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Preface

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

Background

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

Data sources

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

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Executive Summary

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Net Generation and Consumption of Fuels for September															
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential		
					Electric Utilities		Independent Power Producers								
Fuel	Facility Type	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Net Generation (Thousand Megawatthours)															
Coal	Utility Scale Facilities	85,918	96,544	-11.0%	64,868	73,021	20,506	22,941	21	24	524	558	0	0
Petroleum Liquids	Utility Scale Facilities	942	1,055	-10.7%	693	781	203	233	11	7	35	34	0	0
Petroleum Coke	Utility Scale Facilities	638	799	-20.1%	460	639	118	108	0	1	60	51	0	0
Natural Gas	Utility Scale Facilities	150,742	141,762	6.3%	75,933	68,655	65,876	64,319	738	771	8,195	8,017	0	0
Other Gas	Utility Scale Facilities	1,139	1,104	3.1%	10	3	349	328	0	0	781	773	0	0
Nuclear	Utility Scale Facilities	65,892	64,725	1.8%	34,770	34,377	31,122	30,348	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	16,372	19,166	-14.6%	15,029	17,368	1,250	1,692	NM	16	81	90	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	37,200	30,683	21.2%	4,727	3,723	29,983	24,402	264	258	2,227	2,300	0	0
... Wind	Utility Scale Facilities	24,299	18,518	31.2%	3,679	2,874	20,599	15,627	14	12	8	6	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	6,726	5,961	12.8%	616	436	6,053	5,475	51	46	6	4	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,287	3,286	0.0%	266	234	855	810	8	8	2,158	2,234	0	0
... Other Biomass	Utility Scale Facilities	1,505	1,590	-5.3%	83	94	1,206	1,247	161	193	56	56	0	0
... Geothermal	Utility Scale Facilities	1,383	1,328	4.1%	83	85	1,270	1,243	30	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-671	-603	11.3%	-583	-500	-88	-103	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,129	1,004	12.4%	43	47	595	515	90	80	400	363	0	0
All Energy Sources	Utility Scale Facilities	359,301	356,239	0.9%	195,950	198,115	149,913	144,783	1,135	1,156	12,303	12,185	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	3,222	2,674	20.5%	0	0	0	0	1,012	893	281	242	1,929	1,539
Estimated Total Solar Photovoltaic	All Facilities	9,654	8,205	17.7%	613	432	5,761	5,049	1,064	938	287	247	1,929	1,539
Estimated Total Solar	All Facilities	9,948	8,635	15.2%	616	436	6,053	5,475	1,064	938	287	247	1,929	1,539
Consumption of Fossil Fuels for Electricity Generation															
Coal (1000 tons)	Utility Scale Facilities	47,802	53,914	-11.3%	35,731	40,293	11,876	13,415	6	7	189	199	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,661	1,863	-10.8%	1,262	1,401	336	411	27	18	37	33	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	259	325	-20.2%	183	259	59	50	0	0	17	15	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,115,478	1,051,744	6.1%	581,753	530,570	481,162	468,661	4,663	4,838	47,900	47,675	0	0
Consumption of Fossil Fuels for Useful Thermal Output															
Coal (1000 tons)	Utility Scale Facilities	934	1,061	-12.0%	180	183	62	97	37	38	655	743	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	157	130	21.2%	4	7	21	15	28	15	104	93	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	91	74	22.7%	2	1	7	7	0	1	82	65	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	99,974	99,352	0.6%	4,233	3,479	27,776	27,089	6,333	6,581	61,631	62,203	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output															
Coal (1000 tons)	Utility Scale Facilities	48,736	54,975	-11.3%	35,911	40,475	11,938	13,512	42	45	844	943	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,819	1,993	-8.8%	1,266	1,407	357	426	56	34	140	127	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	350	399	-12.2%	185	260	67	58	0	1	98	80	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,215,452	1,151,095	5.6%	585,986	534,049	508,938	495,750	10,996	11,419	109,531	109,877	0	0
Fuel Stocks (end-of-month)															
Coal (1000 tons)	Utility Scale Facilities	111,746	101,630	10.0%	90,128	84,975	21,075	15,705	51	NM	491	854	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	28,315	27,836	1.7%	17,529	17,707	8,944	8,282	382	410	1,460	1,437	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	474	844	-43.8%	282	557	11	51	1	3	180	233	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for September									
	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	September 2019	September 2018	Percentage Change	September 2019	September 2018	Percentage Change	September 2019	September 2018	Percentage Change
Residential	131,038	128,910	1.7%	17,252	16,775	2.8%	13.17	13.01	1.2%
Commercial	121,379	122,034	-0.5%	13,317	13,085	1.8%	10.97	10.72	2.3%
Industrial	81,940	85,758	-4.5%	5,811	6,045	-3.9%	7.09	7.05	0.6%
Transportation	682	640	6.4%	67	64	4.1%	9.83	10.05	-2.2%
All Sectors	335,038	337,342	-0.7%	36,447	35,969	1.3%	10.88	10.66	2.1%

NM = Not meaningful due to large relative standard error.
W = Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Coal generation and consumption includes anthracite, bituminous, subbituminous, lignite, waste coal, refined coal, synthetic coal, and coal-derived synthesis gas.
Petroleum Liquids includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
Petroleum Coke includes petroleum coke and synthesis gas derived from petroleum coke.
Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.
Other Gases includes blast furnace gas and other manufactured and waste gases derived from fossil fuels.
Wood and Wood-Derived Fuels include wood, black liquor, and other wood waste.
Other Biomass includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, and other biomass.
Coal stocks include anthracite, bituminous, subbituminous, lignite, refined coal, and synthetic coal; waste coal is excluded.
Sales of electricity to ultimate customers and net generation may not correspond exactly for a particular month for a variety of reasons (e.g., sales data may include imported electricity).
Net generation is presented for the calendar month while sales of electricity to ultimate customers and associated revenue accumulate from bills collected for periods of time that vary depending

Table ES1.B. Total Electric Power Industry Summary Statistics, Year-to-Date 2019 and 2018

Net Generation and Consumption of Fuels for January through September														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	751,249	869,087	-13.6%	564,438	654,160	181,790	209,321	207	233	4,814	5,372	0	0
Petroleum Liquids	Utility Scale Facilities	8,749	13,259	-34.0%	6,159	7,997	2,167	4,771	84	105	339	386	0	0
Petroleum Coke	Utility Scale Facilities	6,045	6,968	-13.2%	4,400	5,361	1,119	1,107	4	4	522	496	0	0
Natural Gas	Utility Scale Facilities	1,201,170	1,127,822	6.5%	598,858	557,827	522,985	493,003	6,499	6,460	72,829	70,532	0	0
Other Gas	Utility Scale Facilities	10,320	10,281	0.4%	132	152	3,202	3,020	0	0	6,987	7,110	0	0
Nuclear	Utility Scale Facilities	610,006	612,076	-0.3%	325,598	321,621	284,408	290,455	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	214,512	228,266	-6.0%	195,790	209,761	17,710	17,529	168	181	844	796	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	333,464	315,794	5.6%	41,444	36,870	268,682	255,056	2,464	2,424	20,873	21,444	0	0
... Wind	Utility Scale Facilities	219,038	205,138	6.8%	32,286	28,606	186,540	176,335	133	127	79	70	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	57,976	52,003	11.5%	5,159	3,883	52,316	47,650	449	432	52	38	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	30,253	31,107	-2.7%	2,491	2,604	7,553	7,740	72	62	20,138	20,701	0	0
... Other Biomass	Utility Scale Facilities	13,888	15,629	-11.1%	796	1,024	10,998	12,167	1,492	1,802	603	636	0	0
... Geothermal	Utility Scale Facilities	12,309	11,917	3.3%	714	754	11,276	11,163	319	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-3,850	-4,548	-15.3%	-3,055	-3,699	-795	-848	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	10,019	9,675	3.6%	363	419	5,439	4,996	807	762	3,410	3,498	0	0
All Energy Sources	Utility Scale Facilities	3,141,685	3,188,680	-1.5%	1,734,128	1,790,467	1,286,706	1,278,409	10,234	10,169	110,617	109,635	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	27,984	23,467	19.2%	0	0	0	0	8,921	7,800	2,410	2,085	16,653	13,583
Estimated Total Solar Photovoltaic	All Facilities	83,251	72,414	15.0%	5,133	3,838	49,633	44,638	9,370	8,232	2,462	2,123	16,653	13,583
Estimated Total Solar	All Facilities	85,959	75,471	13.9%	5,159	3,883	52,316	47,650	9,370	8,232	2,462	2,123	16,653	13,583
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	419,067	480,466	-12.8%	312,102	358,626	105,199	119,836	59	67	1,707	1,938	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	15,436	23,261	-33.6%	11,232	14,479	3,674	8,170	176	212	354	400	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,428	2,802	-13.4%	1,765	2,146	522	522	1	1	139	133	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,809,838	8,354,989	5.4%	4,576,572	4,313,291	3,763,345	3,580,792	40,410	40,502	429,510	420,405	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	9,563	10,433	-8.3%	1,658	1,755	929	1,008	340	374	6,636	7,297	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,730	1,910	-9.4%	58	91	192	238	328	269	1,152	1,311	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	684	698	-1.9%	12	10	72	68	5	6	594	614	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	923,653	899,683	2.7%	35,708	32,784	257,366	249,084	59,740	61,657	570,840	556,158	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	428,630	490,899	-12.7%	313,760	360,380	106,128	120,843	399	441	8,344	9,235	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	17,166	25,171	-31.8%	11,290	14,571	3,866	8,408	504	481	1,506	1,711	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,112	3,500	-11.1%	1,778	2,155	595	591	7	8	733	746	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,733,491	9,254,672	5.2%	4,612,280	4,346,075	4,020,711	3,829,876	100,150	102,158	1,000,350	976,563	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through September									
	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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	Percentage Change
Residential	1,104,423	1,135,076	-2.7%	144,441	146,582	-1.5%	13.08	12.91	1.3%
Commercial	1,030,316	1,052,645	-2.1%	110,298	112,696	-2.1%	10.71	10.71	0.0%
Industrial	719,516	754,642	-4.7%	49,543	52,503	-5.6%	6.89	6.96	-1.0%
Transportation	5,885	5,763	2.1%	574	559	2.9%	9.76	9.69	0.7%
All Sectors	2,860,141	2,948,126	-3.0%	304,856	312,340	-2.4%	10.66	10.59	0.7%

NM = Not meaningful due to large relative standard error.
W = Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Coal generation and consumption includes anthracite, bituminous, subbituminous, lignite, waste coal, refined coal, synthetic coal, and coal-derived synthesis gas.
Petroleum Liquids includes distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
Petroleum Coke includes petroleum coke and synthesis gas derived from petroleum coke.
Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.
Other Gases includes blast furnace gas and other manufactured and waste gases derived from fossil fuels.
Wood and Wood-Derived Fuels include wood, black liquor, and other wood waste.
Other Biomass includes biogenic municipal solid waste, landfill gas, sludge waste, agricultural byproducts, and other biomass.
Coal stocks include anthracite, bituminous, subbituminous, lignite, refined coal, and synthetic coal; waste coal is excluded.
Sales of electricity to ultimate customers and net generation may not correspond exactly for a particular month for a variety of reasons (e.g., sales data may include imported electricity).
Net generation is presented for the calendar month while sales of electricity to ultimate customers and associated revenue accumulate from bills collected for periods of time that vary depending

Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2019 and 2018

Total (All Sectors)										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal (1000 tons)	46,443	49,892	37.59	38.76	234	276	420,943	440,083	39.37	39.17
Petroleum Liquids (1000 barrels)	1,344	1,316	76.57	92.57	111	207	10,597	17,332	82.33	85.66
Petroleum Coke (1000 tons)	131	288	48.38	83.35	5	6	1,470	2,329	59.93	74.25
Natural Gas (1000 Mcf)	1,018,596	1,057,919	2.68	3.22	585	806	8,203,005	8,377,935	3.02	3.50

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal (1000 tons)	34,843	36,530	38.89	40.31	163	191	312,238	323,552	40.73	40.28
Petroleum Liquids (1000 barrels)	1,097	940	75.64	93.63	82	131	8,062	10,835	81.45	85.88
Petroleum Coke (1000 tons)	105	263	48.71	86.74	4	5	1,420	2,288	60.39	74.73
Natural Gas (1000 Mcf)	503,066	518,216	2.86	3.39	300	428	4,031,011	4,176,197	3.18	3.65

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal (1000 tons)	11,060	12,761	32.81	33.63	54	71	103,386	110,301	34.61	35.19
Petroleum Liquids (1000 barrels)	222	351	80.79	89.90	22	65	2,328	6,230	85.54	85.38
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	452,716	472,958	2.44	3.00	239	328	3,588,371	3,624,728	2.82	3.35

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal (1000 tons)	0	0	--	--	0	0	5	6	65.77	66.44
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	717	723	3.28	3.48	3	3	6,838	6,621	3.38	3.62

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal (1000 tons)	539	600	51.28	53.10	17	14	5,314	6,224	52.28	51.77
Petroleum Liquids (1000 barrels)	25	25	80.17	89.73	7	11	207	267	80.62	82.49
Petroleum Coke (1000 tons)	26	25	47.00	47.54	1	1	50	41	46.99	47.05
Natural Gas (1000 Mcf)	62,097	66,022	2.65	3.20	43	47	576,785	570,389	2.98	3.23

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, 2019 and 2018

Total (All Sectors)										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal	889,826	943,820	1.96	2.05	234	276	8,105,943	8,397,763	2.04	2.05
Petroleum Liquids	8,156	7,903	12.62	15.42	111	207	63,927	104,289	13.65	14.22
Petroleum Coke	3,777	8,158	1.67	2.94	5	6	42,040	65,816	2.10	2.63
Natural Gas	1,053,061	1,093,336	2.59	3.12	585	806	8,477,403	8,653,102	2.92	3.39
Fossil Fuels	1,954,820	2,053,217	2.33	2.65	723	987	16,689,313	17,220,970	2.52	2.77

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal	671,720	695,648	2.02	2.12	163	191	6,031,549	6,202,786	2.11	2.10
Petroleum Liquids	6,701	5,665	12.38	15.53	82	131	48,905	65,507	13.43	14.20
Petroleum Coke	3,034	7,493	1.68	3.05	4	5	40,639	64,731	2.11	2.64
Natural Gas	519,620	535,618	2.77	3.28	300	428	4,163,682	4,311,858	3.08	3.53
Fossil Fuels	1,201,075	1,244,425	2.40	2.68	399	549	10,284,774	10,644,882	2.55	2.76

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal	206,975	235,579	1.75	1.82	54	71	1,964,536	2,065,278	1.82	1.88
Petroleum Liquids	1,301	2,082	13.76	15.17	22	65	13,751	37,117	14.48	14.31
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	468,552	489,149	2.36	2.90	239	328	3,712,346	3,747,305	2.72	3.24
Fossil Fuels	676,828	726,810	2.17	2.54	275	385	5,690,634	5,849,700	2.40	2.76

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal	0	0	--	--	0	0	119	130	2.90	2.92
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	747	744	3.15	3.38	3	3	7,088	6,819	3.26	3.52
Fossil Fuels	747	744	3.15	3.38	3	3	7,207	6,950	3.26	3.51

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
Coal	11,131	12,593	2.48	2.53	17	14	109,739	129,569	2.53	2.49
Petroleum Liquids	154	155	13.15	14.38	7	11	1,271	1,665	13.14	13.23
Petroleum Coke	743	664	1.63	1.78	1	1	1,401	1,084	1.68	1.77
Natural Gas	64,141	67,825	2.56	3.12	43	47	594,287	587,120	2.90	3.13
Fossil Fuels	76,169	81,238	2.56	3.04	46	50	706,698	719,438	2.86	3.04

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), 2009-September 2019
(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															
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	13,096	4,034,271	23,990	74,007	77,276
2018	1,145,962	16,245	8,981	1,468,727	13,463	807,084	292,524	63,825	350,518	-5,905	12,973	4,174,398	29,539	89,773	93,365
Year 2017															
January	115,333	1,121	944	95,473	1,046	73,121	26,788	2,030	26,676	-435	1,094	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	289,653	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	1,050	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	404,387	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	1,034	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	119,284	5,555	965	110,265	1,097	74,649	25,064	3,319	32,453	-547	1,109	373,212	1,619	4,810	4,938
February	82,050	804	754	98,492	1,092	64,790	24,902	3,896	29,419	-315	994	306,879	1,766	5,472	5,663
March	80,626	830	642	106,503	1,158	67,033	25,861	5,056	33,204	-490	1,108	321,530	2,434	7,233	7,490
April	73,346	873	666	98,354	1,099	59,133	28,115	6,057	32,451	-377	1,028	300,743	2,740	8,482	8,796
May	85,227	1,040	517	115,268	1,167	67,320	30,444	6,849	30,424	-390	1,070	338,936	3,011	9,430	9,860
June	101,503	1,066	834	130,808	1,091	69,688	27,597	7,415	31,197	-433	1,104	371,870	3,059	9,957	10,474
July	115,376	988	913	164,722	1,172	72,456	25,100	6,755	23,318	-644	1,111	411,265	3,146	9,521	9,901
August	115,129	1,047	879	161,650	1,301	72,282	22,017	6,695	26,603	-747	1,146	408,004	3,017	9,303	9,712
Sept	96,544	1,055	799	141,762	1,104	64,725	19,166	5,961	24,722	-603	1,004	356,239	2,674	8,205	8,635
October	87,264	1,015	562	123,116	1,016	59,397	19,548	4,970	27,432	-492	1,084	324,911	2,392	7,087	7,361
November	92,819	1,006	656	108,142	1,045	63,954	21,913	3,743	28,340	-343	1,075	322,349	1,905	5,480	5,648
December	96,793	966	795	109,647	1,120	71,657	22,797	3,110	30,955	-522	1,139	338,458	1,775	4,792	4,885
Year 2019															
January	101,008	1,358	840	119,306	1,115	73,701	24,215	3,641	31,695	-323	1,195	357,750	1,910	5,441	5,551
February	80,104	806	747	111,009	1,110	64,715	21,829	3,811	28,911	-389	1,002	313,655	2,066	5,746	5,877
March	78,516	823	639	112,948	1,251	65,080	25,550	5,885	32,374	-409	1,082	323,739	2,925	8,549	8,809
April	60,054	788	446	103,004	1,071	60,581	25,486	6,806	35,430	-103	1,020	294,584	3,260	9,741	10,066
May	71,883	943	747	116,366	1,101	67,124	30,063	7,161	32,223	-368	1,124	328,367	3,566	10,390	10,727
June	78,609	976	555	136,995	1,040	68,805	26,471	7,971	29,199	-385	1,107	351,343	3,622	11,153	11,593
July	100,981	1,029	746	174,345	1,290	72,199	23,733	8,132	28,589	-622	1,162	411,584	3,783	11,515	11,915
August	94,176	1,084	687	176,454	1,202	71,911	20,792	7,844	26,593	-579	1,199	401,363	3,630	11,061	11,474
Sept	85,918	942	638	150,742	1,139	65,892	16,372	6,726	30,474	-671	1,129	359,301	3,222	9,654	9,948
Year to Date															
2017	918,528	8,573	6,911	983,306	9,372	598,637	239,108	41,667	239,076	-4,898	9,846	3,050,127	18,967	57,933	60,634
2018	869,087	13,259	6,968	1,127,822	10,281	612,076	228,266	52,003	263,791	-4,548	9,675	3,188,680	23,467	72,414	75,471
2019	751,249	8,749	6,045	1,201,170	10,320	610,006	214,512	57,976	275,488	-3,850	10,019	3,141,685	27,984	83,251	85,959
Rolling 12 Months Ending in September															
2018	1,156,394	17,100	9,033	1,440,931	13,378	818,388	289,491	63,623	357,706	-6,145	12,925	4,172,824	28,490	88,488	92,113
2019	1,028,125	11,736	8,058	1,542,074	13,502	805,015	278,770	69,798	362,215	-5,207	13,318	4,127,403	34,056	100,610	103,854

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 2018 and prior years are final. Values for 2019 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), 2009-September 2019
(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													
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
2018	272,650	60,234	3,592	41,005	11,036	7,136	2,724	15,967	292,524	706,867	29,539	89,773	93,365
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	25,597	3,191	128	3,698	964	588	265	1,341	25,064	60,836	1,619	4,810	4,938
February	23,188	3,705	191	3,241	906	559	251	1,274	24,902	58,218	1,766	5,472	5,663
March	26,462	4,799	258	3,554	972	597	253	1,367	25,861	64,121	2,434	7,233	7,490
April	26,429	5,743	314	3,108	920	566	239	1,188	28,115	66,623	2,740	8,482	8,796
May	23,952	6,419	430	3,358	930	573	228	1,383	30,444	67,717	3,011	9,430	9,860
June	24,701	6,898	517	3,476	889	629	202	1,300	27,597	66,209	3,059	9,957	10,474
July	16,445	6,374	380	3,753	909	638	202	1,370	25,100	55,172	3,146	9,521	9,901
August	19,845	6,286	409	3,634	919	630	208	1,367	22,017	55,316	3,017	9,303	9,712
Sept	18,518	5,531	430	3,286	836	562	192	1,328	19,166	49,849	2,674	8,205	8,635
October	21,193	4,695	275	3,223	918	594	231	1,273	19,548	51,950	2,392	7,087	7,361
November	22,014	3,575	168	3,271	920	584	220	1,331	21,913	53,996	1,905	5,480	5,648
December	24,305	3,018	92	3,405	951	616	233	1,446	22,797	56,862	1,775	4,792	4,885
Year 2019													
January	25,137	3,530	111	3,533	868	529	207	1,420	24,215	59,551	1,910	5,441	5,551
February	22,994	3,679	131	3,164	796	464	186	1,307	21,829	54,551	2,066	5,746	5,877
March	26,102	5,625	260	3,252	863	492	229	1,435	25,550	63,809	2,925	8,549	8,809
April	29,706	6,481	325	3,022	791	471	202	1,237	25,486	67,723	3,260	9,741	10,066
May	25,971	6,825	336	3,365	830	528	184	1,346	30,063	69,447	3,566	10,390	10,727
June	22,942	7,531	439	3,342	846	524	184	1,361	26,471	63,641	3,622	11,153	11,593
July	22,020	7,732	400	3,571	862	538	187	1,411	23,733	60,454	3,783	11,515	11,915
August	19,867	7,431	413	3,717	864	546	192	1,408	20,792	55,229	3,630	11,061	11,474
Sept	24,299	6,432	294	3,287	824	511	170	1,383	16,372	53,572	3,222	9,654	9,948
Year to Date													
2017	180,340	38,965	2,701	30,678	8,676	5,216	2,329	11,838	239,108	519,850	18,967	57,933	60,634
2018	205,138	48,946	3,057	31,107	8,247	5,342	2,040	11,917	228,266	544,060	23,467	72,414	75,471
2019	219,038	55,267	2,709	30,253	7,544	4,603	1,741	12,309	214,512	547,976	27,984	83,251	85,959
Rolling 12 Months Ending in September													
2018	279,101	59,998	3,625	41,581	11,114	7,078	2,826	16,006	289,491	710,820	28,490	88,488	92,113
2019	286,550	66,554	3,243	40,152	10,333	6,397	2,425	16,359	278,770	710,783	34,056	100,610	103,854

