11,197	-0.31%	8,508	8,976	5.50%
Natural Gas	1,335,068	1,333,482	-0.12%	1,380,295	1,378,307	-0.14%	1,272,864	1,296,415	1.85%
Other Gases	12,963	13,117	1.18%	13,000	12,807	-1.48%	14,159	12,469	-11.94%
Hydroelectric	246,075	243,989	-0.85%	259,143	261,126	0.77%	293,550	293,839	0.10%
Nuclear	797,178	797,178	0.00%	805,327	805,694	0.05%	804,950	804,950	0.00%
Other	311,597	309,189	-0.77%	357,299	355,387	-0.54%	400,289	399,371	-0.23%
Total	**4,087,381**	**4,077,601**	**-0.24%**	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,268**	**0.48%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	740,855	739,594	-0.17%	678,005	677,371	-0.09%	663,479	663,911	0.07%
Petroleum Liquids (1,000 barrels)	29,545	28,925	-2.10%	21,225	22,405	5.56%	21,935	21,696	-1.09%
Petroleum Coke (1,000 tons)	4,088	4,044	-1.07%	4,275	4,253	-0.52%	3,349	3,490	4.21%
Natural Gas (1,000 Mcf)	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%	9,440,777	9,507,760	0.71%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	197,128	195,548	-0.80%	163,946	162,009	-1.18%	137,155	137,687	0.39%
Petroleum Liquids (1,000 barrels)	32,223	32,884	2.05%	30,880	31,839	3.11%	28,723	29,294	1.99%
Petroleum Coke (1,000 tons)	1,342	1,340	-0.15%	872	845	-3.10%	1,113	864	-22.42%
Retail Sales (Million kWh)									
Residential	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%	1,378,819	1,378,648	-0.01%
Commercial	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%	1,349,208	1,352,888	0.27%
Industrial	958,563	986,508	2.92%	936,269	976,715	4.32%	946,443	984,298	4.00%
Transportation	7,659	7,637	-0.29%	7,499	7,497	-0.03%	7,524	7,523	-0.02%
Total	**3,724,525**	**3,758,992**	**0.93%**	**3,710,779**	**3,762,462**	**1.39%**	**3,681,995**	**3,723,356**	**1.12%**
Revenue (Million Dollars)									
Residential	177,367	177,624	0.14%	176,585	177,077	0.28%	177,860	177,661	-0.11%
Commercial	143,893	144,781	0.62%	140,937	142,643	1.21%	144,108	144,242	0.09%
Industrial	66,088	68,166	3.14%	63,201	66,068	4.54%	65,394	67,691	3.51%
Transportation	779	771	-1.12%	711	722	1.53%	727	728	0.15%
Total	**388,127**	**391,341**	**0.83%**	**381,435**	**386,509**	**1.33%**	**388,089**	**390,322**	**0.58%**
Average Retail Price (Cents/kWh)									
Residential	12.67	12.65	-0.16%	12.55	12.55	0.02%	12.90	12.89	-0.10%
Commercial	10.59	10.64	0.44%	10.37	10.43	0.65%	10.68	10.66	-0.18%
Industrial	6.89	6.91	0.22%	6.75	6.76	0.21%	6.91	6.88	-0.47%
Transportation	10.17	10.09	-0.83%	9.48	9.63	1.55%	9.67	9.68	0.17%
Total	**10.42**	**10.41**	**-0.10%**	**10.28**	**10.27**	**-0.06%**	**10.54**	**10.48**	**-0.54%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	769,866	782,929	1.70%	638,564	650,770	1.91%	634,118	642,364	1.30%
Petroleum Liquids (1,000 barrels)	24,512	24,320	-0.78%	16,610	16,807	1.18%	15,619	16,127	3.25%
Petroleum Coke (1,000 tons)	4,779	4,897	2.46%	4,166	4,166	0.01%	3,309	3,309	0.00%
Natural Gas (1,000 Mcf)	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%	8,050,520	9,628,733	19.60%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.22	2.22	-0.03%	2.12	2.11	-0.15%	2.08	2.06	-0.87%
Petroleum Liquids (1,000 barrels)	11.48	11.49	0.10%	9.36	9.39	0.28%	11.82	11.86	0.36%
Petroleum Coke (1,000 tons)	1.87	1.84	-1.37%	1.65	1.65	0.15%	2.13	2.13	0.00%
Natural Gas (1,000 Mcf)	3.22	3.23	0.18%	2.88	2.87	-0.06%	3.39	3.37	-0.55%

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 kilowatthour 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 2017 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 earths 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 though 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.

Watthour (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.