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error.
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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, 2009-September 2019
(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												
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	553	2,274,279
2018	859,979	10,108	6,817	720,069	151	424,251	267,336	4,916	44,166	-4,785	561	2,333,570
Year 2017												
January	85,985	810	743	45,702	13	38,425	24,717	136	3,161	-346	45	199,391
February	64,844	632	540	39,534	17	33,911	21,619	178	3,541	-418	39	164,438
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	205,300
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	46	168,569
December	76,870	953	556	53,353	24	38,871	20,729	304	4,369	-557	50	195,521
Year 2018												
January	88,718	2,491	770	55,797	26	39,366	23,106	288	4,398	-475	41	214,523
February	61,138	617	575	48,715	17	33,941	22,864	314	3,852	-226	38	171,846
March	58,606	595	491	52,161	16	35,262	23,638	446	4,274	-408	48	175,130
April	55,281	632	477	48,151	28	30,580	25,598	480	4,119	-295	39	165,091
May	64,034	745	336	58,251	11	34,479	28,055	463	3,426	-309	45	189,537
June	77,899	756	670	66,774	13	36,437	25,778	503	3,690	-339	50	212,231
July	88,102	668	716	81,297	15	38,293	23,303	477	2,822	-522	55	235,228
August	87,359	711	686	78,025	24	38,885	20,050	476	3,120	-626	56	228,766
Sept	73,021	781	639	68,655	3	34,377	17,368	436	3,287	-500	47	198,115
October	64,902	751	378	59,071	0	31,364	17,571	418	3,446	-405	43	177,539
November	68,864	703	477	51,796	0	33,043	19,630	325	3,629	-254	50	178,264
December	72,053	657	601	51,376	0	38,223	20,373	290	4,104	-426	49	187,300
Year 2019												
January	74,996	855	634	57,285	12	39,806	21,817	369	4,203	-247	42	199,773
February	59,589	561	564	54,496	22	34,243	19,790	386	3,630	-310	33	173,004
March	56,546	597	464	54,670	31	34,213	23,157	577	4,433	-309	33	174,412
April	44,241	534	276	50,523	0	32,063	23,238	641	5,024	-26	37	156,550
May	55,081	671	552	58,862	0	35,416	27,684	661	4,199	-305	44	182,862
June	60,148	724	398	69,984	23	36,847	24,287	638	3,886	-299	41	196,677
July	77,053	715	551	87,430	18	39,023	21,640	655	3,625	-505	40	230,244
August	71,916	809	501	89,675	16	39,218	19,148	616	3,175	-470	51	224,655
Sept	64,868	693	460	75,933	10	34,770	15,029	616	4,111	-583	43	195,950
Year to Date												
2017	685,288	6,260	5,167	475,224	100	316,034	219,469	2,474	29,617	-4,109	414	1,735,938
2018	654,160	7,997	5,361	557,827	152	321,621	209,761	3,883	32,987	-3,699	419	1,790,467
2019	564,438	6,159	4,400	598,858	132	325,598	195,790	5,159	36,286	-3,055	363	1,734,128
Rolling 12 Months Ending in September												
2018	862,511	10,304	6,905	706,437	200	430,071	265,969	4,757	46,134	-5,038	558	2,328,809
2019	770,257	8,270	5,856	761,100	131	428,228	253,365	6,192	47,465	-4,141	506	2,277,230

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2009-September 2019
(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												
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
2018	278,668	5,487	1,516	645,416	3,935	382,833	23,812	58,337	275,154	-1,119	6,677	1,680,717
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	522	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	29,839	2,951	137	45,656	318	35,283	1,856	3,000	25,364	-72	575	144,908
February	20,261	133	126	41,972	320	30,849	1,929	3,549	23,179	-89	543	122,772
March	21,377	186	96	46,421	331	31,770	2,114	4,563	26,260	-82	564	133,600
April	17,506	199	137	42,453	326	28,553	2,392	5,522	25,872	-82	527	123,405
May	20,600	248	124	48,752	379	32,841	2,264	6,325	24,380	-81	526	136,356
June	22,994	268	100	55,384	303	33,251	1,724	6,845	24,920	-95	582	146,277
July	26,647	260	139	73,943	344	34,163	1,700	6,214	17,729	-123	586	161,601
August	27,157	292	139	74,104	369	33,398	1,858	6,158	20,775	-121	579	164,708
Sept	22,941	233	108	64,319	328	30,348	1,692	5,475	18,927	-103	515	144,783
October	21,834	218	126	55,441	255	28,033	1,855	4,508	21,450	-87	556	134,189
November	23,393	245	140	47,605	311	30,911	2,150	3,386	22,175	-88	551	130,779
December	24,120	254	144	49,366	350	33,434	2,277	2,792	24,124	-96	574	137,339
Year 2019												
January	25,372	446	153	52,633	368	33,895	2,277	3,239	24,863	-76	629	143,799
February	19,948	197	139	48,351	355	30,472	1,936	3,393	22,891	-79	547	128,149
March	21,413	180	131	49,673	350	30,867	2,272	5,256	25,354	-100	581	135,975
April	15,295	204	124	44,187	339	28,518	2,134	6,107	27,971	-78	553	125,354
May	16,283	230	143	49,032	338	31,708	2,252	6,438	25,560	-63	632	132,553
June	17,943	209	103	58,396	325	31,958	2,066	7,265	22,765	-86	618	141,561
July	23,342	274	NM	77,549	390	33,176	1,983	7,405	22,312	-118	640	167,031
August	21,688	224	131	77,288	388	32,693	1,541	7,160	20,721	-109	644	162,370
Sept	20,506	203	118	65,876	349	31,122	1,250	6,053	23,930	-88	595	149,913
Year to Date												
2017	227,228	1,923	1,138	433,428	2,964	282,603	18,396	38,748	186,098	-789	4,884	1,196,621
2018	209,321	4,771	1,107	493,003	3,020	290,455	17,529	47,650	207,406	-848	4,996	1,278,409
2019	181,790	2,167	1,119	522,985	3,202	284,408	17,710	52,316	216,366	-795	5,439	1,286,706
Rolling 12 Months Ending in September												
2018	286,291	6,128	1,449	632,494	4,034	388,317	22,167	58,277	280,270	-1,106	6,639	1,684,961
2019	251,137	2,884	NM	675,397	4,117	376,786	23,992	63,002	284,115	-1,066	7,120	1,689,014

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.C. Net Generation by Energy Source: Commercial Sector, 2009-September 2019
(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															
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
2018	303	132	7	8,419	0	0	227	525	2,688	0	1,010	13,312	9,798	10,324	10,324
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	40	41	1	671	0	0	19	29	229	0	84	1,114	552	581	581
February	32	7	1	626	0	0	19	31	206	0	72	995	605	636	636
March	27	7	1	647	0	0	21	43	227	0	83	1,058	820	863	863
April	24	8	0	585	0	0	24	50	217	0	81	989	907	957	957
May	21	7	0	656	0	0	24	57	221	0	90	1,076	992	1,048	1,048
June	20	7	0	737	0	0	21	62	224	0	92	1,163	1,003	1,065	1,065
July	21	11	0	875	0	0	19	59	223	0	90	1,298	1,036	1,094	1,094
August	23	9	0	892	0	0	17	56	230	0	90	1,318	993	1,049	1,049
Sept	24	7	1	771	0	0	16	46	213	0	80	1,156	893	938	938
October	20	7	1	668	0	0	14	39	223	0	83	1,055	786	826	826
November	25	12	1	622	0	0	16	29	212	0	77	993	623	652	652
December	24	9	1	669	0	0	17	25	262	0	88	1,095	589	614	614
Year 2019															
January	33	13	1	719	0	0	NM	29	255	0	94	1,164	637	666	666
February	28	8	1	670	0	0	NM	29	228	0	80	1,061	684	713	713
March	32	8	1	702	0	0	NM	47	253	0	89	1,152	945	991	991
April	21	7	1	644	0	0	NM	52	206	0	88	1,040	1,048	1,100	1,100
May	19	8	0	682	0	0	NM	55	200	0	90	1,079	1,129	1,184	1,184
June	14	7	0	690	0	0	21	61	217	0	92	1,100	1,137	1,198	1,198
July	NM	10	0	813	0	0	NM	63	226	0	91	1,241	1,193	1,257	1,257
August	18	13	0	842	0	0	NM	61	219	0	93	1,261	1,136	1,197	1,197
Sept	21	11	0	738	0	0	NM	51	212	0	90	1,135	1,012	1,064	1,064
Year to Date															
2017	241	67	6	6,096	0	0	165	411	2,046	0	814	9,847	6,058	6,469	6,469
2018	233	105	4	6,460	0	0	181	432	1,992	0	762	10,169	7,800	8,232	8,232
2019	207	84	4	6,499	0	0	168	449	2,016	0	807	10,234	8,921	9,370	9,370
Rolling 12 Months Ending in September															
2018	321	141	6	8,406	0	0	255	542	2,675	0	1,035	13,382	9,426	9,968	9,968
2019	NM	112	7	8,458	0	0	NM	542	2,712	0	1,056	13,378	10,920	11,462	11,462

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019
(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															
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
2018	7,011	517	640	94,823	9,377	0	1,149	47	28,509	0	4,725	146,798	2,636	2,683	2,683
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	687	73	57	8,141	752	0	83	2	2,461	0	410	12,667	146	149	149
February	619	47	52	7,178	755	0	89	3	2,183	0	340	11,265	155	158	158
March	616	41	54	7,274	811	0	87	4	2,443	0	413	11,742	221	225	225
April	535	33	51	7,166	744	0	102	4	2,243	0	380	11,258	241	245	245
May	572	41	56	7,608	778	0	101	5	2,397	0	409	11,967	267	271	271
June	590	34	64	7,913	775	0	74	5	2,363	0	381	12,199	268	273	273
July	606	49	57	8,606	813	0	78	5	2,544	0	381	13,138	277	282	282
August	590	35	54	8,630	909	0	91	5	2,477	0	421	13,213	268	273	273
Sept	558	34	51	8,017	773	0	90	4	2,296	0	363	12,185	242	247	247
October	507	39	58	7,935	762	0	108	4	2,313	0	402	12,127	220	224	224
November	536	46	38	8,120	734	0	116	3	2,325	0	396	12,313	174	177	177
December	596	46	49	8,236	771	0	130	2	2,465	0	429	12,724	157	160	160
Year 2019															
January	606	44	52	8,668	734	0	102	3	2,374	0	429	13,013	168	171	171
February	539	40	42	7,492	734	0	87	3	2,163	0	343	11,442	178	181	181
March	525	38	43	7,903	870	0	101	6	2,334	0	379	12,199	254	260	260
April	497	42	46	7,650	733	0	94	6	2,229	0	342	11,639	278	284	284
May	500	34	52	7,791	764	0	102	6	2,265	0	358	11,872	309	315	315
June	504	36	54	7,926	692	0	97	7	2,332	0	357	12,004	311	318	318
July	565	30	118	8,554	882	0	94	8	2,425	0	391	13,068	321	329	329
August	554	38	55	8,649	798	0	87	7	2,478	0	411	13,077	311	318	318
Sept	524	35	60	8,195	781	0	81	6	2,221	0	400	12,303	281	287	287
Year to Date															
2017	5,771	323	600	68,558	6,308	0	1,079	33	21,315	0	3,734	107,721	1,870	1,903	1,903
2018	5,372	386	496	70,532	7,110	0	796	38	21,406	0	3,498	109,635	2,085	2,123	2,123
2019	4,814	339	522	72,829	6,987	0	844	52	20,821	0	3,410	110,617	2,410	2,462	2,462
Rolling 12 Months Ending in September															
2018	7,270	526	672	93,594	9,144	0	1,100	47	28,628	0	4,692	145,672	2,580	2,627	2,627
2019	6,454	470	666	97,119	9,254	0	1,197	61	27,924	0	4,636	147,781	2,961	3,022	3,022

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 2018 and prior years are final. Values for 2019 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.E. Net Generation by Energy Source: Residential Sector, 2014-September 2019 (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
2018	17,105
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	921
February	1,007
March	1,393
April	1,592
May	1,753
June	1,788
July	1,834
August	1,756
Sept	1,539
October	1,385
November	1,108
December	1,029
Year 2019	
January	1,106
February	1,204
March	1,726
April	1,934
May	2,129
June	2,174
July	2,268
August	2,183
Sept	1,929
Year to Date	
2017	11,040
2018	13,583
2019	16,653
Rolling 12 Months Ending in September	
2018	16,484
2019	20,175

See Glossary for definitions. Values for 2018 and prior years are final. Values for 2019 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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	7,824	8,930	-12.4%	148	166	7,323	8,384	111	120	242	260
Connecticut	3,361	3,343	0.6%	6	9	3,264	3,237	35	39	57	57
Maine	751	780	-3.8%	0	0	590	607	11	13	150	160
Massachusetts	1,491	2,288	-34.8%	40	42	1,376	2,166	55	57	21	22
New Hampshire	1,416	1,400	1.1%	49	65	1,358	1,327	5	6	3	3
Rhode Island	662	992	-33.3%	0	0	644	969	5	5	12	18
Vermont	144	127	12.7%	53	50	90	78	0	0	0	0
Middle Atlantic	36,345	35,493	2.4%	2,795	2,787	33,004	32,156	193	193	352	357
New Jersey	6,139	6,674	-8.0%	19	21	6,002	6,546	52	51	65	57
New York	10,908	10,847	0.6%	2,773	2,754	7,960	7,897	111	117	64	79
Pennsylvania	19,298	17,972	7.4%	3	12	19,041	17,713	30	25	223	221
East North Central	47,400	49,699	-4.6%	17,601	18,963	28,806	29,723	153	164	841	849
Illinois	14,374	15,386	-6.6%	407	507	13,705	14,623	33	38	230	218
Indiana	8,125	8,905	-8.8%	5,504	6,438	2,267	2,106	28	20	326	341
Michigan	9,698	9,656	0.4%	6,745	6,905	2,786	2,586	57	68	110	97
Ohio	10,138	10,293	-1.5%	1,133	912	8,937	9,300	23	27	46	54
Wisconsin	5,065	5,459	-7.2%	3,813	4,201	1,111	1,108	12	11	129	139
West North Central	27,928	28,260	-1.2%	21,726	23,327	5,807	4,552	56	54	340	326
Iowa	5,127	5,241	-2.2%	3,909	4,383	1,023	656	20	19	175	183
Kansas	4,710	4,192	12.3%	2,779	2,766	1,927	1,420	NM	1	NM	5
Minnesota	4,730	4,939	-4.2%	3,589	3,894	1,019	930	14	16	107	99
Missouri	6,088	6,550	-7.1%	5,581	6,152	485	379	18	17	3	3
Nebraska	3,239	3,033	6.8%	2,595	2,546	604	454	1	1	39	31
North Dakota	3,141	3,493	-10.1%	2,542	2,934	585	554	NM	NM	14	5
South Dakota	894	812	10.1%	731	652	163	160	NM	0	0	0
South Atlantic	72,769	72,948	-0.2%	59,970	59,717	11,070	11,579	138	147	1,590	1,505
Delaware	435	632	-31.1%	3	5	311	523	0	0	121	104
District of Columbia	7	6	19.4%	0	0	NM	0	6	6	0	0
Florida	23,277	23,252	0.1%	21,680	21,745	1,174	1,072	5	6	418	429
Georgia	11,993	11,622	3.2%	9,832	9,730	1,739	1,472	1	0	420	420
Maryland	3,290	3,904	-15.7%	112	412	3,099	3,399	75	79	4	14
North Carolina	12,134	10,829	12.1%	10,438	9,368	1,534	1,317	21	25	142	118
South Carolina	8,344	9,214	-9.4%	7,954	8,449	234	641	0	0	156	125
Virginia	8,076	8,433	-4.2%	6,286	6,165	1,547	2,028	31	29	211	210
West Virginia	5,213	5,056	3.1%	3,665	3,844	1,430	1,127	0	0	117	85
East South Central	32,916	32,130	2.4%	28,127	26,834	4,021	4,515	19	24	748	758
Alabama	12,361	12,640	-2.2%	8,463	8,280	3,535	3,973	0	0	363	387
Kentucky	6,746	6,971	-3.2%	6,658	6,851	44	88	0	0	45	32
Mississippi	6,531	5,689	14.8%	5,972	5,110	401	431	0	0	159	148
Tennessee	7,277	6,830	6.6%	7,034	6,592	42	23	19	24	182	191
West South Central	69,242	62,773	10.3%	23,606	22,884	38,866	33,266	110	97	6,660	6,526
Arkansas	5,853	5,362	9.2%	5,189	4,686	532	576	NM	3	128	97
Louisiana	9,782	9,182	6.5%	6,343	5,908	757	736	16	16	2,666	2,522
Oklahoma	7,964	7,377	8.0%	3,641	3,571	4,268	3,722	0	0	56	85
Texas	45,642	40,853	11.7%	8,433	8,720	33,310	28,233	90	77	3,809	3,823
Mountain	32,611	33,919	-3.9%	24,836	26,312	7,463	7,317	77	48	234	241
Arizona	10,815	11,380	-5.0%	9,143	9,630	1,660	1,738	13	12	0	0
Colorado	4,621	4,575	1.0%	3,534	3,449	1,078	1,117	4	3	6	6
Idaho	1,219	1,530	-20.4%	704	1,010	472	482	4	4	38	33
Montana	2,214	2,380	-7.0%	603	900	1,608	1,477	0	0	2	3
Nevada	3,691	3,899	-5.3%	2,557	2,814	1,068	1,045	41	12	25	29
New Mexico	3,237	2,910	11.2%	2,207	2,007	1,021	894	9	10	0	0
Utah	3,235	3,453	-6.3%	2,862	3,045	329	358	7	7	38	43
Wyoming	3,579	3,792	-5.6%	3,226	3,457	227	206	0	0	125	128
Pacific Contiguous	30,830	30,731	0.3%	16,171	16,212	13,175	12,935	219	255	1,264	1,330
California	18,364	17,574	4.5%	7,127	6,509	9,913	9,655	213	247	1,112	1,163
Oregon	4,864	5,012	-2.9%	3,185	3,398	1,616	1,557	6	6	57	52
Washington	7,601	8,145	-6.7%	5,858	6,305	1,647	1,723	NM	2	95	115
Pacific Noncontiguous	1,437	1,357	5.9%	970	914	378	355	58	54	32	33
Alaska	542	488	11.0%	491	436	21	20	19	22	11	10
Hawaii	895	869	3.0%	479	479	357	335	38	32	21	23
U.S. Total	359,301	356,239	0.9%	195,950	198,115	149,913	144,783	1,135	1,156	12,303	12,185

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	75,965	80,884	-6.1%	1,860	2,251	70,895	75,414	1,004	1,043	2,206	2,176
Connecticut	29,808	29,974	-0.6%	63	77	28,965	29,100	300	314	481	484
Maine	7,650	8,259	-7.4%	0	0	6,157	6,778	101	126	1,392	1,355
Massachusetts	17,517	21,300	-17.8%	448	449	16,362	20,140	506	507	200	204
New Hampshire	13,441	13,501	-0.4%	728	1,108	12,641	12,321	50	49	22	24
Rhode Island	5,895	6,291	-6.3%	0	0	5,741	6,136	44	45	111	110
Vermont	1,653	1,558	6.1%	620	617	1,030	939	3	2	0	0
Middle Atlantic	327,879	320,663	2.3%	26,723	27,378	296,144	288,221	1,721	1,783	3,292	3,280
New Jersey	53,587	58,439	-8.3%	97	76	52,493	57,351	433	492	564	519
New York	99,166	99,665	-0.5%	26,539	27,194	70,992	70,779	998	1,014	638	678
Pennsylvania	175,126	162,559	7.7%	87	107	172,659	160,091	290	277	2,091	2,084
East North Central	444,892	461,319	-3.6%	167,085	184,199	268,149	267,541	1,390	1,482	8,268	8,097
Illinois	137,630	142,841	-3.6%	4,188	4,304	131,101	136,125	326	316	2,015	2,095
Indiana	78,309	84,855	-7.7%	54,714	63,981	20,033	17,476	206	204	3,357	3,193
Michigan	89,280	90,616	-1.5%	61,024	63,231	26,593	25,755	567	649	1,096	982
Ohio	92,053	93,193	-1.2%	10,412	14,174	80,946	78,317	184	205	511	497
Wisconsin	47,619	49,815	-4.4%	36,748	38,509	9,476	9,867	107	109	1,289	1,330
West North Central	256,749	265,780	-3.4%	205,038	218,124	48,124	44,109	485	482	3,103	3,065
Iowa	48,042	46,859	2.5%	36,763	36,608	9,451	8,443	170	171	1,658	1,638
Kansas	39,468	38,715	1.9%	25,264	25,761	14,133	12,888	11	12	60	53
Minnesota	43,951	46,414	-5.3%	33,942	36,531	8,878	8,717	150	148	981	1,017
Missouri	58,420	64,837	-9.9%	54,006	60,780	4,251	3,889	139	135	23	33
Nebraska	27,715	27,987	-1.0%	22,497	23,779	4,943	3,916	13	14	263	277
North Dakota	29,703	31,859	-6.8%	24,590	27,003	4,993	4,808	NM	NM	117	46
South Dakota	9,451	9,111	3.7%	7,977	7,662	1,475	1,449	NM	0	0	0
South Atlantic	623,677	626,361	-0.4%	516,610	514,420	91,293	96,763	1,403	1,302	14,370	13,877
Delaware	4,247	5,033	-15.6%	30	29	3,214	4,231	4	4	999	768
District of Columbia	69	63	8.9%	0	0	12	0	57	63	0	0
Florida	187,553	186,209	0.7%	175,094	173,099	8,622	9,268	47	59	3,790	3,783
Georgia	97,441	97,373	0.1%	80,637	81,903	12,923	11,510	6	6	3,875	3,954
Maryland	30,667	33,400	-8.2%	3,168	2,967	26,549	29,618	817	627	134	188
North Carolina	100,748	101,875	-1.1%	85,666	89,327	13,579	10,977	196	249	1,308	1,322
South Carolina	77,254	76,439	1.1%	74,350	72,394	1,505	2,746	2	2	1,396	1,297
Virginia	75,834	73,331	3.4%	59,485	55,468	14,227	15,734	275	292	1,847	1,838
West Virginia	49,864	52,638	-5.3%	38,179	39,233	10,663	12,679	0	0	1,022	726
East South Central	278,595	285,410	-2.4%	237,228	242,027	34,296	36,317	164	175	6,907	6,890
Alabama	108,073	112,220	-3.7%	77,026	79,515	27,544	29,279	0	0	3,502	3,427
Kentucky	55,323	59,662	-7.3%	54,605	58,707	291	581	0	0	427	373
Mississippi	51,688	49,417	4.6%	44,212	41,757	6,102	6,233	0	0	1,374	1,428
Tennessee	63,513	64,111	-0.9%	61,386	62,048	359	224	164	175	1,604	1,663
West South Central	558,630	566,029	-1.3%	188,508	199,455	310,633	307,935	841	731	58,648	57,908
Arkansas	47,624	52,341	-9.0%	42,202	46,121	4,097	4,945	35	35	1,291	1,240
Louisiana	77,984	78,307	-0.4%	47,843	48,294	6,130	7,272	121	128	23,891	22,613
Oklahoma	64,289	67,546	-4.8%	30,728	32,672	32,960	34,175	0	0	601	699
Texas	368,732	367,835	0.2%	67,736	72,368	267,446	261,542	686	568	32,865	33,356
Mountain	279,580	278,091	0.5%	215,573	217,294	61,209	58,067	734	410	2,063	2,320
Arizona	87,659	85,263	2.8%	74,841	75,098	12,704	10,047	114	118	0	0
Colorado	41,975	41,553	1.0%	32,416	31,338	9,478	10,138	27	22	53	55
Idaho	12,547	14,022	-10.5%	8,091	9,309	4,000	4,296	36	37	419	380
Montana	20,476	20,660	-0.9%	7,837	9,597	12,617	11,039	0	0	22	24
Nevada	30,509	30,824	-1.0%	20,875	21,485	8,975	8,954	418	100	241	284
New Mexico	26,364	23,533	12.0%	17,980	14,911	8,302	8,527	78	80	4	15
Utah	29,110	28,347	2.7%	25,711	24,816	2,949	3,041	61	53	388	437
Wyoming	30,940	33,888	-8.7%	27,821	30,739	2,184	2,025	0	0	935	1,124
Pacific Contiguous	283,676	292,102	-2.9%	167,408	177,118	102,827	101,043	1,962	2,212	11,479	11,729
California	157,589	149,489	5.4%	67,503	58,259	78,145	78,848	1,892	2,131	10,050	10,252
Oregon	46,292	49,506	-6.5%	32,547	36,923	13,186	12,082	55	56	504	444
Washington	79,795	93,107	-14.3%	67,358	81,937	11,496	10,112	16	25	925	1,033
Pacific Noncontiguous	12,042	12,042	0.0%	8,096	8,202	3,135	3,000	529	547	282	293
Alaska	4,718	4,765	-1.0%	4,237	4,257	172	173	215	253	93	82
Hawaii	7,324	7,277	0.6%	3,859	3,945	2,963	2,827	314	294	189	210
U.S. Total	3,141,685	3,188,680	-1.5%	1,734,128	1,790,467	1,286,706	1,278,409	10,234	10,169	110,617	109,635

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	17	26	-34.3%	12	15	3	10	0	0	NM	1
Connecticut	-2	6	-129.5%	0	0	-2	6	0	0	0	0
Maine	6	5	39.6%	0	0	5	4	0	0	NM	1
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	12	15	-15.0%	12	15	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	2,813	2,796	0.6%	0	0	2,805	2,788	0	0	8	8
New Jersey	89	92	-2.7%	0	0	89	92	0	0	0	0
New York	0	52	-100.0%	0	0	0	52	0	0	0	0
Pennsylvania	2,724	2,652	2.7%	0	0	2,716	2,644	0	0	8	8
East North Central	17,930	22,564	-20.5%	10,229	12,826	7,542	9,539	5	6	154	194
Illinois	3,974	5,230	-24.0%	279	360	3,564	4,708	NM	1	131	162
Indiana	4,632	6,258	-26.0%	4,221	5,817	407	437	4	5	0	0
Michigan	3,190	3,623	-12.0%	3,150	3,589	35	31	0	0	NM	3
Ohio	4,079	4,744	-14.0%	542	381	3,536	4,363	0	0	0	0
Wisconsin	2,055	2,708	-24.1%	2,036	2,680	0	0	0	0	19	28
West North Central	12,847	15,049	-14.6%	12,648	14,868	0	0	7	8	193	172
Iowa	1,712	2,566	-33.3%	1,582	2,434	0	0	7	8	123	124
Kansas	1,594	1,558	2.3%	1,594	1,558	0	0	0	0	0	0
Minnesota	1,343	1,822	-26.3%	1,320	1,804	0	0	0	0	23	17
Missouri	4,231	4,813	-12.1%	4,231	4,813	0	0	0	0	0	0
Nebraska	1,828	1,933	-5.4%	1,789	1,902	0	0	0	0	39	31
North Dakota	1,945	2,268	-14.2%	1,937	2,268	0	0	0	0	NM	0
South Dakota	194	88	120.1%	194	88	0	0	0	0	0	0
South Atlantic	15,423	16,599	-7.1%	13,547	15,025	1,816	1,523	2	2	57	48
Delaware	-3	27	-110.0%	0	0	-3	27	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,959	2,828	-30.7%	1,952	2,822	0	0	0	0	NM	6
Georgia	2,898	3,405	-14.9%	2,876	3,392	0	0	0	0	NM	13
Maryland	694	638	8.8%	0	0	694	636	0	0	0	2
North Carolina	3,521	2,853	23.4%	3,502	2,834	6	6	2	2	11	10
South Carolina	1,499	1,635	-8.3%	1,499	1,634	0	0	0	0	0	2
Virginia	176	637	-72.4%	157	587	2	34	0	0	17	16
West Virginia	4,678	4,576	2.2%	3,562	3,757	1,117	819	0	0	0	0
East South Central	10,664	9,823	8.6%	10,494	9,684	123	77	0	0	47	61
Alabama	2,417	2,592	-6.8%	2,408	2,588	0	0	0	0	NM	4
Kentucky	5,032	5,145	-2.2%	5,032	5,145	0	0	0	0	0	0
Mississippi	449	358	25.5%	326	281	123	77	0	0	0	0
Tennessee	2,766	1,727	60.2%	2,728	1,670	0	0	0	0	38	57
West South Central	12,538	15,172	-17.4%	6,751	8,493	5,773	6,663	0	0	14	15
Arkansas	2,462	2,640	-6.7%	2,071	2,173	387	462	0	0	4	4
Louisiana	908	1,100	-17.4%	788	810	120	290	0	0	0	0
Oklahoma	858	1,090	-21.2%	719	902	129	176	0	0	10	11
Texas	8,310	10,342	-19.7%	3,172	4,607	5,138	5,735	0	0	0	0
Mountain	12,455	13,189	-5.6%	10,866	11,725	1,554	1,431	0	0	35	32
Arizona	2,188	2,734	-20.0%	2,188	2,734	0	0	0	0	0	0
Colorado	2,018	2,234	-9.7%	2,018	2,234	0	0	0	0	0	0
Idaho	NM	2	NM	0	0	0	0	0	0	NM	2
Montana	1,383	1,275	8.5%	23	17	1,360	1,256	0	0	NM	1
Nevada	267	230	16.1%	169	149	97	81	0	0	0	0
New Mexico	1,373	1,260	9.0%	1,373	1,260	0	0	0	0	0	0
Utah	2,145	2,149	-0.2%	2,110	2,117	35	32	0	0	0	0
Wyoming	3,079	3,306	-6.9%	2,985	3,215	61	62	0	0	33	29
Pacific Contiguous	1,064	1,141	-6.7%	289	336	759	778	0	0	15	27
California	14	24	-43.3%	0	0	0	0	0	0	14	24
Oregon	289	336	-13.9%	289	336	0	0	0	0	0	0
Washington	761	780	-2.5%	0	0	759	778	0	0	1	2
Pacific Noncontiguous	167	186	-10.5%	NM	48	129	130	NM	8	0	0
Alaska	54	73	-25.3%	NM	48	16	16	NM	8	0	0
Hawaii	112	113	-1.0%	0	0	112	113	0	0	0	0
U.S. Total	85,918	96,544	-11.0%	64,868	73,021	20,506	22,941	21	24	524	558

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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	389	851	-54.3%	269	543	102	295	0	0	18	12
Connecticut	59	253	-76.7%	0	0	59	253	0	0	0	0
Maine	61	54	11.9%	0	0	43	42	0	0	18	12
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	269	543	-50.5%	269	543	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	30,816	35,625	-13.5%	0	0	30,723	35,523	0	0	93	102
New Jersey	796	934	-14.8%	0	0	796	934	0	0	0	0
New York	422	617	-31.7%	0	0	422	606	0	0	0	11
Pennsylvania	29,598	34,074	-13.1%	0	0	29,505	33,983	0	0	93	91
East North Central	172,929	206,185	-16.1%	100,826	122,982	70,579	81,504	54	64	1,470	1,635
Illinois	38,031	46,300	-17.9%	2,780	3,060	34,076	41,927	21	30	1,154	1,282
Indiana	47,410	57,825	-18.0%	44,310	54,697	3,068	3,093	32	34	0	0
Michigan	29,823	32,987	-9.6%	29,507	32,595	272	331	0	0	45	61
Ohio	37,245	44,130	-15.6%	4,079	7,973	33,164	36,152	0	0	3	5
Wisconsin	20,418	24,944	-18.1%	20,150	24,656	0	0	0	0	268	287
West North Central	124,279	141,945	-12.4%	122,422	140,100	0	0	58	63	1,798	1,782
Iowa	18,094	20,942	-13.6%	16,870	19,698	0	0	50	57	1,173	1,188
Kansas	13,324	15,425	-13.6%	13,324	15,425	0	0	0	0	0	0
Minnesota	14,116	16,755	-15.8%	13,822	16,438	0	0	2	1	291	317
Missouri	42,757	48,499	-11.8%	42,752	48,494	0	0	6	5	0	0
Nebraska	15,373	17,419	-11.7%	15,110	17,142	0	0	0	0	263	277
North Dakota	18,606	20,990	-11.4%	18,535	20,990	0	0	0	0	71	0
South Dakota	2,009	1,914	5.0%	2,009	1,914	0	0	0	0	0	0
South Atlantic	125,803	152,136	-17.3%	112,156	132,110	13,159	19,466	29	29	459	530
Delaware	123	277	-55.6%	0	0	123	277	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	15,842	23,028	-31.2%	15,790	22,950	0	0	0	0	52	78
Georgia	20,782	23,679	-12.2%	20,644	23,530	0	0	0	0	139	149
Maryland	4,596	8,329	-44.8%	0	0	4,564	8,284	0	0	32	45
North Carolina	24,128	25,709	-6.1%	23,880	25,500	123	77	25	24	99	108
South Carolina	11,744	14,637	-19.8%	11,736	14,623	0	0	0	0	8	14
Virginia	2,945	7,587	-61.2%	2,699	6,972	112	473	4	5	130	137
West Virginia	45,643	48,890	-6.6%	37,407	38,535	8,236	10,355	0	0	0	0
East South Central	79,910	90,960	-12.1%	77,482	88,335	2,029	2,072	0	0	399	553
Alabama	20,154	25,731	-21.7%	20,111	25,700	0	0	0	0	43	32
Kentucky	41,032	44,286	-7.3%	41,032	44,286	0	0	0	0	0	0
Mississippi	3,890	3,833	1.5%	1,861	1,761	2,029	2,072	0	0	0	0
Tennessee	14,834	17,110	-13.3%	14,478	16,588	0	0	0	0	356	522
West South Central	103,225	126,159	-18.2%	55,600	70,205	47,504	55,758	0	0	121	196
Arkansas	18,104	21,658	-16.4%	15,220	17,896	2,852	3,728	0	0	31	34
Louisiana	6,281	9,148	-31.3%	4,967	6,028	1,313	3,120	0	0	0	0
Oklahoma	7,087	11,676	-39.3%	6,626	10,279	371	1,236	0	0	90	162
Texas	71,754	83,676	-14.2%	28,786	36,002	42,967	47,674	0	0	0	0
Mountain	105,799	109,629	-3.5%	93,618	98,812	11,902	10,491	0	0	279	325
Arizona	19,036	23,120	-17.7%	19,036	23,120	0	0	0	0	0	0
Colorado	18,550	19,412	-4.4%	18,546	19,404	0	0	0	0	4	8
Idaho	NM	13	NM	0	0	0	0	0	0	NM	13
Montana	10,527	9,077	16.0%	215	157	10,307	8,915	0	0	NM	6
Nevada	2,101	1,646	27.6%	1,344	908	756	739	0	0	0	0
New Mexico	11,123	8,956	24.2%	11,123	8,956	0	0	0	0	0	0
Utah	18,266	18,368	-0.6%	17,959	18,053	307	315	0	0	0	0
Wyoming	26,182	29,038	-9.8%	25,395	28,216	531	523	0	0	256	299
Pacific Contiguous	6,634	4,159	59.5%	1,757	842	4,701	3,082	0	0	176	235
California	159	218	-27.0%	0	0	0	0	0	0	159	218
Oregon	1,757	842	108.7%	1,757	842	0	0	0	0	0	0
Washington	4,718	3,098	52.3%	0	0	4,701	3,082	0	0	17	17
Pacific Noncontiguous	1,465	1,438	1.9%	308	232	1,091	1,130	66	77	0	0
Alaska	506	439	15.2%	308	232	132	131	66	77	0	0
Hawaii	959	999	-4.0%	0	0	959	999	0	0	0	0
U.S. Total	751,249	869,087	-13.6%	564,438	654,160	181,790	209,321	207	233	4,814	5,372

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	12	9	32.7%	2	4	9	3	1	1	NM	1
Connecticut	NM	3	NM	1	0	NM	2	NM	0	0	0
Maine	2	1	149.4%	0	0	2	0	0	0	NM	0
Massachusetts	3	4	-18.8%	NM	3	NM	1	NM	0	0	0
New Hampshire	1	1	-36.7%	0	1	NM	0	1	1	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	NM	0
Vermont	NM	0	NM	NM	0	0	0	0	0	0	0
Middle Atlantic	16	43	-62.9%	3	8	11	33	NM	1	1	2
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	8	19	-58.8%	3	7	4	11	NM	0	0	1
Pennsylvania	6	23	-74.8%	0	0	5	22	0	0	1	1
East North Central	39	46	-14.4%	29	24	9	20	0	1	1	2
Illinois	3	4	-15.6%	1	0	3	3	NM	0	0	0
Indiana	10	10	-0.5%	10	9	0	0	0	0	1	2
Michigan	10	11	-4.8%	10	10	0	0	NM	0	0	0
Ohio	12	18	-31.6%	5	2	7	16	0	0	0	0
Wisconsin	NM	3	NM	NM	3	0	0	NM	0	0	0
West North Central	17	25	-31.4%	16	24	NM	1	0	0	0	0
Iowa	-2	7	-124.1%	-2	7	0	0	0	0	0	0
Kansas	8	2	297.1%	8	2	0	0	0	0	0	0
Minnesota	4	3	8.2%	3	3	NM	1	0	0	0	0
Missouri	3	7	-46.8%	3	7	0	0	0	0	0	0
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	0
North Dakota	2	4	-64.1%	2	4	0	0	0	0	0	0
South Dakota	NM	1	NM	NM	1	0	0	NM	0	0	0
South Atlantic	91	192	-52.6%	61	160	15	20	7	4	8	8
Delaware	NM	2	NM	0	0	NM	2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	22	106	-79.5%	20	106	NM	0	0	0	1	1
Georgia	10	14	-25.3%	NM	7	NM	2	1	0	5	4
Maryland	7	6	27.7%	NM	0	7	5	0	0	0	0
North Carolina	14	15	-6.9%	12	12	NM	1	NM	0	NM	2
South Carolina	8	10	-19.4%	NM	9	0	0	0	0	0	1
Virginia	17	31	-44.1%	NM	17	5	10	6	4	NM	0
West Virginia	11	9	22.1%	11	9	0	0	0	0	0	0
East South Central	18	29	-36.1%	17	28	NM	0	0	0	1	1
Alabama	1	2	-29.4%	1	2	NM	0	0	0	NM	0
Kentucky	6	8	-23.9%	6	8	0	0	0	0	0	0
Mississippi	1	6	-84.8%	1	6	0	0	0	0	0	0
Tennessee	10	12	-20.1%	10	12	0	0	0	0	0	0
West South Central	7	7	-6.7%	6	5	NM	1	0	0	1	1
Arkansas	2	2	-13.9%	1	2	0	0	0	0	0	0
Louisiana	NM	1	NM	NM	1	0	0	0	0	0	0
Oklahoma	2	0	334.8%	2	0	0	0	0	0	0	0
Texas	2	3	-21.5%	2	2	NM	1	0	0	NM	0
Mountain	16	12	34.6%	15	11	0	1	NM	0	0	0
Arizona	4	2	125.8%	4	2	0	0	NM	0	0	0
Colorado	NM	1	NM	NM	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	0	NM	NM	0	0	0	0	0	0	0
Nevada	1	1	-2.0%	1	1	0	0	0	0	0	0
New Mexico	2	2	-8.2%	2	2	0	0	0	0	0	0
Utah	3	2	37.0%	3	2	0	0	0	0	0	0
Wyoming	3	3	10.3%	3	3	0	0	0	0	0	0
Pacific Contiguous	5	4	24.8%	3	3	1	1	0	0	NM	0
California	3	3	11.0%	3	3	0	0	NM	0	0	0
Oregon	0	0	0.9%	0	0	0	0	0	0	0	0
Washington	1	1	88.2%	NM	0	1	0	0	0	NM	0
Pacific Noncontiguous	720	688	4.7%	541	515	156	153	1	1	23	20
Alaska	91	66	37.6%	86	62	0	0	0	0	5	4
Hawaii	629	622	1.2%	455	453	156	153	1	0	18	16
U.S. Total	942	1,055	-10.7%	693	781	203	233	11	7	35	34

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

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	213	1,203	-82.3%	22	172	152	989	29	27	11	15
Connecticut	63	338	-81.5%	4	4	54	330	3	2	2	1
Maine	24	182	-86.6%	0	0	15	168	2	1	8	13
Massachusetts	94	446	-79.0%	9	72	71	363	13	10	1	1
New Hampshire	18	163	-88.7%	8	93	NM	59	9	12	0	0
Rhode Island	13	71	-81.4%	0	0	11	70	2	1	NM	0
Vermont	NM	3	NM	NM	3	0	0	0	0	0	0
Middle Atlantic	643	2,360	-72.8%	184	610	429	1,697	10	21	19	31
New Jersey	59	289	-79.6%	1	1	56	281	1	5	1	1
New York	433	1,568	-72.4%	183	608	231	922	7	12	13	26
Pennsylvania	150	503	-70.1%	0	2	142	494	2	4	6	3
East North Central	369	423	-12.9%	228	235	128	165	2	5	11	19
Illinois	31	38	-18.1%	5	5	26	32	0	0	0	0
Indiana	98	99	-0.8%	93	84	0	0	NM	0	5	15
Michigan	79	95	-16.6%	76	90	0	0	1	3	2	1
Ohio	125	164	-23.4%	27	29	95	131	0	1	3	3
Wisconsin	35	28	24.7%	28	27	7	1	0	0	0	0
West North Central	238	251	-5.3%	228	231	7	17	2	2	1	1
Iowa	49	55	-10.9%	46	52	3	3	0	0	0	0
Kansas	49	41	18.9%	49	41	0	0	0	0	0	0
Minnesota	33	39	-14.3%	26	22	NM	14	2	1	1	1
Missouri	57	76	-24.8%	57	76	0	0	0	0	0	0
Nebraska	15	10	52.6%	15	10	0	0	0	0	0	0
North Dakota	27	26	4.2%	27	26	0	0	0	0	0	0
South Dakota	7	4	74.2%	7	4	0	0	NM	0	0	0
South Atlantic	1,061	2,919	-63.6%	787	2,054	168	725	33	44	73	95
Delaware	35	199	-82.3%	0	6	35	193	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	256	471	-45.6%	244	446	1	12	0	0	11	14
Georgia	99	208	-52.2%	42	74	NM	78	4	4	47	52
Maryland	66	250	-73.8%	0	4	64	243	1	1	1	3
North Carolina	180	566	-68.2%	166	512	6	37	NM	2	8	16
South Carolina	73	305	-76.0%	67	292	2	5	0	0	5	8
Virginia	254	796	-68.1%	173	611	52	145	28	37	2	3
West Virginia	97	123	-21.0%	96	109	1	14	0	0	0	0
East South Central	201	219	-8.1%	191	183	2	25	0	0	9	11
Alabama	14	56	-74.2%	9	25	1	25	0	0	5	6
Kentucky	54	51	5.9%	54	51	0	0	0	0	0	0
Mississippi	12	21	-44.3%	10	17	0	0	0	0	2	4
Tennessee	121	90	33.2%	118	89	0	0	0	0	2	1
West South Central	96	108	-10.7%	71	82	19	19	0	1	6	6
Arkansas	32	30	9.0%	20	22	10	5	0	0	2	3
Louisiana	8	18	-56.3%	8	18	0	0	0	0	0	0
Oklahoma	17	13	31.4%	15	12	0	0	0	0	1	1
Texas	39	47	-16.8%	27	29	9	14	0	1	2	3
Mountain	159	136	17.2%	148	119	11	17	NM	0	0	0
Arizona	47	38	25.3%	47	38	0	0	NM	0	0	0
Colorado	9	9	-1.7%	9	9	0	0	0	0	0	0
Idaho	0	0	386.1%	0	0	0	0	0	0	0	0
Montana	10	14	-32.5%	NM	0	8	14	0	0	0	0
Nevada	10	8	31.1%	8	6	2	2	0	0	0	0
New Mexico	25	14	82.5%	25	14	0	0	0	0	0	0
Utah	28	26	8.8%	27	25	1	1	0	0	0	0
Wyoming	31	28	9.7%	31	28	0	0	0	0	0	0
Pacific Contiguous	55	75	-27.0%	30	29	10	11	1	1	14	34
California	37	59	-36.3%	27	26	2	5	0	0	8	28
Oregon	3	NM	NM	3	NM	0	0	0	0	0	0
Washington	14	13	13.5%	NM	0	8	6	0	0	6	6
Pacific Noncontiguous	5,716	5,566	2.7%	4,270	4,282	1,243	1,105	8	5	194	174
Alaska	663	595	11.3%	620	559	0	0	4	3	38	33
Hawaii	5,053	4,971	1.7%	3,650	3,723	1,243	1,105	4	2	157	141
U.S. Total	8,749	13,259	-34.0%	6,159	7,997	2,167	4,771	84	105	339	386

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
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	12	9	35.2%	0	0	0	0	0	0	12	9
New Jersey	6	6	-3.7%	0	0	0	0	0	0	6	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	6	3	127.0%	0	0	0	0	0	0	6	3
East North Central	150	174	-13.6%	52	89	83	70	0	0	15	15
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	59	95	-37.7%	44	82	0	0	0	0	15	13
Ohio	83	72	16.2%	0	0	83	70	0	0	1	1
Wisconsin	8	8	5.6%	8	8	0	0	0	0	0	0
West North Central	4	1	585.5%	0	0	0	0	0	1	4	0
Iowa	4	1	585.5%	0	0	0	0	0	1	4	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	116	196	-40.5%	100	186	0	0	0	0	16	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	100	186	-45.9%	100	186	0	0	0	0	0	0
Georgia	16	10	62.7%	0	0	0	0	0	0	16	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	321	382	-16.1%	308	364	0	0	0	0	13	18
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	315	377	-16.3%	308	364	0	0	0	0	8	12
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	6	6	0.3%	0	0	0	0	0	0	6	6
Mountain	35	38	-6.6%	0	0	35	38	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	35	38	-6.6%	0	0	35	38	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	638	799	-20.1%	460	639	118	108	0	1	60	51

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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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	108	102	5.8%	0	0	0	0	0	0	108	102
New Jersey	51	43	17.7%	0	0	0	0	0	0	51	43
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	57	59	-3.0%	0	0	0	0	0	0	57	59
East North Central	1,499	1,737	-13.7%	627	852	763	806	0	0	109	79
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	664	844	-21.4%	558	774	0	0	0	0	106	70
Ohio	766	815	-6.0%	0	0	763	806	0	0	3	9
Wisconsin	69	78	-11.5%	69	78	0	0	0	0	0	0
West North Central	72	40	77.7%	0	0	0	0	4	4	68	36
Iowa	72	40	77.7%	0	0	0	0	4	4	68	36
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	1,104	1,410	-21.7%	956	1,290	0	0	0	0	149	120
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	956	1,290	-25.9%	956	1,290	0	0	0	0	0	0
Georgia	149	120	23.7%	0	0	0	0	0	0	149	120
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	2,906	3,378	-14.0%	2,817	3,219	0	0	0	0	89	159
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	2,830	3,326	-14.9%	2,817	3,219	0	0	0	0	13	108
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	75	51	47.8%	0	0	0	0	0	0	75	51
Mountain	356	301	18.4%	0	0	356	301	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	356	301	18.4%	0	0	356	301	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	6,045	6,968	-13.2%	4,400	5,361	1,119	1,107	4	4	522	496

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	3,979	4,970	-20.0%	NM	30	3,741	4,704	94	100	130	136
Connecticut	1,713	1,790	-4.3%	3	6	1,619	1,688	35	39	57	57
Maine	153	204	-24.8%	0	0	113	164	3	3	38	37
Massachusetts	1,172	1,715	-31.6%	NM	21	1,090	1,620	51	53	20	21
New Hampshire	318	303	5.2%	1	3	314	296	1	1	3	3
Rhode Island	622	959	-35.2%	0	0	605	937	5	5	12	18
Vermont	0	0	-96.1%	0	0	0	0	0	0	0	0
Middle Atlantic	16,753	16,662	0.5%	706	865	15,736	15,456	98	104	212	237
New Jersey	3,484	3,987	-12.6%	NM	18	3,418	3,920	13	16	35	34
New York	4,237	5,035	-15.9%	687	846	3,429	4,045	75	81	45	63
Pennsylvania	9,033	7,639	18.2%	1	1	8,889	7,491	10	7	132	140
East North Central	13,331	11,490	16.0%	4,609	3,342	8,303	7,771	130	134	289	243
Illinois	1,621	1,816	-10.8%	114	133	1,417	1,609	31	37	58	37
Indiana	2,810	2,064	36.1%	1,233	560	1,440	1,377	20	12	117	115
Michigan	2,830	2,456	15.2%	1,116	865	1,619	1,511	50	52	45	28
Ohio	4,297	3,662	17.3%	576	509	3,685	3,112	22	26	14	15
Wisconsin	1,774	1,491	18.9%	1,570	1,275	142	163	7	6	54	48
West North Central	3,337	2,575	29.6%	2,900	2,246	351	229	30	26	57	74
Iowa	776	780	-0.5%	725	716	NM	1	10	6	41	57
Kansas	427	192	121.8%	424	188	0	0	0	0	NM	5
Minnesota	983	828	18.7%	844	724	121	86	8	8	10	9
Missouri	734	573	27.9%	490	417	229	143	12	11	3	3
Nebraska	142	44	223.5%	142	44	0	0	0	0	0	0
North Dakota	126	93	36.4%	125	92	0	0	0	0	1	1
South Dakota	151	66	129.7%	151	66	0	0	0	0	0	0
South Atlantic	37,075	35,998	3.0%	30,583	28,597	5,956	6,946	83	90	454	364
Delaware	408	565	-27.8%	2	4	305	487	0	0	101	74
District of Columbia	2	2	-14.6%	0	0	0	0	2	2	0	0
Florida	17,913	17,406	2.9%	16,933	16,502	841	763	2	2	137	140
Georgia	5,698	4,936	15.4%	4,176	3,645	1,466	1,242	0	0	55	48
Maryland	1,129	1,629	-30.7%	112	411	942	1,134	71	77	4	7
North Carolina	3,820	3,877	-1.5%	3,041	3,091	756	768	NM	8	16	10
South Carolina	2,366	2,633	-10.1%	2,237	2,058	118	565	0	0	10	10
Virginia	5,446	4,744	14.8%	4,028	2,863	1,350	1,829	0	1	67	51
West Virginia	295	205	43.6%	54	22	177	159	0	0	63	24
East South Central	13,757	13,225	4.0%	9,744	8,654	3,774	4,336	19	23	220	212
Alabama	5,679	5,649	0.5%	2,088	1,621	3,485	3,923	0	0	106	105
Kentucky	1,415	1,502	-5.8%	1,357	1,401	42	86	0	0	16	15
Mississippi	4,981	4,468	11.5%	4,700	4,098	245	326	0	0	35	44
Tennessee	1,682	1,605	4.8%	1,598	1,534	1	0	19	23	64	48
West South Central	39,108	33,460	16.9%	13,435	11,075	19,736	16,590	104	89	5,833	5,705
Arkansas	1,885	1,487	26.7%	1,747	1,373	112	88	NM	3	22	24
Louisiana	6,450	5,630	14.6%	3,703	3,226	547	366	16	16	2,184	2,021
Oklahoma	4,530	4,262	6.3%	2,754	2,449	1,742	1,767	0	0	34	46
Texas	26,244	22,081	18.9%	5,231	4,027	17,335	14,369	85	70	3,593	3,614
Mountain	10,990	11,399	-3.6%	8,739	8,936	2,095	2,296	35	35	120	132
Arizona	4,781	4,751	0.6%	3,571	3,502	1,198	1,238	11	11	0	0
Colorado	1,384	1,408	-1.7%	1,209	1,100	173	307	0	0	2	1
Idaho	403	417	-3.4%	211	239	176	168	3	3	13	7
Montana	49	38	29.6%	36	26	13	12	0	0	NM	0
Nevada	2,431	2,731	-11.0%	2,213	2,510	188	187	6	6	25	28
New Mexico	1,141	1,096	4.1%	792	708	341	378	9	10	0	0
Utah	715	880	-18.8%	678	835	6	6	6	6	25	33
Wyoming	86	78	9.4%	29	17	0	0	0	0	56	61
Pacific Contiguous	12,114	11,751	3.1%	4,910	4,684	6,184	5,990	146	170	874	907
California	8,474	7,994	6.0%	2,820	2,502	4,649	4,430	142	165	862	897
Oregon	2,054	2,035	1.0%	1,050	1,052	994	974	4	4	NM	5
Washington	1,586	1,722	-7.9%	1,040	1,131	541	586	0	1	NM	5
Pacific Noncontiguous	298	232	28.3%	292	227	0	0	0	0	6	5
Alaska	298	232	28.3%	292	227	0	0	0	0	6	5
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	150,742	141,762	6.3%	75,933	68,655	65,876	64,319	738	771	8,195	8,017

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

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	37,334	39,251	-4.9%	148	210	35,236	37,070	817	832	1,133	1,139
Connecticut	15,768	14,454	9.1%	26	44	14,967	13,616	296	311	479	483
Maine	1,268	1,777	-28.6%	0	0	919	1,430	23	23	326	324
Massachusetts	12,198	14,814	-17.7%	118	135	11,434	14,027	451	454	195	199
New Hampshire	2,584	2,281	13.3%	4	31	2,549	2,221	9	6	22	24
Rhode Island	5,514	5,924	-6.9%	0	0	5,367	5,776	37	38	111	110
Vermont	1	1	13.8%	1	1	0	0	1	1	0	0
Middle Atlantic	141,709	126,415	12.1%	7,838	8,392	131,082	115,172	864	937	1,925	1,914
New Jersey	30,540	29,936	2.0%	122	127	30,010	29,353	101	150	307	306
New York	37,684	38,970	-3.3%	7,713	8,260	28,863	29,562	663	685	444	463
Pennsylvania	73,485	57,509	27.8%	4	6	72,209	56,257	99	101	1,174	1,145
East North Central	118,482	103,859	14.1%	40,191	35,837	74,289	64,302	1,123	1,127	2,879	2,594
Illinois	14,512	13,986	3.8%	1,283	1,119	12,461	12,108	297	279	471	479
Indiana	23,600	20,370	15.9%	9,829	8,709	12,310	10,373	142	137	1,319	1,151
Michigan	25,646	24,658	4.0%	8,752	8,650	15,991	15,228	462	462	441	318
Ohio	38,860	31,933	21.7%	6,112	5,995	32,414	25,597	173	194	161	146
Wisconsin	15,864	12,913	22.9%	14,215	11,363	1,113	996	48	55	487	499
West North Central	26,323	23,868	10.3%	22,550	20,412	2,969	2,644	261	243	543	568
Iowa	6,367	5,976	6.5%	5,908	5,505	NM	6	82	75	371	389
Kansas	2,871	2,464	16.5%	2,815	2,412	0	0	0	0	56	51
Minnesota	8,173	7,395	10.5%	7,089	6,279	920	947	76	79	87	89
Missouri	5,903	5,517	7.0%	3,738	3,708	2,043	1,692	100	86	22	31
Nebraska	1,040	727	43.1%	1,036	724	0	0	4	3	0	0
North Dakota	939	826	13.6%	932	819	0	0	0	0	7	7
South Dakota	1,031	964	7.0%	1,031	964	0	0	0	0	0	0
South Atlantic	297,184	274,299	8.3%	245,388	223,840	47,033	46,534	893	722	3,871	3,203
Delaware	3,854	4,278	-9.9%	25	18	2,988	3,693	0	0	840	567
District of Columbia	16	21	-20.9%	0	0	0	0	16	21	0	0
Florida	139,685	131,121	6.5%	132,953	124,004	5,504	5,942	15	22	1,213	1,154
Georgia	43,938	40,278	9.1%	32,773	30,484	10,688	9,353	0	0	477	442
Maryland	11,753	10,467	12.3%	3,162	2,957	7,752	6,836	787	605	53	69
North Carolina	31,876	32,592	-2.2%	25,272	27,754	6,421	4,679	65	65	119	94
South Carolina	18,644	15,947	16.9%	17,993	13,877	560	1,978	0	0	91	92
Virginia	45,936	38,526	19.2%	33,008	24,599	12,318	13,375	10	9	600	543
West Virginia	1,483	1,069	38.6%	202	148	802	677	0	0	479	244
East South Central	105,622	106,907	-1.2%	72,186	71,583	31,211	33,280	161	172	2,064	1,872
Alabama	44,019	45,193	-2.6%	15,927	15,433	27,111	28,817	0	0	982	943
Kentucky	10,839	11,459	-5.4%	10,393	10,752	276	566	0	0	170	141
Mississippi	37,887	40,131	-5.6%	33,745	35,892	3,811	3,887	0	0	332	353
Tennessee	12,877	10,124	27.2%	12,122	9,506	13	11	161	172	580	435
West South Central	300,608	285,868	5.2%	104,563	97,268	143,804	137,865	778	660	51,462	50,076
Arkansas	15,573	17,065	-8.7%	14,331	15,845	978	963	27	31	237	225
Louisiana	54,665	47,787	14.4%	30,687	26,377	3,897	3,161	121	128	19,961	18,121
Oklahoma	34,519	33,220	3.9%	21,643	19,802	12,579	13,132	0	0	298	286
Texas	195,850	187,797	4.3%	37,903	35,243	126,351	120,610	629	501	30,967	31,444
Mountain	86,867	79,211	9.7%	69,849	63,965	15,637	13,769	313	305	1,067	1,173
Arizona	34,266	27,457	24.8%	25,676	21,520	8,486	5,830	104	107	0	0
Colorado	12,954	12,617	2.7%	11,092	10,611	1,846	1,992	1	0	15	14
Idaho	2,641	2,253	17.2%	1,478	1,032	1,042	1,128	29	29	92	64
Montana	408	318	28.4%	291	251	116	65	0	0	NM	2
Nevada	19,527	20,903	-6.6%	17,627	18,986	1,612	1,586	49	49	239	282
New Mexico	9,045	8,811	2.6%	6,482	5,608	2,482	3,110	76	78	4	15
Utah	7,289	6,204	17.5%	6,907	5,797	54	56	54	43	274	309
Wyoming	738	648	13.8%	296	161	1	1	0	0	440	486
Pacific Contiguous	84,722	85,882	-1.4%	33,879	34,106	41,723	42,367	1,290	1,462	7,831	7,947
California	59,945	64,628	-7.2%	20,115	21,893	30,865	33,498	1,249	1,413	7,716	7,825
Oregon	14,920	12,536	19.0%	7,388	6,717	7,442	5,733	34	34	57	52
Washington	9,858	8,719	13.1%	6,376	5,497	3,416	3,136	7	16	58	71
Pacific Noncontiguous	2,319	2,261	2.6%	2,265	2,214	0	0	0	0	53	47
Alaska	2,319	2,261	2.6%	2,265	2,214	0	0	0	0	53	47
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,201,170	1,127,822	6.5%	598,858	557,827	522,985	493,003	6,499	6,460	72,829	70,532

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 2019 are preliminary. Values for 2018 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), 2009-September 2019 (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						
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
2018	1,231,944	132,866	97,814	5,203	901	1,468,727
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	93,426	10,362	6,034	382	61	110,265
February	86,046	8,021	4,010	352	63	98,492
March	90,850	9,834	5,349	395	73	106,503
April	82,423	9,766	5,755	348	62	98,354
May	94,192	10,839	9,757	421	58	115,268
June	108,641	11,513	10,165	424	65	130,808
July	133,649	15,619	14,731	630	92	164,722
August	133,733	14,426	12,805	587	100	161,650
Sept	118,249	12,775	10,189	465	84	141,762
October	102,793	11,156	8,648	428	91	123,116
November	91,899	9,822	5,955	389	76	108,142
December	96,042	8,733	4,415	381	74	109,647
Year 2019						
January	105,695	7,724	5,531	346	10	119,306
February	97,878	7,401	5,327	394	9	111,009
March	98,278	7,716	6,558	387	10	112,948
April	86,325	9,030	7,280	358	12	103,004
May	96,577	10,107	9,271	398	13	116,366
June	115,480	10,748	10,299	455	13	136,995
July	139,495	18,802	15,230	802	16	174,345
August	141,752	18,271	15,577	835	19	176,454
Sept	123,666	13,982	12,443	636	16	150,742

Values for 2018 and prior years are final. Values for 2019 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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	54	47	16.7%	0	0	0	0	0	0	54	47
New Jersey	18	16	14.9%	0	0	0	0	0	0	18	16
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	36	31	17.6%	0	0	0	0	0	0	36	31
East North Central	394	406	-2.9%	10	3	178	181	0	0	207	222
Illinois	16	16	4.2%	0	0	0	0	0	0	16	16
Indiana	181	191	-5.4%	0	0	0	0	0	0	181	191
Michigan	147	127	16.3%	10	3	138	123	0	0	0	0
Ohio	50	73	-31.2%	0	0	41	58	0	0	10	15
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	-3.1%	0	0	0	0	0	0	4	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	4	4	-3.1%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	22	31	-29.8%	0	0	0	0	0	0	22	31
Delaware	19	29	-33.6%	0	0	0	0	0	0	19	29
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-98.9%	0	0	0	0	0	0	0	1
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	2	1	85.7%	0	0	0	0	0	0	2	1
East South Central	NM	1	NM	0	0	0	0	0	0	NM	1
Alabama	NM	0	NM	0	0	0	0	0	0	NM	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	1	14.4%	0	0	0	0	0	0	1	1
West South Central	471	402	17.0%	0	0	135	88	0	0	336	314
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	234	231	1.6%	0	0	0	0	0	0	234	231
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	236	172	37.7%	0	0	135	88	0	0	101	83
Mountain	32	33	-3.8%	0	0	1	1	0	0	31	32
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	-49.6%	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	2	1	355.0%	0	0	0	0	0	0	2	1
Wyoming	29	31	-7.8%	0	0	0	0	0	0	29	31
Pacific Contiguous	159	174	-8.8%	0	0	34	58	0	0	125	117
California	125	117	6.8%	0	0	0	0	0	0	125	117
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	34	58	-40.3%	0	0	34	58	0	0	0	0
Pacific Noncontiguous	0	5	-92.5%	0	0	0	0	0	0	0	5
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	5	-92.5%	0	0	0	0	0	0	0	5
U.S. Total	1,139	1,104	3.1%	10	3	349	328	0	0	781	773

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 2019 are preliminary. Values for 2018 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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	560	555	0.9%	0	0	0	1	0	0	560	554
New Jersey	159	157	1.5%	0	0	0	0	0	0	159	157
New York	2	0	--	0	0	0	0	0	0	2	0
Pennsylvania	399	398	0.2%	0	0	0	1	0	0	399	397
East North Central	3,849	3,789	1.6%	132	152	1,677	1,607	0	0	2,041	2,030
Illinois	183	148	23.6%	0	0	0	0	0	0	183	148
Indiana	1,742	1,766	-1.4%	0	0	0	0	0	0	1,742	1,766
Michigan	1,365	1,277	6.9%	132	152	1,233	1,125	0	0	0	0
Ohio	559	598	-6.6%	0	0	443	482	0	0	116	116
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	38	38	0.1%	0	0	0	0	0	0	38	38
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	38	38	0.1%	0	0	0	0	0	0	38	38
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	183	213	-14.1%	0	0	0	0	0	0	183	213
Delaware	151	192	-21.5%	0	0	0	0	0	0	151	192
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	4	-97.3%	0	0	0	0	0	0	0	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	32	17	90.4%	0	0	0	0	0	0	32	17
East South Central	13	12	12.8%	0	0	0	0	0	0	13	12
Alabama	NM	4	NM	0	0	0	0	0	0	NM	4
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	9	8	14.3%	0	0	0	0	0	0	9	8
West South Central	4,097	3,859	6.2%	0	0	1,284	1,057	0	0	2,813	2,802
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,949	1,954	-0.2%	0	0	0	0	0	0	1,949	1,954
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,148	1,905	12.8%	0	0	1,284	1,057	0	0	864	848
Mountain	204	287	-29.1%	0	0	7	10	0	0	197	278
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	7	10	-27.8%	0	0	7	10	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	13	4	235.7%	0	0	0	0	0	0	13	4
Wyoming	184	274	-33.0%	0	0	0	0	0	0	184	274
Pacific Contiguous	1,372	1,485	-7.6%	0	0	234	345	0	0	1,138	1,140
California	1,138	1,140	-0.2%	0	0	0	0	0	0	1,138	1,140
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	234	345	-32.2%	0	0	234	345	0	0	0	0
Pacific Noncontiguous	4	43	-90.3%	0	0	0	0	0	0	4	43
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	4	43	-90.3%	0	0	0	0	0	0	4	43
U.S. Total	10,320	10,281	0.4%	132	152	3,202	3,020	0	0	6,987	7,110

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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	2,380	2,587	-8.0%	0	0	2,380	2,587	0	0	0	0
Connecticut	1,486	1,397	6.4%	0	0	1,486	1,397	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	308	-100.0%	0	0	0	308	0	0	0	0
New Hampshire	894	882	1.4%	0	0	894	882	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	12,847	12,238	5.0%	0	0	12,847	12,238	0	0	0	0
New Jersey	2,317	2,383	-2.8%	0	0	2,317	2,383	0	0	0	0
New York	3,745	2,962	26.5%	0	0	3,745	2,962	0	0	0	0
Pennsylvania	6,784	6,894	-1.6%	0	0	6,784	6,894	0	0	0	0
East North Central	12,895	12,703	1.5%	2,275	2,153	10,620	10,550	0	0	0	0
Illinois	7,748	7,589	2.1%	0	0	7,748	7,589	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,847	2,729	4.3%	2,275	2,153	572	576	0	0	0	0
Ohio	1,433	1,535	-6.6%	0	0	1,433	1,535	0	0	0	0
Wisconsin	867	851	1.8%	0	0	867	851	0	0	0	0
West North Central	3,596	3,432	4.8%	3,167	3,294	429	138	0	0	0	0
Iowa	429	138	211.2%	0	0	429	138	0	0	0	0
Kansas	570	871	-34.5%	570	871	0	0	0	0	0	0
Minnesota	1,173	1,075	9.2%	1,173	1,075	0	0	0	0	0	0
Missouri	855	863	-1.0%	855	863	0	0	0	0	0	0
Nebraska	568	485	17.2%	568	485	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	16,066	15,621	2.9%	14,802	14,374	1,265	1,246	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,273	1,873	21.3%	2,273	1,873	0	0	0	0	0	0
Georgia	2,753	2,509	9.7%	2,753	2,509	0	0	0	0	0	0
Maryland	1,265	1,246	1.5%	0	0	1,265	1,246	0	0	0	0
North Carolina	3,526	2,836	24.3%	3,526	2,836	0	0	0	0	0	0
South Carolina	4,176	4,572	-8.7%	4,176	4,572	0	0	0	0	0	0
Virginia	2,073	2,583	-19.7%	2,073	2,583	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	6,642	6,846	-3.0%	6,642	6,846	0	0	0	0	0	0
Alabama	3,517	3,327	5.7%	3,517	3,327	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	944	725	30.2%	944	725	0	0	0	0	0	0
Tennessee	2,181	2,794	-21.9%	2,181	2,794	0	0	0	0	0	0
West South Central	6,435	6,046	6.4%	2,854	2,458	3,581	3,588	0	0	0	0
Arkansas	1,310	953	37.5%	1,310	953	0	0	0	0	0	0
Louisiana	1,544	1,505	2.5%	1,544	1,505	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,581	3,588	-0.2%	0	0	3,581	3,588	0	0	0	0
Mountain	2,839	2,808	1.1%	2,839	2,808	0	0	0	0	0	0
Arizona	2,839	2,808	1.1%	2,839	2,808	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	2,193	2,444	-10.3%	2,193	2,444	0	0	0	0	0	0
California	1,370	1,615	-15.2%	1,370	1,615	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	823	829	-0.8%	823	829	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	65,892	64,725	1.8%	34,770	34,377	31,122	30,348	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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	22,711	24,835	-8.6%	0	0	22,711	24,835	0	0	0	0
Connecticut	12,367	13,546	-8.7%	0	0	12,367	13,546	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	2,177	3,116	-30.1%	0	0	2,177	3,116	0	0	0	0
New Hampshire	8,167	8,172	-0.1%	0	0	8,167	8,172	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	116,701	119,220	-2.1%	0	0	116,701	119,220	0	0	0	0
New Jersey	20,030	25,215	-20.6%	0	0	20,030	25,215	0	0	0	0
New York	32,855	31,507	4.3%	0	0	32,855	31,507	0	0	0	0
Pennsylvania	63,815	62,498	2.1%	0	0	63,815	62,498	0	0	0	0
East North Central	118,885	118,867	0.0%	19,965	18,942	98,920	99,925	0	0	0	0
Illinois	74,280	73,318	1.3%	0	0	74,280	73,318	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	25,036	24,132	3.7%	19,965	18,942	5,071	5,190	0	0	0	0
Ohio	12,205	13,552	-9.9%	0	0	12,205	13,552	0	0	0	0
Wisconsin	7,363	7,865	-6.4%	0	0	7,363	7,865	0	0	0	0
West North Central	33,735	33,912	-0.5%	29,846	30,327	3,889	3,586	0	0	0	0
Iowa	3,889	3,586	8.5%	0	0	3,889	3,586	0	0	0	0
Kansas	7,659	6,464	18.5%	7,659	6,464	0	0	0	0	0	0
Minnesota	10,548	11,130	-5.2%	10,548	11,130	0	0	0	0	0	0
Missouri	6,462	7,929	-18.5%	6,462	7,929	0	0	0	0	0	0
Nebraska	5,176	4,804	7.7%	5,176	4,804	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	153,699	153,544	0.1%	142,650	142,534	11,049	11,010	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	21,794	22,245	-2.0%	21,794	22,245	0	0	0	0	0	0
Georgia	24,552	25,468	-3.6%	24,552	25,468	0	0	0	0	0	0
Maryland	11,049	11,010	0.4%	0	0	11,049	11,010	0	0	0	0
North Carolina	31,268	30,910	1.2%	31,268	30,910	0	0	0	0	0	0
South Carolina	42,755	41,825	2.2%	42,755	41,825	0	0	0	0	0	0
Virginia	22,281	22,086	0.9%	22,281	22,086	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	68,857	62,181	10.7%	68,857	62,181	0	0	0	0	0	0
Alabama	32,634	29,908	9.1%	32,634	29,908	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	8,596	4,087	110.3%	8,596	4,087	0	0	0	0	0	0
Tennessee	27,627	28,185	-2.0%	27,627	28,185	0	0	0	0	0	0
West South Central	50,952	54,517	-6.5%	19,813	22,638	31,139	31,879	0	0	0	0
Arkansas	10,451	9,988	4.6%	10,451	9,988	0	0	0	0	0	0
Louisiana	9,362	12,650	-26.0%	9,362	12,650	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	31,139	31,879	-2.3%	0	0	31,139	31,879	0	0	0	0
Mountain	24,749	24,322	1.8%	24,749	24,322	0	0	0	0	0	0
Arizona	24,749	24,322	1.8%	24,749	24,322	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	19,719	20,677	-4.6%	19,719	20,677	0	0	0	0	0	0
California	13,414	13,484	-0.5%	13,414	13,484	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	6,305	7,193	-12.3%	6,305	7,193	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	610,006	612,076	-0.3%	325,598	321,621	284,408	290,455	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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	390	398	-1.9%	57	56	327	335	0	0	NM	6
Connecticut	32	30	8.5%	2	3	30	27	0	0	0	0
Maine	188	171	9.5%	0	0	182	165	0	0	NM	6
Massachusetts	65	60	8.1%	NM	14	49	45	0	0	0	0
New Hampshire	44	71	-38.2%	25	19	NM	52	0	0	0	0
Rhode Island	0	0	-54.2%	0	0	0	0	0	0	0	0
Vermont	62	65	-5.9%	NM	20	47	46	0	0	0	0
Middle Atlantic	2,575	2,629	-2.1%	2,104	1,960	467	666	0	0	NM	3
New Jersey	0	2	-99.2%	0	0	0	2	0	0	0	0
New York	2,333	2,297	1.6%	2,102	1,948	228	346	0	0	NM	3
Pennsylvania	241	331	-27.1%	2	11	239	319	0	0	0	0
East North Central	210	388	-45.9%	183	345	18	30	0	0	9	13
Illinois	9	13	-27.2%	NM	5	NM	8	0	0	0	0
Indiana	NM	19	NM	NM	19	0	0	0	0	0	0
Michigan	73	134	-45.3%	67	124	NM	10	0	0	NM	1
Ohio	NM	21	NM	NM	19	0	1	0	0	0	0
Wisconsin	115	201	-42.6%	101	177	NM	11	0	0	9	12
West North Central	628	932	-32.6%	607	907	NM	20	0	0	7	6
Iowa	38	63	-39.3%	38	63	1	1	0	0	0	0
Kansas	2	3	-42.8%	0	0	2	3	0	0	0	0
Minnesota	51	71	-29.0%	32	49	NM	16	0	0	7	6
Missouri	NM	56	NM	NM	56	0	0	0	0	0	0
Nebraska	66	94	-30.1%	66	94	0	0	0	0	0	0
North Dakota	150	217	-31.0%	150	217	0	0	0	0	0	0
South Dakota	319	427	-25.4%	319	427	0	0	0	0	0	0
South Atlantic	780	1,675	-53.5%	652	1,308	74	305	1	2	53	60
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	NM	20	NM	NM	20	0	0	0	0	0	0
Georgia	134	252	-46.8%	133	251	NM	0	0	0	1	0
Maryland	42	246	-82.8%	0	0	42	246	0	0	0	0
North Carolina	322	572	-43.7%	319	566	NM	4	1	2	NM	0
South Carolina	99	260	-62.0%	96	254	NM	6	0	0	0	0
Virginia	55	165	-66.7%	53	160	NM	5	0	0	0	0
West Virginia	115	160	-28.2%	38	56	25	44	0	0	51	60
East South Central	1,279	1,660	-22.9%	1,279	1,659	NM	1	0	0	0	0
Alabama	447	740	-39.6%	447	740	0	0	0	0	0	0
Kentucky	246	280	-12.1%	246	280	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	586	640	-8.3%	586	640	0	0	0	0	0	0
West South Central	198	458	-56.8%	105	378	93	80	0	0	0	0
Arkansas	64	187	-65.8%	58	184	NM	3	0	0	0	0
Louisiana	84	73	14.7%	0	0	84	73	0	0	0	0
Oklahoma	43	126	-66.1%	43	126	0	0	0	0	0	0
Texas	NM	71	NM	NM	68	3	3	0	0	0	0
Mountain	1,919	2,624	-26.9%	1,849	2,526	68	96	2	2	0	0
Arizona	472	515	-8.4%	472	515	0	0	0	0	0	0
Colorado	112	128	-12.4%	96	111	NM	15	2	2	0	0
Idaho	522	822	-36.5%	480	759	42	63	0	0	0	0
Montana	534	851	-37.2%	528	841	NM	10	0	0	0	0
Nevada	173	154	12.1%	168	148	NM	6	0	0	0	0
New Mexico	NM	11	NM	NM	11	0	0	0	0	0	0
Utah	46	69	-33.4%	46	69	0	0	0	0	0	0
Wyoming	50	74	-32.1%	49	72	0	1	0	0	0	0
Pacific Contiguous	8,305	8,293	0.2%	8,117	8,136	188	156	NM	0	0	0
California	2,917	2,301	26.8%	2,760	2,178	156	122	NM	0	0	0
Oregon	1,742	1,954	-10.9%	1,730	1,941	NM	14	0	0	0	0
Washington	3,646	4,038	-9.7%	3,627	4,018	20	20	0	0	0	0
Pacific Noncontiguous	88	110	-19.8%	75	93	2	3	NM	11	NM	3
Alaska	83	103	-19.5%	75	93	0	0	NM	11	0	0
Hawaii	5	6	-23.8%	0	0	2	3	0	0	NM	3
U.S. Total	16,372	19,166	-14.6%	15,029	17,368	1,250	1,692	NM	16	81	90

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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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	5,491	5,297	3.7%	800	751	4,606	4,463	4	3	82	80
Connecticut	401	385	4.1%	30	26	370	359	0	0	0	0
Maine	2,374	2,283	4.0%	0	0	2,292	2,203	0	0	82	80
Massachusetts	826	793	4.1%	203	187	619	603	4	3	0	0
New Hampshire	968	947	2.2%	272	259	696	688	0	0	0	0
Rhode Island	3	2	9.4%	0	0	3	2	0	0	0	0
Vermont	920	886	3.8%	295	278	625	608	0	0	0	0
Middle Atlantic	25,262	25,219	0.2%	18,960	18,768	6,251	6,403	5	4	46	44
New Jersey	24	25	-5.2%	0	0	24	25	0	0	0	0
New York	22,150	22,032	0.5%	18,876	18,668	3,222	3,315	5	4	46	44
Pennsylvania	3,089	3,162	-2.3%	84	99	3,005	3,063	0	0	0	0
East North Central	2,976	3,281	-9.3%	2,641	2,913	244	257	1	1	90	110
Illinois	98	107	-8.3%	34	43	62	63	1	1	0	0
Indiana	155	161	-4.0%	155	161	0	0	0	0	0	0
Michigan	994	1,135	-12.4%	911	1,042	76	86	0	0	NM	7
Ohio	202	176	14.7%	180	164	22	12	0	0	0	0
Wisconsin	1,527	1,702	-10.3%	1,360	1,503	83	96	0	0	83	103
West North Central	9,235	9,045	2.1%	8,992	8,804	170	180	0	0	73	62
Iowa	563	612	-8.2%	556	608	6	5	0	0	0	0
Kansas	14	19	-27.4%	0	0	14	19	0	0	0	0
Minnesota	676	698	-3.2%	453	480	150	157	0	0	73	62
Missouri	630	546	15.4%	630	546	0	0	0	0	0	0
Nebraska	894	915	-2.3%	894	915	0	0	0	0	0	0
North Dakota	2,128	2,106	1.0%	2,128	2,106	0	0	0	0	0	0
South Dakota	4,331	4,149	4.4%	4,331	4,149	0	0	0	0	0	0
South Atlantic	14,380	13,568	6.0%	11,495	10,629	2,345	2,454	14	11	525	474
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	168	157	6.9%	168	157	0	0	0	0	0	0
Georgia	2,739	2,561	6.9%	2,718	2,545	NM	7	0	0	8	9
Maryland	1,830	1,957	-6.5%	0	0	1,830	1,957	0	0	0	0
North Carolina	4,821	4,380	10.0%	4,762	4,334	40	37	12	9	NM	0
South Carolina	2,237	2,041	9.6%	2,180	1,981	55	58	2	2	0	0
Virginia	1,237	1,221	1.3%	1,193	1,170	43	51	0	0	0	0
West Virginia	1,348	1,249	8.0%	474	441	363	343	0	0	511	465
East South Central	18,851	20,065	-6.0%	18,844	20,056	NM	8	0	0	0	0
Alabama	8,322	8,423	-1.2%	8,322	8,423	0	0	0	0	0	0
Kentucky	3,006	3,478	-13.6%	2,998	3,470	NM	8	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	7,524	8,163	-7.8%	7,524	8,163	0	0	0	0	0	0
West South Central	5,304	5,819	-8.8%	4,367	4,819	936	999	NM	1	0	0
Arkansas	2,170	2,375	-8.6%	2,129	2,338	41	36	0	0	0	0
Louisiana	863	936	-7.8%	0	0	863	936	0	0	0	0
Oklahoma	1,435	1,614	-11.1%	1,435	1,614	0	0	0	0	0	0
Texas	836	894	-6.6%	803	866	31	27	NM	1	0	0
Mountain	23,594	28,155	-16.2%	22,728	27,116	855	1,027	11	12	0	0
Arizona	4,753	5,499	-13.6%	4,753	5,499	0	0	0	0	0	0
Colorado	1,300	1,474	-11.8%	1,130	1,292	159	171	11	12	0	0
Idaho	7,037	8,825	-20.3%	6,488	8,146	550	678	0	0	0	0
Montana	7,252	9,129	-20.6%	7,166	9,020	87	109	0	0	0	0
Nevada	1,888	1,585	19.1%	1,845	1,529	43	56	0	0	0	0
New Mexico	109	120	-8.9%	109	120	0	0	0	0	0	0
Utah	609	740	-17.8%	600	735	9	5	0	0	0	0
Wyoming	645	782	-17.5%	637	774	8	9	0	0	0	0
Pacific Contiguous	108,277	116,423	-7.0%	105,982	114,709	2,280	1,705	NM	10	0	0
California	34,127	22,218	53.6%	32,257	21,026	1,855	1,181	NM	10	0	0
Oregon	22,525	28,434	-20.8%	22,364	28,236	160	198	0	0	0	0
Washington	51,625	65,772	-21.5%	51,360	65,447	265	325	0	0	0	0
Pacific Noncontiguous	1,142	1,395	-18.2%	981	1,197	15	32	117	139	28	26
Alaska	1,091	1,320	-17.4%	973	1,181	0	0	117	139	0	0
Hawaii	51	75	-32.1%	8	17	15	32	0	0	28	26
U.S. Total	214,512	228,266	-6.0%	195,790	209,761	17,710	17,529	168	181	844	796

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	929	837	11.0%	63	61	760	657	11	14	94	104
Connecticut	79	74	7.2%	0	0	79	74	NM	0	NM	0
Maine	375	372	0.9%	0	0	278	263	3	5	94	104
Massachusetts	212	172	23.2%	13	5	195	163	3	4	NM	0
New Hampshire	142	125	13.6%	11	27	126	93	4	4	0	0
Rhode Island	39	33	18.4%	0	0	38	32	0	0	0	0
Vermont	82	62	33.1%	38	29	44	32	0	0	0	0
Middle Atlantic	1,142	1,011	13.0%	7	6	1,028	902	51	52	56	51
New Jersey	176	148	18.4%	7	6	144	120	24	23	NM	0
New York	522	457	14.2%	0	0	491	427	16	19	15	11
Pennsylvania	444	405	9.5%	0	0	393	355	11	10	41	39
East North Central	2,477	1,914	29.4%	306	217	2,046	1,556	12	16	113	125
Illinois	978	717	36.4%	9	8	968	708	NM	1	0	0
Indiana	463	333	39.2%	37	33	420	293	2	2	5	5
Michigan	621	501	23.8%	166	117	409	327	3	8	43	50
Ohio	176	168	4.7%	NM	1	153	144	1	1	20	21
Wisconsin	239	195	22.5%	92	58	96	83	5	5	45	49
West North Central	7,466	6,212	20.2%	2,377	1,977	5,002	4,152	16	16	71	66
Iowa	2,169	1,686	28.7%	1,566	1,164	592	516	4	4	7	2
Kansas	2,108	1,566	34.7%	182	148	1,925	1,417	NM	1	0	0
Minnesota	1,150	1,107	3.9%	207	224	876	815	NM	4	63	64
Missouri	265	245	8.1%	3	3	256	236	6	6	0	0
Nebraska	634	476	33.2%	28	20	604	454	1	1	0	0
North Dakota	909	902	0.8%	324	348	585	554	NM	NM	0	0
South Dakota	230	230	-0.2%	67	70	163	160	0	0	0	0
South Atlantic	3,169	2,625	20.7%	593	394	1,725	1,360	33	37	819	834
Delaware	9	9	7.7%	NM	1	7	7	0	0	NM	1
District of Columbia	6	4	34.7%	0	0	NM	0	4	4	0	0
Florida	726	594	22.2%	388	236	198	192	3	4	137	163
Georgia	616	592	4.1%	30	29	272	227	NM	0	314	336
Maryland	123	111	10.1%	NM	1	119	103	3	3	0	5
North Carolina	894	638	40.1%	37	28	749	520	10	13	98	76
South Carolina	287	206	39.5%	33	26	112	69	0	0	142	110
Virginia	397	365	8.8%	103	74	155	136	12	13	128	143
West Virginia	111	106	5.2%	0	0	111	106	0	0	0	0
East South Central	616	596	3.3%	14	13	123	101	NM	0	479	481
Alabama	300	328	-8.7%	3	3	50	49	0	0	248	276
Kentucky	40	28	43.0%	11	10	1	1	0	0	29	17
Mississippi	156	132	18.3%	0	0	32	28	0	0	124	104
Tennessee	120	108	10.8%	NM	0	41	23	NM	0	79	85
West South Central	10,079	6,765	49.0%	159	119	9,541	6,245	7	7	372	394
Arkansas	128	91	41.2%	NM	0	26	23	2	0	100	68
Louisiana	197	224	-12.1%	NM	0	6	6	0	0	191	218
Oklahoma	2,543	1,902	33.8%	135	102	2,396	1,772	0	0	12	27
Texas	7,210	4,548	58.5%	24	17	7,112	4,443	5	7	68	81
Mountain	4,278	3,778	13.3%	533	317	3,685	3,428	40	11	21	21
Arizona	524	568	-7.8%	61	66	462	501	NM	1	0	0
Colorado	1,121	818	37.0%	230	23	889	793	NM	1	0	0
Idaho	287	284	1.2%	13	13	254	251	1	1	19	19
Montana	186	153	21.4%	17	16	167	135	0	0	2	2
Nevada	817	781	4.7%	4	4	778	770	35	6	0	0
New Mexico	711	541	31.3%	30	26	680	515	NM	0	0	0
Utah	308	339	-9.0%	19	19	288	319	1	1	0	0
Wyoming	324	293	10.6%	159	150	165	143	0	0	0	0
Pacific Contiguous	6,920	6,843	1.1%	661	605	5,983	5,931	73	85	203	222
California	5,404	5,448	-0.8%	178	208	5,091	5,091	70	81	65	69
Oregon	774	684	13.2%	116	69	605	566	2	2	51	47
Washington	742	711	4.3%	367	328	287	275	NM	1	87	107
Pacific Noncontiguous	126	103	22.0%	14	14	91	69	20	19	NM	0
Alaska	15	14	12.0%	7	6	NM	4	4	3	NM	0
Hawaii	111	90	23.5%	7	8	87	66	17	16	0	0
U.S. Total	37,200	30,683	21.2%	4,727	3,723	29,983	24,402	264	258	2,227	2,300

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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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	8,755	8,501	3.0%	621	575	7,156	6,963	113	132	866	830
Connecticut	717	647	10.8%	3	3	714	644	NM	1	NM	0
Maine	3,661	3,685	-0.7%	0	0	2,765	2,807	34	52	862	826
Massachusetts	1,887	1,848	2.1%	118	55	1,726	1,748	39	41	NM	4
New Hampshire	1,395	1,359	2.6%	176	182	1,187	1,146	32	31	0	0
Rhode Island	365	293	24.6%	0	0	360	288	5	5	0	0
Vermont	731	668	9.4%	323	336	405	330	2	2	0	0
Middle Atlantic	10,990	10,501	4.7%	61	63	9,965	9,415	465	496	499	526
New Jersey	1,562	1,547	1.0%	61	63	1,286	1,252	210	227	4	4
New York	5,151	4,666	10.4%	0	0	4,868	4,369	151	163	133	133
Pennsylvania	4,277	4,288	-0.3%	0	0	3,811	3,794	104	105	362	389
East North Central	25,847	23,095	11.9%	3,061	2,810	21,477	18,909	137	182	1,171	1,194
Illinois	10,294	8,774	17.3%	85	77	10,203	8,690	NM	6	0	0
Indiana	5,042	4,409	14.4%	328	331	4,655	4,010	14	16	45	52
Michigan	6,121	5,838	4.8%	1,723	1,520	3,870	3,712	48	95	480	512
Ohio	2,081	1,820	14.4%	15	14	1,840	1,587	11	10	215	209
Wisconsin	2,309	2,254	2.4%	911	868	909	910	59	55	430	422
West North Central	62,177	56,333	10.4%	20,512	18,076	40,984	37,576	139	146	542	535
Iowa	19,009	15,647	21.5%	13,382	10,744	5,547	4,844	34	35	46	24
Kansas	15,547	14,298	8.7%	1,417	1,419	14,119	12,870	11	12	0	-2
Minnesota	10,142	10,091	0.5%	1,900	2,046	7,699	7,493	50	42	493	510
Missouri	2,266	2,271	-0.2%	22	28	2,208	2,196	34	44	2	2
Nebraska	5,217	4,112	26.9%	265	184	4,943	3,916	9	11	0	0
North Dakota	7,924	7,835	1.1%	2,928	3,024	4,993	4,808	NM	NM	NM	1
South Dakota	2,072	2,079	-0.3%	598	631	1,475	1,449	0	0	0	0
South Atlantic	28,616	27,002	6.0%	5,075	3,997	15,491	14,711	311	381	7,740	7,912
Delaware	84	87	-3.5%	5	5	67	68	4	4	8	9
District of Columbia	52	43	23.2%	0	0	12	0	41	43	0	0
Florida	6,470	5,670	14.1%	3,191	2,007	1,844	2,166	33	38	1,403	1,460
Georgia	5,449	5,425	0.4%	248	234	2,214	2,072	2	2	2,984	3,117
Maryland	1,131	1,137	-0.6%	6	6	1,047	1,038	28	21	49	71
North Carolina	8,075	7,318	10.3%	319	317	6,748	5,914	93	148	915	939
South Carolina	2,458	2,167	13.4%	306	308	885	699	0	0	1,267	1,159
Virginia	3,632	3,855	-5.8%	1,000	1,118	1,407	1,455	110	126	1,115	1,155
West Virginia	1,266	1,300	-2.6%	0	0	1,266	1,300	0	0	0	0
East South Central	5,590	5,497	1.7%	122	126	1,047	931	3	3	4,418	4,436
Alabama	2,925	2,904	0.7%	24	25	433	437	0	0	2,468	2,442
Kentucky	359	340	5.4%	95	101	7	7	0	0	257	232
Mississippi	1,303	1,345	-3.1%	0	0	262	274	0	0	1,041	1,071
Tennessee	1,003	907	10.6%	NM	0	345	213	3	3	652	690
West South Central	90,733	85,510	6.1%	1,303	1,293	85,881	80,268	62	70	3,487	3,880
Arkansas	1,241	1,191	4.2%	NM	1	215	213	7	4	1,017	973
Louisiana	1,662	1,976	-15.9%	NM	1	57	56	0	0	1,604	1,919
Oklahoma	21,303	21,080	1.1%	1,085	1,063	20,010	19,771	0	0	208	246
Texas	66,526	61,262	8.6%	216	227	65,599	60,229	55	66	657	741
Mountain	37,437	35,660	5.0%	4,532	3,078	32,213	32,215	410	93	282	274
Arizona	4,777	4,790	-0.3%	546	561	4,221	4,218	10	11	0	0
Colorado	9,268	8,214	12.8%	1,791	241	7,460	7,960	14	10	2	2
Idaho	2,804	2,883	-2.7%	126	131	2,409	2,490	7	8	263	254
Montana	1,696	1,586	6.9%	163	169	1,517	1,401	0	0	16	16
Nevada	6,966	6,659	4.6%	32	34	6,563	6,572	369	52	2	2
New Mexico	6,063	5,634	7.6%	241	215	5,820	5,416	NM	2	0	0
Utah	2,757	2,842	-3.0%	171	167	2,578	2,665	7	10	0	0
Wyoming	3,106	3,053	1.7%	1,462	1,561	1,644	1,492	0	0	0	0
Pacific Contiguous	62,215	62,639	-0.7%	6,008	6,711	53,682	53,335	658	739	1,867	1,855
California	48,165	47,086	2.3%	1,662	1,815	45,299	44,041	628	708	575	522
Oregon	7,063	7,661	-7.8%	1,035	1,126	5,560	6,121	21	22	448	393
Washington	6,986	7,892	-11.5%	3,311	3,770	2,823	3,173	9	9	844	940
Pacific Noncontiguous	1,104	1,057	4.4%	149	139	786	734	167	182	2	2
Alaska	143	152	-6.3%	73	75	41	43	27	33	2	2
Hawaii	961	905	6.2%	76	65	746	691	139	149	0	0
U.S. Total	333,464	315,794	5.6%	41,444	36,870	268,682	255,056	2,464	2,424	20,873	21,444

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	-39	-38	4.5%	0	0	-39	-38	0	0	0	0
Connecticut	0	1	-38.3%	0	0	0	1	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-40	-38	3.9%	0	0	-40	-38	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	-74	-116	-36.1%	-25	-51	-49	-65	0	0	0	0
New Jersey	-6	-3	81.0%	-6	-3	0	0	0	0	0	0
New York	-19	-47	-58.9%	-19	-47	0	0	0	0	0	0
Pennsylvania	-49	-65	-25.5%	0	0	-49	-65	0	0	0	0
East North Central	-93	-37	150.4%	-93	-37	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	-93	-37	150.4%	-93	-37	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	-3	-7	-57.3%	-3	-7	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	-3	-7	-57.3%	-3	-7	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	-369	-328	12.5%	-369	-328	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	-140	-104	34.6%	-140	-104	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	-94	-105	-10.1%	-94	-105	0	0	0	0	0	0
Virginia	-135	-119	13.1%	-135	-119	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-69	-58	19.8%	-69	-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	-69	-58	19.8%	-69	-58	0	0	0	0	0	0
West South Central	-11	-9	27.2%	-11	-9	0	0	0	0	0	0
Arkansas	1	1	23.2%	1	1	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-12	-9	26.9%	-12	-9	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-13	-16	-21.0%	-13	-16	0	0	0	0	0	0
Arizona	7	3	163.8%	7	3	0	0	0	0	0	0
Colorado	-20	-19	6.4%	-20	-19	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	5	-100.0%	0	5	0	0	0	0	0	0
California	-2	5	-133.8%	-2	5	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	0	-730.9%	2	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-671	-603	11.3%	-583	-500	-88	-103	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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	-342	-347	-1.3%	0	0	-342	-347	0	0	0	0
Connecticut	3	-1	-305.4%	0	0	3	-1	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-345	-345	-0.1%	0	0	-345	-345	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	-774	-957	-19.2%	-321	-456	-453	-502	0	0	0	0
New Jersey	-87	-115	-24.0%	-87	-115	0	0	0	0	0	0
New York	-234	-341	-31.5%	-234	-341	0	0	0	0	0	0
Pennsylvania	-453	-502	-9.7%	0	0	-453	-502	0	0	0	0
East North Central	-601	-535	12.3%	-601	-535	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	-601	-535	12.3%	-601	-535	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	345	-2	NM	345	-2	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	345	-2	NM	345	-2	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	-1,895	-2,035	-6.9%	-1,895	-2,035	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	-340	-434	-21.6%	-340	-434	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	-687	-513	33.9%	-687	-513	0	0	0	0	0	0
Virginia	-869	-1,088	-20.2%	-869	-1,088	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-486	-483	0.6%	-486	-483	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	-486	-483	0.6%	-486	-483	0	0	0	0	0	0
West South Central	-27	-67	-60.3%	-27	-67	0	0	0	0	0	0
Arkansas	50	31	62.3%	50	31	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-76	-98	-21.8%	-76	-98	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-116	-180	-35.5%	-116	-180	0	0	0	0	0	0
Arizona	34	39	-12.5%	34	39	0	0	0	0	0	0
Colorado	-150	-219	-31.4%	-150	-219	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	45	58	-21.9%	45	58	0	0	0	0	0	0
California	40	27	44.4%	40	27	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	6	31	-81.5%	6	31	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	-3,850	-4,548	-15.3%	-3,055	-3,699	-795	-848	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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources by State, by Sector, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	157	142	10.6%	0	0	142	125	4	5	10	12
Connecticut	48	42	13.0%	0	0	48	42	0	0	0	0
Maine	26	28	-7.9%	0	0	11	10	4	5	10	12
Massachusetts	79	68	17.0%	0	0	79	68	0	0	0	0
New Hampshire	4	4	3.1%	0	0	4	4	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	-100.0%	0	0	0	0	0	0	0	0
Middle Atlantic	207	174	19.3%	0	0	159	137	43	36	6	1
New Jersey	52	42	24.3%	0	0	32	29	14	12	6	1
New York	82	72	14.0%	0	0	63	55	19	17	0	0
Pennsylvania	73	60	22.2%	0	0	64	53	9	7	0	0
East North Central	67	51	31.3%	2	1	7	7	6	9	52	35
Illinois	24	1	NM	0	0	-1	-1	0	0	25	3
Indiana	25	30	-16.0%	0	0	0	0	2	2	23	28
Michigan	14	17	-19.4%	0	0	8	8	4	7	2	2
Ohio	0	0	-15.0%	0	0	0	0	0	0	1	1
Wisconsin	4	3	43.4%	2	1	0	0	0	0	NM	2
West North Central	32	37	-14.1%	14	18	11	12	3	3	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	-0.2%	0	0	0	0	0	0	0	0
Minnesota	27	33	-18.4%	9	14	11	12	3	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	5	4	19.6%	5	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	395	340	16.3%	0	0	219	178	13	12	162	150
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	270	237	14.0%	0	0	135	118	0	0	135	119
Georgia	8	8	-1.6%	0	0	0	0	0	0	8	8
Maryland	30	28	8.2%	0	0	30	28	0	0	0	0
North Carolina	37	39	-2.9%	0	0	21	18	0	0	16	20
South Carolina	4	3	17.8%	0	0	1	1	0	0	3	2
Virginia	47	26	76.5%	0	0	34	15	13	12	0	0
West Virginia	0	-1	-51.2%	0	0	0	-1	0	0	0	0
East South Central	7	7	-9.0%	6	7	0	0	0	0	0	1
Alabama	0	0	-100.0%	0	0	0	0	0	0	0	0
Kentucky	6	7	-4.8%	6	7	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	1	-49.8%	0	0	0	0	0	0	0	1
West South Central	97	90	7.6%	0	0	6	11	0	0	91	79
Arkansas	0	0	122.0%	0	0	0	0	0	0	0	0
Louisiana	49	40	22.0%	0	0	0	0	0	0	49	40
Oklahoma	0	6	-99.5%	0	0	0	6	0	0	0	0
Texas	47	43	9.2%	0	0	6	5	0	0	41	38
Mountain	60	55	7.8%	7	6	25	25	0	0	27	24
Arizona	0	0	23.1%	0	0	0	0	0	0	0	0
Colorado	6	5	12.0%	0	0	2	1	0	0	4	4
Idaho	5	6	-10.7%	0	0	0	0	0	0	5	6
Montana	24	24	0.2%	0	0	24	24	0	0	0	0
Nevada	2	2	-10.9%	2	2	0	0	0	0	0	0
New Mexico	0	0	-28.1%	0	0	0	0	0	0	0	0
Utah	16	13	25.8%	5	4	0	0	0	0	11	9
Wyoming	8	6	21.0%	0	0	0	0	0	0	8	6
Pacific Contiguous	70	76	-7.4%	-2	-1	26	21	0	0	47	56
California	61	67	-9.6%	-2	-1	16	12	0	0	47	56
Oregon	4	3	41.9%	0	0	4	3	0	0	0	0
Washington	5	6	-6.5%	0	0	5	6	0	0	0	0
Pacific Noncontiguous	37	32	14.4%	16	17	0	0	21	16	0	0
Alaska	0	0	-13.8%	0	0	0	0	0	0	0	0
Hawaii	37	33	14.1%	17	17	0	0	21	16	0	0
U.S. Total	1,129	1,004	12.4%	43	47	595	515	90	80	400	363

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	1,414	1,293	9.4%	0	0	1,276	1,144	42	50	96	100
Connecticut	432	352	22.8%	0	0	432	352	0	0	0	0
Maine	262	278	-5.7%	0	0	124	129	42	50	96	100
Massachusetts	680	628	8.2%	0	0	680	628	0	0	0	0
New Hampshire	40	35	13.9%	0	0	40	35	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	-100.0%	0	0	0	0	0	0	0	0
Middle Atlantic	1,865	1,624	14.9%	0	0	1,446	1,292	378	325	41	7
New Jersey	453	408	11.0%	0	0	290	292	121	109	41	7
New York	704	646	9.1%	0	0	532	496	172	149	0	0
Pennsylvania	708	570	24.2%	0	0	624	503	84	67	0	0
East North Central	658	617	6.6%	15	11	73	66	74	105	497	436
Illinois	200	171	16.9%	0	0	-8	-15	0	0	208	186
Indiana	262	225	16.5%	0	0	0	0	17	16	245	209
Michigan	152	185	-17.7%	0	0	80	83	56	89	16	12
Ohio	9	5	84.6%	-1	-2	0	-3	0	0	10	10
Wisconsin	35	31	10.3%	16	13	0	0	0	0	19	19
West North Central	307	349	-11.9%	143	176	104	106	21	25	40	43
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	4	4	-0.3%	0	0	0	0	0	0	4	4
Minnesota	263	306	-14.1%	102	137	104	106	21	25	36	39
Missouri	0	1	-100.0%	0	1	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	41	38	6.5%	41	38	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,542	3,305	7.2%	-1	0	2,049	1,862	124	114	1,370	1,329
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,382	2,222	7.2%	-1	0	1,273	1,149	0	0	1,110	1,073
Georgia	72	66	9.7%	0	0	0	0	0	0	72	66
Maryland	242	250	-3.1%	0	0	242	250	0	0	0	0
North Carolina	401	399	0.5%	0	0	240	233	0	0	161	166
South Carolina	30	29	3.2%	0	0	4	6	0	0	27	24
Virginia	419	349	19.9%	0	0	295	235	124	114	0	0
West Virginia	-5	-10	-50.0%	0	0	-5	-10	0	0	0	0
East South Central	37	53	-30.5%	33	47	0	0	0	0	4	6
Alabama	0	0	-100.0%	0	0	0	0	0	0	0	0
Kentucky	33	47	-29.6%	33	47	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	4	6	-37.7%	0	0	0	0	0	0	4	6
West South Central	736	879	-16.3%	0	0	66	90	0	0	670	789
Arkansas	3	5	-38.1%	0	0	0	0	0	0	3	5
Louisiana	363	511	-28.9%	0	0	0	0	0	0	363	511
Oklahoma	5	41	-88.0%	0	0	1	37	0	0	4	4
Texas	364	323	12.9%	0	0	65	53	0	0	300	270
Mountain	530	569	-6.8%	64	61	229	238	0	0	238	270
Arizona	-3	-2	83.1%	0	0	-3	-2	0	0	0	0
Colorado	45	45	-1.0%	0	0	13	14	0	0	32	31
Idaho	50	50	0.9%	0	0	0	0	0	0	50	50
Montana	219	225	-2.6%	0	0	219	225	0	0	0	0
Nevada	17	22	-22.9%	17	22	0	0	0	0	0	0
New Mexico	-1	-1	34.5%	-1	-1	0	0	0	0	0	0
Utah	148	164	-9.7%	47	40	0	0	0	0	101	124
Wyoming	55	65	-15.8%	0	0	0	0	0	0	55	65
Pacific Contiguous	638	704	-9.4%	-13	-14	197	200	0	0	453	518
California	565	629	-10.3%	-12	-13	124	124	0	0	453	518
Oregon	24	30	-20.8%	0	0	24	31	0	0	0	0
Washington	49	45	10.0%	0	-1	49	45	0	0	0	0
Pacific Noncontiguous	292	281	4.1%	122	138	0	-1	170	143	0	0
Alaska	-3	-2	10.2%	-3	-2	0	0	0	0	0	0
Hawaii	295	283	4.2%	125	141	0	-1	170	143	0	0
U.S. Total	10,019	9,675	3.6%	363	419	5,439	4,996	807	762	3,410	3,498

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	262	201	30.3%	17	13	242	186	NM	2	NM	0
Connecticut	NM	1	NM	0	0	NM	1	0	0	0	0
Maine	172	134	28.7%	0	0	172	134	0	0	0	0
Massachusetts	16	12	35.1%	NM	3	10	8	NM	1	NM	0
New Hampshire	29	23	25.1%	0	0	29	23	0	0	0	0
Rhode Island	15	10	55.8%	0	0	15	10	0	0	0	0
Vermont	28	22	31.0%	13	10	16	12	0	0	0	0
Middle Atlantic	559	483	15.8%	0	0	559	482	NM	0	NM	NM
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	298	260	14.6%	0	0	297	259	NM	0	NM	NM
Pennsylvania	260	221	17.3%	0	0	260	221	0	0	0	0
East North Central	1,983	1,440	37.7%	221	157	1,754	1,278	NM	1	NM	4
Illinois	937	679	38.1%	NM	1	936	678	NM	0	0	0
Indiana	399	272	46.6%	0	0	399	272	0	0	0	0
Michigan	422	295	42.9%	158	108	263	187	0	0	0	0
Ohio	108	102	5.8%	NM	1	102	98	0	0	NM	4
Wisconsin	118	93	27.7%	61	47	55	44	NM	1	0	0
West North Central	7,147	5,934	20.4%	2,348	1,941	4,795	3,990	NM	4	0	0
Iowa	2,146	1,668	28.6%	1,564	1,162	582	507	0	0	0	0
Kansas	2,102	1,560	34.7%	182	147	1,918	1,411	NM	1	0	0
Minnesota	892	885	0.8%	189	200	701	683	NM	2	0	0
Missouri	244	223	9.2%	0	0	244	223	0	0	0	0
Nebraska	624	466	34.0%	22	14	602	452	0	0	0	0
North Dakota	909	902	0.8%	324	348	585	554	NM	NM	0	0
South Dakota	229	230	-0.2%	67	70	162	160	0	0	0	0
South Atlantic	186	172	8.1%	0	0	186	172	0	0	0	0
Delaware	0	0	-11.7%	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	45	37	19.5%	0	0	45	37	0	0	0	0
North Carolina	29	28	3.9%	0	0	29	28	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	111	106	5.2%	0	0	111	106	0	0	0	0
East South Central	NM	3	NM	0	0	NM	3	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	3	NM	0	0	NM	3	0	0	0	0
West South Central	9,274	6,032	53.7%	153	113	9,116	5,915	5	4	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	2,524	1,868	35.1%	129	97	2,395	1,771	0	0	0	0
Texas	6,750	4,165	62.1%	23	16	6,722	4,144	5	4	NM	1
Mountain	2,402	1,874	28.2%	417	200	1,984	1,673	NM	0	0	0
Arizona	43	38	11.9%	0	0	43	38	0	0	0	0
Colorado	996	699	42.4%	230	23	766	676	0	0	0	0
Idaho	202	192	5.1%	12	12	189	180	0	0	0	0
Montana	181	148	22.4%	17	16	164	132	0	0	0	0
Nevada	25	23	11.2%	0	0	25	23	0	0	0	0
New Mexico	578	406	42.4%	0	0	578	406	NM	0	0	0
Utah	70	75	-7.0%	0	0	70	75	0	0	0	0
Wyoming	307	293	4.8%	159	150	148	143	0	0	0	0
Pacific Contiguous	2,424	2,329	4.0%	515	443	1,908	1,885	0	0	0	1
California	1,203	1,259	-4.4%	67	84	1,135	1,173	0	0	0	1
Oregon	609	512	19.1%	110	64	499	448	0	0	0	0
Washington	612	559	9.4%	338	295	274	264	0	0	0	0
Pacific Noncontiguous	60	50	19.9%	7	6	52	43	0	0	0	0
Alaska	11	10	12.8%	7	6	NM	4	0	0	0	0
Hawaii	48	40	21.7%	0	0	48	40	0	0	0	0
U.S. Total	24,299	18,518	31.2%	3,679	2,874	20,599	15,627	14	12	8	6

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	2,670	2,466	8.3%	169	161	2,476	2,282	23	21	NM	2
Connecticut	NM	9	NM	0	0	NM	9	0	0	0	0
Maine	1,748	1,648	6.1%	0	0	1,748	1,648	0	0	0	0
Massachusetts	164	159	3.7%	42	41	103	99	17	15	NM	2
New Hampshire	304	281	7.9%	0	0	304	281	0	0	0	0
Rhode Island	162	112	45.5%	0	0	157	106	5	5	0	0
Vermont	282	259	9.0%	127	120	155	139	0	0	0	0
Middle Atlantic	5,908	5,419	9.0%	0	0	5,902	5,413	NM	2	NM	5
New Jersey	16	16	1.4%	0	0	16	16	0	0	0	0
New York	3,296	2,844	15.9%	0	0	3,291	2,837	NM	2	NM	5
Pennsylvania	2,595	2,559	1.4%	0	0	2,595	2,559	0	0	0	0
East North Central	21,255	18,441	15.3%	2,329	2,086	18,848	16,287	21	20	57	48
Illinois	9,927	8,400	18.2%	9	9	9,914	8,388	NM	3	0	0
Indiana	4,465	3,815	17.1%	0	0	4,465	3,815	0	0	0	0
Michigan	4,179	3,865	8.1%	1,651	1,444	2,528	2,422	0	0	0	0
Ohio	1,444	1,189	21.4%	NM	8	1,380	1,135	2	2	52	44
Wisconsin	1,241	1,172	5.9%	661	626	560	528	15	14	5	5
West North Central	59,446	53,646	10.8%	20,234	17,705	39,178	35,906	34	35	0	0
Iowa	18,828	15,480	21.6%	13,366	10,726	5,459	4,752	3	2	0	0
Kansas	15,486	14,244	8.7%	1,415	1,417	14,060	12,815	11	12	0	0
Minnesota	7,905	7,897	0.1%	1,716	1,782	6,171	6,097	18	19	0	0
Missouri	2,100	2,094	0.3%	0	0	2,100	2,094	0	0	0	0
Nebraska	5,132	4,018	27.7%	211	126	4,921	3,893	0	0	0	0
North Dakota	7,923	7,834	1.1%	2,928	3,024	4,993	4,808	NM	NM	0	0
South Dakota	2,071	2,078	-0.3%	598	631	1,473	1,447	0	0	0	0
South Atlantic	2,058	2,128	-3.3%	0	0	2,055	2,125	4	4	0	0
Delaware	4	4	-0.2%	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	415	431	-3.7%	0	0	415	431	0	0	0	0
North Carolina	373	394	-5.1%	0	0	373	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	1,266	1,300	-2.6%	0	0	1,266	1,300	0	0	0	0
East South Central	33	31	5.9%	0	0	33	31	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	33	31	5.9%	0	0	33	31	0	0	0	0
West South Central	83,168	78,238	6.3%	1,245	1,233	81,874	76,956	40	40	10	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	21,031	20,766	1.3%	1,035	1,013	19,995	19,754	0	0	0	0
Texas	62,138	57,471	8.1%	209	220	61,878	57,203	40	40	10	8
Mountain	20,938	19,576	7.0%	3,528	2,087	17,404	17,485	NM	2	2	2
Arizona	430	399	7.8%	0	0	430	399	0	0	0	0
Colorado	8,167	7,222	13.1%	1,787	237	6,376	6,982	NM	0	2	2
Idaho	1,938	1,998	-3.0%	116	120	1,823	1,878	0	0	0	0
Montana	1,654	1,542	7.2%	163	169	1,491	1,373	0	0	0	0
Nevada	249	235	6.1%	0	0	249	235	0	0	0	0
New Mexico	4,906	4,506	8.9%	0	0	4,904	4,504	NM	2	0	0
Utah	641	621	3.1%	0	0	641	621	0	0	0	0
Wyoming	2,953	3,053	-3.3%	1,462	1,561	1,491	1,492	0	0	0	0
Pacific Contiguous	23,000	24,620	-6.6%	4,709	5,259	18,283	19,353	4	4	5	4
California	11,649	11,786	-1.2%	678	729	10,962	11,048	4	4	5	4
Oregon	5,603	6,301	-11.1%	990	1,076	4,613	5,224	0	0	0	0
Washington	5,748	6,533	-12.0%	3,041	3,454	2,707	3,080	0	0	0	0
Pacific Noncontiguous	561	573	-2.0%	73	75	488	498	0	0	0	0
Alaska	113	117	-3.2%	73	75	41	43	0	0	0	0
Hawaii	448	455	-1.7%	0	0	448	455	0	0	0	0
U.S. Total	219,038	205,138	6.8%	32,286	28,606	186,540	176,335	133	127	79	70

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	519	551	-5.9%	31	44	385	391	9	13	94	104
Connecticut	64	68	-5.9%	0	0	64	68	0	0	0	0
Maine	202	238	-14.8%	0	0	105	129	3	5	94	104
Massachusetts	89	91	-2.4%	0	0	87	88	1	3	0	0
New Hampshire	113	102	11.0%	11	27	98	70	4	4	0	0
Rhode Island	15	21	-29.0%	0	0	15	21	0	0	0	0
Vermont	36	33	10.5%	20	17	17	15	0	0	0	0
Middle Atlantic	400	424	-5.7%	0	0	307	332	39	42	54	50
New Jersey	63	73	-13.7%	0	0	50	59	13	13	0	0
New York	161	172	-6.3%	0	0	131	143	16	18	14	11
Pennsylvania	176	179	-1.8%	0	0	126	130	10	10	40	39
East North Central	419	413	1.6%	63	41	241	237	9	13	107	121
Illinois	35	32	8.9%	8	7	26	25	0	0	0	0
Indiana	34	34	-0.2%	23	23	4	4	2	2	5	5
Michigan	185	194	-4.7%	0	0	139	136	3	7	43	50
Ohio	53	55	-3.6%	0	0	37	36	1	1	15	18
Wisconsin	113	99	15.1%	31	11	35	36	3	3	45	49
West North Central	159	171	-6.8%	27	35	50	58	12	12	71	66
Iowa	21	17	28.3%	NM	2	9	9	4	3	7	2
Kansas	5	5	-1.1%	0	0	5	5	0	0	0	0
Minnesota	115	129	-10.6%	18	24	33	39	NM	2	63	64
Missouri	11	13	-11.2%	2	3	3	4	6	6	0	0
Nebraska	7	8	-14.8%	5	6	0	0	1	1	0	0
North Dakota	0	0	-100.0%	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,552	1,485	4.6%	180	152	534	472	20	27	818	834
Delaware	4	4	4.8%	0	0	3	3	0	0	NM	1
District of Columbia	4	4	1.4%	0	0	0	0	4	4	0	0
Florida	352	391	-9.9%	63	65	150	161	3	3	137	163
Georgia	429	404	6.3%	0	0	115	68	0	0	314	336
Maryland	31	40	-21.1%	0	0	30	33	1	2	0	5
North Carolina	199	170	16.9%	0	0	101	88	NM	5	98	76
South Carolina	210	168	25.6%	33	26	36	31	0	0	142	110
Virginia	322	304	5.8%	85	61	98	87	11	13	128	143
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	507	515	-1.7%	7	7	22	27	0	0	478	481
Alabama	262	296	-11.5%	0	0	14	20	0	0	248	276
Kentucky	36	25	46.0%	7	7	1	1	0	0	29	17
Mississippi	125	105	19.1%	0	0	NM	1	0	0	124	104
Tennessee	84	90	-6.6%	0	0	6	6	0	0	78	84
West South Central	424	444	-4.5%	0	0	53	47	0	3	371	394
Arkansas	106	75	41.9%	0	0	5	7	0	0	100	68
Louisiana	197	224	-12.1%	0	0	6	6	0	0	191	218
Oklahoma	14	29	-52.2%	0	0	2	2	0	0	12	27
Texas	107	116	-7.7%	0	0	39	32	0	3	67	81
Mountain	77	75	2.3%	NM	1	54	51	2	2	20	21
Arizona	20	17	13.1%	0	0	20	17	0	0	0	0
Colorado	14	14	-3.0%	0	0	14	14	0	0	0	0
Idaho	30	30	0.9%	NM	1	10	9	1	1	18	19
Montana	2	2	-2.1%	0	0	0	0	0	0	2	2
Nevada	4	4	5.8%	0	0	4	4	0	0	0	0
New Mexico	1	2	-19.5%	0	0	1	2	0	0	0	0
Utah	6	6	-4.1%	0	0	5	5	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	705	769	-8.3%	36	43	412	438	58	69	200	219
California	486	524	-7.1%	2	5	368	387	55	66	62	66
Oregon	93	94	-1.0%	5	5	35	40	2	2	51	47
Washington	126	152	-16.9%	30	33	9	11	NM	1	87	107
Pacific Noncontiguous	30	28	5.9%	5	4	4	4	20	19	NM	0
Alaska	4	3	9.5%	0	0	0	0	4	3	NM	0
Hawaii	26	25	5.4%	5	4	4	4	17	16	0	0
U.S. Total	4,792	4,876	-1.7%	349	329	2,061	2,057	169	201	2,213	2,290

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

Table 1.15.B. Utility Scale Facility Net Generation from Biomass

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	4,817	5,033	-4.3%	341	368	3,528	3,731	87	108	862	826
Connecticut	578	572	1.1%	0	0	578	572	0	0	0	0
Maine	1,903	2,027	-6.1%	0	0	1,007	1,150	34	52	862	826
Massachusetts	778	874	-11.0%	0	0	759	851	19	23	0	0
New Hampshire	1,091	1,078	1.2%	176	182	883	865	32	31	0	0
Rhode Island	150	159	-6.0%	0	0	150	159	0	0	0	0
Vermont	318	322	-1.4%	165	186	151	134	2	2	0	0
Middle Atlantic	3,620	3,980	-9.0%	0	0	2,780	3,085	354	383	486	512
New Jersey	605	714	-15.2%	0	0	496	590	109	124	0	0
New York	1,402	1,588	-11.7%	0	0	1,128	1,301	145	158	129	129
Pennsylvania	1,612	1,678	-3.9%	0	0	1,156	1,194	100	101	356	383
East North Central	3,978	4,111	-3.2%	535	548	2,227	2,267	105	151	1,112	1,144
Illinois	315	319	-1.2%	74	66	241	252	0	0	0	0
Indiana	306	344	-11.0%	211	239	37	37	14	16	45	52
Michigan	1,808	1,871	-3.3%	0	0	1,282	1,266	46	93	480	512
Ohio	517	529	-2.2%	0	0	349	360	6	5	162	163
Wisconsin	1,031	1,048	-1.6%	250	242	318	352	38	37	425	417
West North Central	1,367	1,672	-18.3%	261	357	460	670	104	110	542	535
Iowa	168	157	7.6%	10	13	81	87	31	33	46	24
Kansas	46	48	-4.8%	0	0	46	50	0	0	0	-2
Minnesota	1,013	1,292	-21.6%	183	262	306	497	31	24	493	510
Missouri	80	105	-23.8%	19	24	27	36	32	42	2	2
Nebraska	59	70	-16.3%	50	59	0	0	9	11	0	0
North Dakota	NM	1	NM	0	0	0	0	0	0	NM	1
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	14,302	15,121	-5.4%	1,683	1,806	4,686	5,135	198	271	7,734	7,910
Delaware	39	44	-11.5%	0	0	31	35	0	0	8	9
District of Columbia	41	43	-4.0%	0	0	0	0	41	43	0	0
Florida	3,410	3,844	-11.3%	546	488	1,435	1,865	28	33	1,401	1,458
Georgia	3,813	3,806	0.2%	0	0	828	689	0	0	2,984	3,117
Maryland	311	398	-21.9%	0	0	246	314	17	13	49	71
North Carolina	1,876	1,973	-4.9%	0	0	957	978	4	56	915	939
South Carolina	1,868	1,766	5.8%	301	307	304	300	0	0	1,263	1,159
Virginia	2,945	3,248	-9.3%	836	1,011	886	955	108	126	1,115	1,155
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	4,678	4,741	-1.3%	64	70	201	240	0	0	4,413	4,431
Alabama	2,602	2,610	-0.3%	0	0	134	167	0	0	2,468	2,442
Kentucky	326	308	6.0%	64	70	6	6	0	0	257	232
Mississippi	1,049	1,080	-2.9%	0	0	9	9	0	0	1,041	1,071
Tennessee	700	743	-5.8%	0	0	52	57	0	0	647	685
West South Central	3,978	4,492	-11.4%	0	0	487	592	15	28	3,477	3,872
Arkansas	1,075	1,024	4.9%	0	0	53	47	4	4	1,017	973
Louisiana	1,661	1,975	-15.9%	0	0	57	56	0	0	1,604	1,919
Oklahoma	223	264	-15.6%	0	0	14	17	0	0	208	246
Texas	1,020	1,229	-17.0%	0	0	362	472	11	24	647	733
Mountain	781	774	1.0%	10	11	480	475	14	18	276	270
Arizona	179	161	11.5%	0	0	179	161	0	0	0	0
Colorado	120	123	-2.4%	0	0	120	123	0	0	0	0
Idaho	363	360	0.8%	10	11	85	87	7	8	261	254
Montana	16	16	-2.2%	0	0	0	0	0	0	16	16
Nevada	39	40	-1.4%	0	0	39	40	0	0	0	0
New Mexico	13	16	-16.9%	0	0	13	16	0	0	0	0
Utah	52	59	-12.4%	0	0	44	49	7	10	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	6,366	6,554	-2.9%	344	431	3,664	3,674	521	614	1,838	1,835
California	4,355	4,432	-1.7%	34	71	3,284	3,275	491	582	546	503
Oregon	808	764	5.8%	41	44	299	305	21	22	448	393
Washington	1,204	1,359	-11.4%	270	316	81	94	9	9	844	940
Pacific Noncontiguous	255	259	-1.6%	48	37	38	38	167	182	2	2
Alaska	29	35	-16.7%	0	0	0	0	27	33	2	2
Hawaii	225	224	0.7%	48	37	38	38	139	149	0	0
U.S. Total	44,141	46,736	-5.6%	3,286	3,627	18,550	19,907	1,564	1,864	20,742	21,337

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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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
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	354	327	8.0%	19	19	305	309	30	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	NM	7	NM	0	0	NM	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	306	282	8.5%	0	0	277	282	30	0	0	0
New Mexico	5	1	348.6%	0	0	5	1	0	0	0	0
Utah	36	37	-2.1%	19	19	17	19	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,018	992	2.6%	64	66	954	925	0	0	0	0
California	1,005	977	2.9%	64	66	941	911	0	0	0	0
Oregon	12	15	-16.0%	0	0	12	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	12	9	28.2%	0	0	12	9	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	12	9	28.2%	0	0	12	9	0	0	0	0
U.S. Total	1,383	1,328	4.1%	83	85	1,270	1,243	30	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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	3,226	2,958	9.1%	171	167	2,736	2,792	319	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	55	62	-12.1%	0	0	55	62	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,802	2,554	9.7%	0	0	2,484	2,554	319	0	0	0
New Mexico	44	9	377.8%	0	0	44	9	0	0	0	0
Utah	325	333	-2.4%	171	167	154	166	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	8,981	8,876	1.2%	542	587	8,439	8,290	0	0	0	0
California	8,870	8,745	1.4%	542	587	8,328	8,158	0	0	0	0
Oregon	111	132	-16.1%	0	0	111	132	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	101	82	23.1%	0	0	101	82	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	101	82	23.1%	0	0	101	82	0	0	0	0
U.S. Total	12,309	11,917	3.3%	714	754	11,276	11,163	319	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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.17.A. Net Generation from Solar Photovoltaic
by State, by Sector, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	459	354	29.7%	148	84	310	269	15	4	133	80	NM	150	NM	0	165	149	12	11	0	0	12	11	133	109
Connecticut	72	49	47.3%	15	6	57	43	0	0	14	5	NM	18	NM	0	21	18	NM	2	NM	0	3	2	34	23
Maine	NM	6	NM	NM	1	7	5	0	0	NM	1	3	2	0	0	3	2	0	0	0	0	0	0	4	3
Massachusetts	308	259	19.0%	107	69	201	190	9	1	98	67	NM	118	NM	0	119	118	9	8	0	0	9	8	73	64
New Hampshire	12	10	24.5%	0	0	12	10	0	0	0	0	4	3	0	0	4	3	1	1	0	0	1	1	8	6
Rhode Island	26	10	150.1%	8	2	18	9	0	0	8	2	13	4	0	0	13	4	0	0	0	0	0	0	5	4
Vermont	32	19	63.4%	17	7	15	12	6	2	11	5	5	4	0	0	5	4	0	NM	0	0	0	NM	9	8
Middle Atlantic	602	439	37.1%	182	104	419	335	7	6	162	87	194	166	12	10	182	156	NM	18	NM	1	22	18	216	161
New Jersey	312	236	31.9%	111	74	200	162	7	6	93	59	104	93	11	9	93	84	NM	11	NM	0	15	11	93	68
New York	237	162	46.6%	63	25	174	137	0	0	62	25	NM	60	NM	0	75	59	2	2	0	0	2	2	98	76
Pennsylvania	53	41	29.8%	8	5	45	36	0	0	7	4	NM	14	NM	0	14	13	NM	6	NM	1	6	5	25	18
East North Central	149	111	34.3%	74	61	75	50	22	19	50	40	NM	32	NM	1	41	31	5	3	0	0	5	2	29	16
Illinois	27	16	71.1%	6	6	21	10	0	0	5	6	NM	6	NM	0	12	6	0	NM	0	0	0	NM	9	3
Indiana	44	37	18.2%	31	27	13	10	14	10	17	17	9	7	0	0	9	7	0	0	0	0	0	0	4	3
Michigan	26	20	27.6%	15	12	11	8	8	8	7	4	NM	NM	NM	NM	5	4	NM	0	0	0	NM	0	6	4
Ohio	35	26	32.2%	16	12	19	15	NM	1	14	10	NM	11	NM	0	11	11	3	1	0	0	3	1	5	3
Wisconsin	17	11	53.8%	7	4	10	7	0	0	6	3	NM	NM	NM	NM	4	3	2	1	0	0	2	1	5	3
West North Central	219	152	44.4%	159	106	60	46	2	1	157	105	28	22	0	0	28	22	2	2	0	0	2	2	29	22
Iowa	NM	14	NM	NM	1	16	13	NM	1	NM	0	10	8	0	0	10	8	1	0	0	0	1	0	6	4
Kansas	NM	3	NM	NM	1	4	3	NM	0	NM	1	1	1	0	0	1	1	0	0	0	0	0	0	2	2
Minnesota	153	101	51.4%	143	93	10	8	NM	0	142	93	3	3	0	0	3	3	1	1	0	0	1	1	6	4
Missouri	39	31	26.2%	10	9	29	21	0	0	9	9	14	10	0	0	13	10	1	0	0	0	1	0	15	11
Nebraska	5	3	36.7%	3	2	1	1	NM	0	2	2	1	0	0	0	1	0	0	0	0	0	0	0	1	1
North Dakota	0	0	114.5%	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	1,682	1,153	45.9%	1,429	964	254	189	411	237	1,005	717	77	66	12	10	65	56	NM	25	NM	0	27	25	162	108
Delaware	15	13	17.6%	5	4	11	9	NM	1	4	4	3	3	0	0	3	3	1	1	0	0	1	1	7	6
District of Columbia	NM	6	NM	NM	0	8	6	0	0	NM	0	4	4	0	0	4	4	0	0	0	0	0	0	4	3
Florida	429	235	82.9%	371	199	58	36	323	167	48	32	NM	9	NM	1	11	9	NM	1	NM	0	1	1	46	26
Georgia	NM	210	NM	187	188	NM	22	30	29	156	159	NM	NM	NM	0	4	NM	NM	NM	0	0	NM	NM	NM	NM
Maryland	134	101	32.2%	46	34	88	67	NM	1	44	32	NM	21	NM	1	23	20	3	3	0	0	3	3	61	44
North Carolina	689	458	50.5%	666	440	23	18	37	28	619	404	20	18	10	8	10	10	1	1	0	0	1	1	13	8
South Carolina	105	61	72.9%	76	38	28	23	NM	0	76	38	6	6	0	0	6	6	NM	2	NM	0	2	2	20	14
Virginia	87	68	28.3%	76	61	12	7	19	12	57	49	NM	2	NM	0	3	2	0	0	0	0	0	0	8	5
West Virginia	1	1	30.2%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
East South Central	121	91	32.5%	107	78	14	13	7	6	99	72	NM	9	NM	0	9	9	NM	NM	NM	1	0	NM	5	4
Alabama	NM	34	NM	38	33	NM	NM	3	3	35	30	NM	1	0	0	NM	1	0	0	0	0	0	0	NM	NM
Kentucky	8	6	20.4%	4	3	4	3	4	3	NM	0	2	2	0	0	2	2	0	0	0	0	0	0	2	1
Mississippi	32	28	15.9%	31	27	1	1	0	0	31	27	1	1	0	0	1	1	NM	NM	0	0	NM	NM	0	0
Tennessee	42	24	76.7%	34	16	8	8	NM	0	32	15	NM	6	NM	0	6	6	NM	NM	NM	1	NM	NM	2	2
West South Central	496	375	32.4%	380	289	116	86	7	6	372	283	25	19	2	0	23	19	1	0	0	0	1	0	92	67
Arkansas	26	18	40.5%	22	16	3	2	NM	0	21	16	2	1	1	0	1	1	0	0	0	0	0	0	2	1
Louisiana	NM	19	NM	NM	0	20	19	NM	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	19	18
Oklahoma	7	6	29.6%	6	5	2	1	6	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	443	331	33.7%	352	268	91	64	NM	1	351	267	NM	17	NM	0	21	17	0	0	0	0	0	0	70	47
Mountain	1,788	1,729	3.4%	1,364	1,366	424	363	95	97	1,260	1,261	120	115	8	9	111	106	NM	7	NM	0	6	6	306	250
Arizona	612	620	-1.3%	390	422	223	198	61	66	328	355	NM	63	NM	1	65	62	1	2	0	0	1	2	157	134
Colorado	170	158	7.7%	111	105	59	53	NM	1	109	103	NM	20	NM	1	20	19	0	0	0	0	0	0	39	34
Idaho	56	59	-5.6%	49	55	6	4	0	0	49	55	1	1	0	0	1	1	NM	0	NM	0	0	0	5	3
Montana	6	5	3.2%	3	3	2	2	0	0	3	3	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Nevada	535	475	12.7%	471	428	63	47	4	4	462	417	16	16	6	6	10	10	4	3	0	0	3	3	50	34
New Mexico	153	154	-0.7%	126	133	26	21	30	26	96	107	8	7	0	0	8	7	0	0	0	0	0	0	19	15
Utah	239	258	-7.2%	196	220	43	37	0	0	196	220	8	7	0	0	8	7	1	1	0	0	1	1	34	29
Wyoming	18	1	NM	17	0	1	1	0	0	17	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pacific Contiguous	4,015	3,696	8.6%	2,563	2,462	1,452	1,234	46	53	2,500	2,392	364	323	15	15	349	308	208	180	3	2	206	178	897	748
California	3,900	3,593	8.6%	2,499	2,398	1,401	1,195	45	52	2,437	2,329	348	311	15	15	333	296	207	179	3	2	204	176	864	723
Oregon	88	86	1.7%	60	64	28	22	NM	1	59	63	13	9	0	0	13	9	2	2	0	0	2	2	13	11
Washington	27	17	58.5%	4	0	23	17	0	0	4	0	3	3	0	0	3	3	0	0	0	0	0	0	20	14
Pacific Noncontiguous	123	106	16.4%	25	16	98	89	2	3	23	13	38	35	0	0	38	35	0	0	0	0	0	0	60	54
Alaska	0	0	59.9%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	122	105	16.2%	25	16	97	89	2	3	23	13	38	35	0	0	38	35	0	0	0	0	0	0	59	53
U.S. Total	9,654	8,205	17.7%	6,432	5,531	3,222	2,674	613	432	5,761	5,049	1,064	938	51	46	1,012	893	287	247	6	4	281	242	1,929	1,539

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 2019 are preliminary. Values for 2018 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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	3,985	3,432	16.1%	1,268	1,001	2,717	2,431	111	47	1,152	950	1,458	1,327	3	3	1,455	1,324	109	97	2	2	107	95	1,155	1,013
Connecticut	628	473	32.6%	129	67	498	407	3	3	126	63	186	162	NM	1	186	161	24	20	NM	0	24	20	289	226
Maine	72	55	30.4%	9	10	62	45	0	0	9	10	26	16	0	0	26	16	0	0	0	0	0	0	36	30
Massachusetts	2,726	2,523	8.0%	945	816	1,782	1,708	76	14	864	797	1,072	1,046	2	2	1,069	1,044	77	68	2	2	75	66	637	598
New Hampshire	106	89	20.1%	0	0	106	89	0	0	0	0	33	26	0	0	33	26	6	6	0	0	6	6	67	57
Rhode Island	193	95	101.8%	53	22	139	73	0	0	53	22	93	38	0	0	93	38	0	0	0	0	0	0	46	35
Vermont	260	197	32.1%	131	87	129	110	32	30	99	57	48	40	0	0	48	40	2	2	0	0	2	2	79	68
Middle Atlantic	5,200	4,223	23.1%	1,462	1,102	3,738	3,121	61	63	1,283	918	1,743	1,511	109	111	1,635	1,401	200	173	10	10	190	163	1,913	1,558
New Jersey	2,751	2,367	16.2%	940	817	1,811	1,551	61	63	774	646	953	879	101	103	852	776	129	105	4	4	125	101	834	673
New York	1,982	1,465	35.3%	452	234	1,530	1,231	0	0	449	231	657	505	3	3	653	502	14	14	0	0	14	14	862	715
Pennsylvania	467	391	19.5%	70	51	397	340	0	0	60	41	134	127	4	4	130	123	57	54	6	6	51	48	216	169
East North Central	1,194	952	25.4%	614	543	581	409	197	176	403	354	338	268	12	11	326	256	41	23	2	2	39	22	215	131
Illinois	196	131	49.4%	53	56	143	76	2	2	49	51	83	52	3	3	81	49	0	1	0	0	0	1	63	26
Indiana	375	329	13.9%	270	250	105	79	117	92	153	158	71	53	0	0	71	53	2	2	0	0	2	2	32	24
Michigan	225	169	33.3%	134	102	91	66	73	76	59	24	46	38	NM	2	44	36	2	2	0	0	2	2	44	28
Ohio	280	228	22.9%	120	102	160	126	6	6	110	92	101	96	2	2	99	93	21	7	2	2	20	5	42	27
Wisconsin	119	96	24.3%	37	34	82	62	0	0	32	30	38	29	5	4	32	25	14	11	0	0	14	11	35	26
West North Central	1,856	1,400	32.6%	1,365	1,015	491	384	17	14	1,347	1,000	233	189	1	1	232	188	19	14	0	0	19	14	240	182
Iowa	142	112	26.8%	12	10	130	102	6	6	6	4	80	64	0	0	80	64	4	3	0	0	4	3	45	35
Kansas	45	28	63.3%	15	7	30	21	NM	2	14	5	12	8	0	0	12	8	0	0	0	0	0	0	18	13
Minnesota	1,309	968	35.2%	1,225	902	84	66	2	2	1,222	900	28	23	0	0	28	23	9	8	0	0	9	8	47	35
Missouri	319	258	24.0%	86	72	233	186	4	4	81	66	108	90	1	1	107	89	5	3	0	0	5	3	121	94
Nebraska	38	32	18.9%	26	24	12	8	NM	0	22	24	4	3	0	0	4	3	1	0	0	0	1	0	7	5
North Dakota	1	0	105.8%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	2	2	9.1%	NM	1	1	1	0	0	NM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
South Atlantic	14,552	11,506	26.5%	12,230	9,707	2,322	1,799	3,366	2,147	8,750	7,452	716	624	109	107	608	517	270	242	6	2	265	240	1,449	1,042
Delaware	142	128	11.5%	41	39	101	88	5	5	36	34	28	26	0	1	28	26	7	7	0	0	7	7	66	55
District of Columbia	78	56	39.9%	12	0	66	56	0	0	12	0	33	34	0	0	33	34	0	0	0	0	0	0	34	22
Florida	3,552	2,105	68.7%	3,035	1,782	517	323	2,619	1,475	409	301	111	90	5	5	106	85	10	10	2	2	8	8	403	230
Georgia	1,878	1,831	2.5%	1,636	1,619	242	212	248	234	1,386	1,383	35	29	NM	2	33	27	193	171	0	0	193	171	16	14
Maryland	1,219	1,000	21.9%	404	308	814	692	6	6	386	293	228	194	12	8	217	185	29	30	0	0	29	30	568	477
North Carolina	6,037	5,115	18.0%	5,826	4,951	212	164	319	317	5,418	4,542	186	184	88	92	97	92	6	5	0	0	6	5	108	67
South Carolina	849	593	43.1%	589	401	260	192	NM	2	581	399	63	49	0	0	63	49	24	17	NM	0	21	17	176	127
Virginia	787	670	17.5%	687	607	100	63	164	107	521	500	30	18	NM	0	28	18	1	1	0	0	1	1	71	44
West Virginia	10	8	27.8%	0	0	10	8	0	0	0	0	3	2	0	0	3	2	0	0	0	0	0	0	7	6
East South Central	1,008	840	20.1%	880	725	129	115	58	57	813	660	89	82	3	3	86	79	7	6	5	5	2	1	41	35
Alabama	334	303	10.3%	323	294	11	8	24	25	299	269	8	6	0	0	8	6	1	1	0	0	1	1	3	2
Kentucky	64	57	11.2%	32	32	32	25	31	31	NM	1	18	15	0	0	18	15	1	0	0	0	1	0	13	10
Mississippi	265	273	-3.2%	254	265	11	9	0	0	254	265	6	5	0	0	6	5	0	0	0	0	0	0	4	3
Tennessee	346	206	67.7%	271	134	75	73	NM	0	260	125	57	56	3	3	54	53	5	5	5	5	0	0	21	20
West South Central	4,584	3,537	29.6%	3,586	2,780	998	756	59	59	3,521	2,719	221	167	7	1	215	166	5	2	0	0	5	2	778	589
Arkansas	194	184	5.5%	166	167	27	17	NM	1	162	166	11	6	3	0	8	6	3	1	0	0	3	1	16	10
Louisiana	190	180	5.1%	NM	1	188	179	NM	1	0	0	13	11	0	0	13	11	0	0	0	0	0	0	175	168
Oklahoma	65	59	10.3%	50	50	15	9	50	50	0	0	4	3	0	0	4	3	0	0	0	0	0	0	11	5
Texas	4,136	3,114	32.8%	3,369	2,562	767	552	7	7	3,359	2,554	194	147	3	1	190	146	2	0	0	0	2	0	576	406
Mountain	15,390	14,598	5.4%	11,675	11,431	3,715	3,167	823	814	10,776	10,543	1,072	1,039	72	73	1,000	966	57	55	4	2	53	53	2,662	2,147
Arizona	5,516	5,329	3.5%	3,497	3,564	2,019	1,766	546	561	2,941	2,992	599	580	10	11	589	569	11	19	0	0	11	19	1,419	1,178
Colorado	1,487	1,338	11.1%	981	870	506	468	4	4	965	855	187	187	12	10	175	176	2	2	0	0	2	2	329	290
Idaho	494	489	1.2%	448	463	46	26	0	0	447	463	5	4	0	0	5	4	4	1	NM	0	2	1	39	21
Montana	47	44	6.4%	27	28	20	16	0	0	27	28	6	5	0	0	6	5	0	0	0	0	0	0	14	11
Nevada	4,258	3,961	7.5%	3,730	3,576	528	384	32	34	3,645	3,489	137	136	50	52	87	84	32	26	2	2	30	24	412	276
New Mexico	1,328	1,296	2.5%	1,100	1,103	229	193	241	215	859	888	67	64	0	0	67	64	1	1	0	0	1	1	160	129
Utah	2,100	2,137	-1.7%	1,740	1,828	360	309	0	0	1,740	1,828	70	63	0	0	70	63	7	6	0	0	7	6	283	240
Wyoming	160	5	NM	153	0	7	5	0	0	153	0	2	1	0	0	2	1	0	0	0	0	0	0	5	3
Pacific Contiguous	34,430	30,981	11.1%	22,000	20,497	12,430	10,484	413	433	21,429	19,927	3,159	2,710	133	121	3,026	2,588	1,752	1,508	24	15	1,727	1,493	7,676	6,402
California	33,453	30,215	10.7%	21,424	20,032	12,029	10,182	408	428	20,858	19,468	3,031	2,617	133	121	2,898	2,495	1,738	1,495	24	15	1,713	1,480	7,418	6,207
Oregon	762	638	19.4%	542	464	220	174	5	5	537	459	102	73	0	0	102	73	13	13	0	0	13	13	104	88
Washington	215	128	67.4%	34	0	180	128	0	0	34	0	26	20	0	0	26	20	0	0	0	0	0	0	154	107
Pacific Noncontiguous	1,052	945	11.3%	187	144	865	802	28	28	159	116	339	315	0	0	339	315	3	2	0	0	3	2	523	484
Alaska	4	3	47.7%	0	0	4	3	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Hawaii	1,048	942	11.2%	187	144	861	799	28	28	159	116	338	314	0	0	338	314	3	2	0	0	3	2	521	483
U.S. Total	83,251	72,414	15.0%	55,267	48,946	27,984	23,467	5,133	3,838	49,633	44,638	9,370	8,232	449	432	8,921	7,800	2,462	2,123	52	38	2,410	2,085	16,653	13,583

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Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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, September 2019 and 2018 (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	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
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	2	4	-47.0%	2	4	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	2	4	-47.0%	2	4	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	82	134	-39.2%	0	0	82	134	0	0	0	0
Arizona	71	90	-20.7%	0	0	71	90	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	10	44	-76.7%	0	0	10	44	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	210	291	-27.9%	0	0	210	291	0	0	0	0
California	210	291	-27.9%	0	0	210	291	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	294	430	-31.6%	2	4	292	425	0	0	0	0

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Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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 September 2019 and 2018 (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	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	26	45	-42.7%	26	45	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	26	45	-42.7%	26	45	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	816	921	-11.4%	0	0	816	921	0	0	0	0
Arizona	670	666	0.6%	0	0	670	666	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	146	255	-42.8%	0	0	146	255	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	1,867	2,091	-10.7%	0	0	1,867	2,091	0	0	0	0
California	1,867	2,091	-10.7%	0	0	1,867	2,091	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	2,709	3,057	-11.4%	26	45	2,683	3,012	0	0	0	0

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Chapter 2

Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	636,213	473,617	159,976	87	2,534
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	64,845	47,762	16,817	11	255
February	45,793	34,002	11,552	9	230
March	44,474	32,312	11,930	8	224
April	40,515	30,350	9,965	7	193
May	47,293	35,261	11,815	6	211
June	56,078	42,502	13,360	6	210
July	63,818	48,277	15,322	6	212
August	63,737	47,866	15,660	7	204
Sept	53,914	40,293	13,415	7	199
October	48,422	35,547	12,695	6	173
November	51,702	37,956	13,537	7	202
December	55,624	41,488	13,908	7	221
Year 2019					
January	55,831	41,298	14,305	10	218
February	45,056	33,365	11,484	8	198
March	44,038	31,673	12,185	9	172
April	33,432	24,481	8,781	6	165
May	40,061	30,220	9,654	6	182
June	44,274	33,482	10,611	4	176
July	56,061	42,233	13,617	6	205
August	52,512	39,619	12,686	5	202
Sept	47,802	35,731	11,876	6	189
Year to Date					
2017	504,557	370,689	131,700	70	2,098
2018	480,466	358,626	119,836	67	1,938
2019	419,067	312,102	105,199	59	1,707
Rolling 12 Months Ending in September					
2018	639,820	472,326	164,780	92	2,623
2019	574,814	427,093	145,339	79	2,303

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	13,813	2,268	1,356	490	9,700
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	1,434	237	144	65	987
February	1,285	216	126	51	892
March	1,254	202	119	49	885
April	1,095	188	100	40	767
May	1,081	173	106	33	769
June	1,081	184	107	30	759
July	1,078	189	105	34	750
August	1,064	181	103	35	745
Sept	1,061	183	97	38	743
October	984	159	72	35	718
November	1,167	173	141	40	813
December	1,229	182	135	40	872
Year 2019					
January	1,305	212	168	49	876
February	1,140	201	91	45	802
March	1,127	202	108	45	772
April	1,044	155	104	33	752
May	1,009	136	108	34	731
June	1,024	177	115	26	705
July	976	186	95	34	661
August	1,004	208	79	37	681
Sept	934	180	62	37	655
Year to Date					
2017	10,898	2,108	847	380	7,562
2018	10,433	1,755	1,008	374	7,297
2019	9,563	1,658	929	340	6,636
Rolling 12 Months Ending in September					
2018	14,202	2,448	1,319	509	9,926
2019	12,944	2,171	1,277	456	9,039

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	650,027	475,885	161,332	577	12,233
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	66,279	47,999	16,961	76	1,242
February	47,079	34,219	11,679	59	1,122
March	45,728	32,513	12,049	57	1,109
April	41,610	30,538	10,065	47	960
May	48,374	35,435	11,921	39	979
June	57,159	42,687	13,467	36	969
July	64,895	48,467	15,427	40	962
August	64,801	48,047	15,763	42	949
Sept	54,975	40,475	13,512	45	943
October	49,406	35,706	12,768	42	891
November	52,868	38,129	13,677	47	1,015
December	56,853	41,670	14,043	47	1,093
Year 2019					
January	57,135	41,510	14,472	58	1,095
February	46,196	33,567	11,575	53	1,001
March	45,165	31,874	12,292	54	944
April	34,476	24,636	8,884	39	918
May	41,070	30,356	9,762	40	913
June	45,298	33,659	10,726	31	881
July	57,038	42,419	13,712	40	866
August	53,517	39,827	12,765	42	883
Sept	48,736	35,911	11,938	42	844
Year to Date					
2017	515,455	372,797	132,547	451	9,661
2018	490,899	360,380	120,843	441	9,235
2019	428,630	313,760	106,128	399	8,344
Rolling 12 Months Ending in September					
2018	654,022	474,775	166,098	600	12,549
2019	587,758	429,265	146,617	534	11,342

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	28,614	18,345	9,467	269	534
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	9,468	4,469	4,861	66	72
February	1,451	1,118	270	14	49
March	1,497	1,096	348	12	42
April	1,601	1,169	383	15	34
May	1,863	1,340	463	18	43
June	1,895	1,378	464	18	35
July	1,753	1,216	454	27	56
August	1,870	1,295	516	24	35
Sept	1,863	1,401	411	18	33
October	1,814	1,368	390	16	40
November	1,799	1,281	452	22	45
December	1,740	1,216	455	20	49
Year 2019					
January	2,423	1,611	745	23	44
February	1,411	1,013	343	13	41
March	1,449	1,072	323	16	39
April	1,397	988	348	15	46
May	1,653	1,227	370	18	37
June	1,731	1,325	351	18	37
July	1,820	1,287	475	25	33
August	1,892	1,448	383	22	39
Sept	1,661	1,262	336	27	37
Year to Date					
2017	15,016	11,316	3,229	132	340
2018	23,261	14,479	8,170	212	400
2019	15,436	11,232	3,674	176	354
Rolling 12 Months Ending in September					
2018	29,940	18,731	10,403	271	536
2019	20,789	15,097	4,970	234	487

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	2,614	103	354	350	1,807
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	701	58	132	109	402
February	179	4	12	25	138
March	156	3	13	21	118
April	136	3	12	17	104
May	147	4	18	16	109
June	162	5	14	15	128
July	156	3	11	28	114
August	143	4	12	23	104
Sept	130	7	15	15	93
October	190	5	16	16	153
November	228	3	20	30	174
December	287	3	80	35	169
Year 2019					
January	375	20	45	45	266
February	186	8	21	27	130
March	172	4	22	29	118
April	160	3	19	17	120
May	267	6	18	120	124
June	143	4	18	13	108
July	120	4	14	25	76
August	151	6	14	23	108
Sept	157	4	21	28	104
Year to Date					
2017	1,255	46	137	161	911
2018	1,910	91	238	269	1,311
2019	1,730	58	192	328	1,152
Rolling 12 Months Ending in September					
2018	2,667	117	320	346	1,883
2019	2,435	70	307	409	1,648

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.2.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	31,228	18,448	9,820	619	2,341
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	10,169	4,527	4,993	175	474
February	1,630	1,122	282	39	187
March	1,653	1,099	361	33	160
April	1,738	1,172	395	32	138
May	2,010	1,343	480	34	152
June	2,057	1,383	478	33	164
July	1,909	1,219	465	55	170
August	2,012	1,298	528	46	140
Sept	1,993	1,407	426	34	127
October	2,003	1,373	406	31	193
November	2,027	1,284	472	52	219
December	2,027	1,220	534	55	218
Year 2019					
January	2,798	1,630	790	68	310
February	1,597	1,021	365	40	171
March	1,621	1,076	344	44	156
April	1,557	991	367	33	166
May	1,920	1,233	388	138	161
June	1,874	1,328	369	31	146
July	1,939	1,291	489	50	109
August	2,042	1,454	397	45	147
Sept	1,819	1,266	357	56	140
Year to Date					
2017	16,272	11,362	3,366	293	1,251
2018	25,171	14,571	8,408	481	1,711
2019	17,166	11,290	3,866	504	1,506
Rolling 12 Months Ending in September					
2018	32,607	18,848	10,723	617	2,419
2019	23,224	15,167	5,278	643	2,136

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	3,623	2,740	704	2	177
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	377	296	67	0	14
February	305	234	60	0	11
March	255	198	43	0	13
April	271	193	63	0	15
May	212	140	58	0	14
June	338	269	51	0	18
July	367	284	66	0	17
August	352	272	66	0	15
Sept	325	259	50	0	15
October	229	158	54	0	16
November	271	196	63	0	13
December	321	241	65	0	16
Year 2019					
January	329	258	56	0	14
February	283	222	50	0	11
March	266	193	60	0	13
April	182	107	60	0	15
May	298	219	63	0	15
June	218	151	53	0	14
July	314	227	61	0	25
August	278	203	59	0	15
Sept	259	183	59	0	17
Year to Date					
2017	2,677	2,095	418	2	162
2018	2,802	2,146	522	1	133
2019	2,428	1,765	522	1	139
Rolling 12 Months Ending in September					
2018	3,615	2,782	647	2	185
2019	3,248	2,360	703	2	183

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 2018 and prior years are final. Values for 2019 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, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	929	12	93	10	814
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	88	1	9	2	76
February	78	1	8	2	67
March	72	1	9	1	61
April	83	1	10	1	71
May	70	1	6	0	63
June	75	1	1	0	73
July	81	1	9	0	71
August	77	1	9	0	66
Sept	74	1	7	1	65
October	77	0	9	1	67
November	71	1	8	2	61
December	83	1	8	2	72
Year 2019					
January	74	1	8	2	63
February	65	1	8	1	55
March	77	1	9	1	66
April	75	2	9	1	63
May	78	1	9	0	69
June	73	1	7	0	65
July	79	2	8	0	69
August	71	0	8	0	63
Sept	91	2	7	0	82
Year to Date					
2017	736	7	87	11	630
2018	698	10	68	6	614
2019	684	12	72	5	594
Rolling 12 Months Ending in September					
2018	940	13	96	10	820
2019	916	15	97	9	795

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 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	4,552	2,752	797	12	991
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	466	297	76	2	90
February	382	235	68	2	78
March	327	199	52	2	74
April	354	195	72	1	86
May	281	141	63	0	77
June	413	270	52	0	91
July	448	285	75	0	88
August	429	273	75	0	81
Sept	399	260	58	1	80
October	306	159	63	1	83
November	342	196	70	2	74
December	404	242	73	2	88
Year 2019					
January	402	260	64	2	77
February	349	224	58	1	66
March	343	194	68	2	79
April	257	110	69	1	78
May	376	220	72	0	84
June	291	152	60	0	79
July	393	230	69	0	95
August	349	203	68	0	78
Sept	350	185	67	0	98
Year to Date					
2017	3,412	2,102	505	13	792
2018	3,500	2,155	591	8	746
2019	3,112	1,778	595	7	733
Rolling 12 Months Ending in September					
2018	4,555	2,795	743	12	1,004
2019	4,164	2,374	801	11	978

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, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	10,831,005	5,551,179	4,662,650	52,650	564,527
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	805,695	425,891	327,248	4,145	48,412
February	706,362	363,822	296,205	3,886	42,449
March	772,285	395,826	329,057	4,071	43,332
April	722,530	372,400	303,312	3,616	43,201
May	868,386	459,568	358,973	4,201	45,644
June	973,815	520,305	401,965	4,633	46,911
July	1,245,456	639,299	549,392	5,518	51,247
August	1,208,717	605,610	545,979	5,593	51,534
Sept	1,051,744	530,570	468,661	4,838	47,675
October	909,137	457,374	400,209	4,290	47,263
November	784,477	395,480	337,206	3,760	48,031
December	782,403	385,034	344,443	4,098	48,828
Year 2019					
January	860,182	432,109	372,632	4,518	50,923
February	793,854	406,473	339,122	4,129	44,129
March	816,094	415,434	349,786	4,332	46,542
April	755,266	392,669	313,432	4,039	45,125
May	852,645	449,587	351,949	4,219	46,889
June	1,012,593	537,266	424,123	4,356	46,848
July	1,294,933	673,464	566,156	5,002	50,310
August	1,308,794	687,816	564,983	5,152	50,843
Sept	1,115,478	581,753	481,162	4,663	47,900
Year to Date					
2017	7,223,346	3,624,906	3,155,972	37,921	404,547
2018	8,354,989	4,313,291	3,580,792	40,502	420,405
2019	8,809,838	4,576,572	3,763,345	40,410	429,510
Rolling 12 Months Ending in September					
2018	10,639,403	5,443,268	4,586,807	52,640	556,688
2019	11,285,854	5,814,460	4,845,203	52,559	573,632

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.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	1,206,711	43,156	331,952	81,856	749,746
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	107,339	3,929	28,934	7,417	67,059
February	94,855	3,366	26,629	6,706	58,155
March	100,280	3,557	28,088	6,844	61,791
April	92,998	2,942	25,265	6,133	58,658
May	94,775	3,306	26,238	6,099	59,132
June	97,069	3,642	26,642	6,537	60,249
July	107,044	4,484	30,339	7,649	64,572
August	105,972	4,079	29,861	7,691	64,340
Sept	99,352	3,479	27,089	6,581	62,203
October	99,117	3,013	27,218	6,411	62,474
November	101,925	3,185	27,080	6,829	64,830
December	105,987	4,174	28,570	6,959	66,284
Year 2019					
January	113,273	3,938	32,017	7,638	69,679
February	100,249	3,737	27,224	6,934	62,353
March	104,802	3,673	29,363	6,898	64,868
April	97,096	3,166	26,597	6,152	61,182
May	98,298	3,357	26,479	6,008	62,454
June	99,574	4,099	27,805	6,326	61,344
July	104,290	4,807	29,111	6,784	63,588
August	106,098	4,697	30,993	6,666	63,741
Sept	99,974	4,233	27,776	6,333	61,631
Year to Date					
2017	868,706	28,846	232,103	77,797	529,960
2018	899,683	32,784	249,084	61,657	556,158
2019	923,653	35,708	257,366	59,740	570,840
Rolling 12 Months Ending in September					
2018	1,199,827	42,678	326,926	88,184	742,039
2019	1,230,681	46,080	340,234	79,939	764,428

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

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	12,037,717	5,594,335	4,994,602	134,507	1,314,273
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	913,034	429,820	356,181	11,562	115,471
February	801,217	367,188	322,834	10,592	100,604
March	872,565	399,383	357,145	10,914	105,123
April	815,528	375,343	328,576	9,750	101,859
May	963,161	462,873	385,211	10,300	104,776
June	1,070,884	523,947	428,607	11,170	107,160
July	1,352,499	643,783	579,731	13,167	115,819
August	1,314,688	609,689	575,840	13,285	115,874
Sept	1,151,095	534,049	495,750	11,419	109,877
October	1,008,253	460,387	427,427	10,702	109,737
November	886,401	398,665	364,286	10,589	112,861
December	888,390	389,208	373,013	11,058	115,112
Year 2019					
January	973,455	436,047	404,649	12,156	120,602
February	894,102	410,211	366,347	11,063	106,482
March	920,896	419,107	379,148	11,230	111,410
April	852,362	395,835	340,029	10,191	106,307
May	950,942	452,945	378,428	10,226	109,343
June	1,112,167	541,365	451,928	10,682	108,191
July	1,399,223	678,271	595,267	11,786	113,898
August	1,414,892	692,513	595,976	11,819	114,585
Sept	1,215,452	585,986	508,938	10,996	109,531
Year to Date					
2017	8,092,052	3,653,752	3,388,075	115,718	934,508
2018	9,254,672	4,346,075	3,829,876	102,158	976,563
2019	9,733,491	4,612,280	4,020,711	100,150	1,000,350
Rolling 12 Months Ending in September					
2018	11,839,230	5,485,946	4,913,733	140,824	1,298,727
2019	12,516,535	5,860,540	5,185,437	132,498	1,338,060

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Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	270,235	23,580	223,513	19,790	3,352
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	23,568	2,389	19,205	1,673	301
February	22,069	2,186	17,993	1,576	314
March	23,672	2,377	19,280	1,692	324
April	22,281	2,159	18,159	1,633	330
May	22,748	2,125	18,722	1,609	291
June	21,854	1,777	18,189	1,607	281
July	22,507	1,817	18,773	1,651	266
August	23,061	1,739	19,377	1,696	249
Sept	20,472	1,604	17,004	1,643	222
October	22,360	1,779	18,634	1,687	259
November	22,405	1,812	18,708	1,630	255
December	23,237	1,815	19,468	1,695	259
Year 2019					
January	20,479	1,594	16,976	1,650	259
February	18,816	1,460	15,676	1,443	236
March	21,453	1,748	17,851	1,578	275
April	19,035	1,540	16,347	902	247
May	19,116	1,596	16,802	504	214
June	19,846	1,544	17,003	1,084	216
July	20,607	1,593	17,527	1,277	209
August	20,903	1,621	17,778	1,281	223
Sept	19,763	1,592	16,684	1,264	224
Year to Date					
2017	209,192	18,784	172,398	15,117	2,892
2018	202,233	18,173	166,703	14,778	2,579
2019	180,018	14,287	152,645	10,983	2,103
Rolling 12 Months Ending in September					
2018	271,153	24,463	223,355	19,782	3,553
2019	248,020	19,694	209,455	15,995	2,876

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	3,621	0	1,867	911	843
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	321	0	176	68	77
February	320	0	165	79	77
March	340	0	175	82	83
April	335	0	164	85	86
May	285	0	140	71	74
June	259	0	146	46	68
July	278	0	139	76	64
August	302	0	157	82	63
Sept	290	0	150	82	58
October	334	0	170	95	69
November	276	0	134	73	68
December	280	0	152	71	57
Year 2019					
January	376	0	222	84	71
February	345	0	215	67	62
March	391	0	234	80	78
April	366	0	186	102	77
May	214	0	79	64	71
June	242	0	108	77	57
July	259	0	144	42	73
August	240	0	103	73	64
Sept	240	0	101	74	64
Year to Date					
2017	3,000	2	1,473	840	685
2018	2,732	0	1,411	671	649
2019	2,673	0	1,391	663	618
Rolling 12 Months Ending in September					
2018	3,672	1	1,887	930	855
2019	3,562	0	1,847	903	812

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	273,856	23,580	225,380	20,701	4,196
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	23,890	2,389	19,382	1,741	378
February	22,390	2,186	18,158	1,655	390
March	24,012	2,377	19,455	1,774	407
April	22,616	2,159	18,323	1,718	416
May	23,033	2,125	18,862	1,680	366
June	22,113	1,777	18,335	1,652	349
July	22,785	1,817	18,912	1,726	330
August	23,363	1,739	19,534	1,778	313
Sept	20,763	1,604	17,154	1,725	280
October	22,694	1,779	18,804	1,783	328
November	22,681	1,812	18,842	1,703	324
December	23,516	1,815	19,620	1,766	316
Year 2019					
January	20,855	1,594	17,198	1,734	330
February	19,160	1,460	15,891	1,511	299
March	21,844	1,748	18,085	1,658	353
April	19,401	1,540	16,533	1,004	324
May	19,329	1,596	16,881	567	285
June	20,089	1,544	17,112	1,161	272
July	20,866	1,593	17,671	1,320	282
August	21,143	1,621	17,881	1,354	288
Sept	20,003	1,592	16,785	1,338	288
Year to Date					
2017	212,191	18,786	173,870	15,957	3,578
2018	204,964	18,173	168,114	15,449	3,228
2019	182,690	14,287	154,036	11,646	2,721
Rolling 12 Months Ending in September					
2018	274,825	24,463	225,242	20,712	4,408
2019	251,581	19,694	211,301	16,898	3,688

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	16,783	467	13,859	2,448	9
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	1,370	28	1,147	195	0
February	1,297	26	1,090	180	1
March	1,398	40	1,153	204	1
April	1,356	38	1,117	200	1
May	1,419	43	1,158	217	1
June	1,476	42	1,218	214	1
July	1,479	48	1,224	207	1
August	1,483	47	1,220	215	1
Sept	1,334	36	1,097	199	1
October	1,387	43	1,140	205	0
November	1,369	39	1,127	202	0
December	1,416	37	1,169	210	0
Year 2019					
January	1,299	30	1,078	191	1
February	1,138	20	948	169	1
March	1,238	20	1,037	180	1
April	1,223	28	1,008	186	1
May	1,324	26	1,107	189	1
June	1,307	25	1,092	190	1
July	1,345	27	1,132	185	1
August	1,372	29	1,152	190	1
Sept	1,265	21	1,061	182	1
Year to Date					
2017	12,341	327	10,110	1,899	6
2018	12,611	348	10,424	1,832	8
2019	11,511	225	9,616	1,662	7
Rolling 12 Months Ending in September					
2018	16,618	443	13,695	2,470	11
2019	15,683	344	13,052	2,279	8

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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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 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	2,050	0	752	1,109	189
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	182	0	64	102	17
February	163	0	60	91	12
March	169	0	64	93	12
April	160	0	54	90	16
May	176	0	59	101	16
June	177	0	65	95	18
July	180	0	65	98	17
August	183	0	66	95	21
Sept	144	0	58	68	17
October	160	0	61	83	16
November	173	0	66	93	14
December	182	0	70	100	13
Year 2019					
January	164	0	66	83	15
February	149	0	63	70	15
March	147	0	67	64	16
April	109	0	56	37	17
May	120	0	64	45	12
June	129	0	64	50	15
July	128	0	67	45	16
August	130	0	62	47	21
Sept	117	0	53	48	15
Year to Date					
2017	1,636	0	628	849	158
2018	1,534	0	555	833	146
2019	1,192	0	562	489	142
Rolling 12 Months Ending in September					
2018	2,023	0	741	1,086	196
2019	1,708	0	759	765	185

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
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Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	18,833	467	14,611	3,557	197
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	1,552	28	1,211	296	17
February	1,459	26	1,150	271	13
March	1,567	40	1,217	297	13
April	1,516	38	1,171	290	17
May	1,595	43	1,217	319	17
June	1,653	42	1,283	309	19
July	1,659	48	1,288	305	18
August	1,666	47	1,286	311	22
Sept	1,478	36	1,156	268	18
October	1,547	43	1,201	288	16
November	1,542	39	1,193	295	14
December	1,598	37	1,238	310	13
Year 2019					
January	1,463	30	1,144	273	16
February	1,286	20	1,011	239	16
March	1,385	20	1,105	244	17
April	1,332	28	1,063	223	18
May	1,444	26	1,171	234	13
June	1,436	25	1,156	241	15
July	1,473	27	1,199	229	17
August	1,503	29	1,215	238	22
Sept	1,382	21	1,114	230	16
Year to Date					
2017	13,977	327	10,738	2,748	164
2018	14,145	348	10,979	2,665	154
2019	12,703	225	10,178	2,151	149
Rolling 12 Months Ending in September					
2018	18,641	443	14,435	3,556	207
2019	17,391	344	13,811	3,044	193

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.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-September 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	362,489	45,856	143,288	520	172,826
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	33,271	4,713	13,790	63	14,705
February	28,971	3,689	12,141	42	13,098
March	31,506	4,501	12,243	36	14,726
April	26,929	2,966	10,597	16	13,349
May	29,601	3,196	11,683	32	14,690
June	31,260	3,909	12,733	53	14,564
July	33,531	4,670	13,260	59	15,542
August	32,229	4,427	12,624	69	15,110
Sept	28,770	3,340	11,278	52	14,100
October	28,047	3,376	10,642	27	14,003
November	28,623	3,741	10,733	20	14,129
December	29,750	3,326	11,563	51	14,810
Year 2019					
January	31,372	4,520	12,598	52	14,201
February	27,238	3,766	10,415	57	13,000
March	28,084	3,557	10,500	72	13,955
April	26,149	3,119	9,721	24	13,285
May	29,821	4,146	11,946	18	13,710
June	28,494	3,285	11,233	31	13,945
July	30,868	4,378	11,758	101	14,630
August	33,336	4,707	13,628	63	14,938
Sept	28,712	3,644	11,790	51	13,227
Year to Date					
2017	271,343	31,236	114,116	343	125,648
2018	276,069	35,412	110,350	422	129,884
2019	264,073	35,123	103,590	470	124,891
Rolling 12 Months Ending in September					
2018	368,696	46,982	148,111	539	173,065
2019	350,493	45,566	136,528	567	167,832

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.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-September 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	1,027,669	10,297	21,623	4,806	990,943
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	89,507	844	2,115	454	86,093
February	80,320	878	2,141	474	76,827
March	86,499	948	1,966	493	83,092
April	82,407	869	1,533	339	79,665
May	85,415	673	1,679	319	82,744
June	84,062	655	1,683	402	81,323
July	89,005	991	1,899	382	85,733
August	89,621	854	1,930	417	86,420
Sept	81,558	655	1,676	336	78,891
October	84,335	1,005	1,607	329	81,395
November	85,962	891	1,635	343	83,093
December	88,978	1,033	1,759	518	85,668
Year 2019					
January	88,292	1,038	1,788	544	84,922
February	79,854	874	1,545	478	76,957
March	80,838	961	1,650	436	77,792
April	79,412	906	1,921	344	76,242
May	80,280	997	1,872	356	77,055
June	78,695	874	1,973	342	75,505
July	80,884	865	1,950	403	77,667
August	83,625	900	1,945	398	80,382
Sept	77,308	914	1,881	394	74,119
Year to Date					
2017	770,876	8,782	16,899	3,124	742,071
2018	768,394	7,367	16,622	3,616	740,788
2019	729,189	8,330	16,524	3,695	700,640
Rolling 12 Months Ending in September					
2018	1,033,944	10,241	22,709	5,014	995,980
2019	988,464	11,260	21,524	4,885	950,795

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-September 2019 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
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
2018	1,390,158	56,153	164,911	5,326	1,163,769
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	122,778	5,557	15,905	517	100,799
February	109,291	4,567	14,282	516	89,926
March	118,005	5,449	14,209	528	97,818
April	109,336	3,835	12,131	356	93,015
May	115,016	3,869	13,362	351	97,434
June	115,322	4,564	14,416	455	95,887
July	122,537	5,661	15,160	441	101,275
August	121,850	5,281	14,554	486	101,530
Sept	110,328	3,995	12,954	388	92,991
October	112,382	4,381	12,248	356	95,397
November	114,586	4,633	12,368	363	97,222
December	118,728	4,360	13,322	569	100,478
Year 2019					
January	119,663	5,558	14,386	596	99,123
February	107,092	4,640	11,960	535	89,957
March	108,923	4,518	12,150	508	91,747
April	105,561	4,025	11,642	368	89,527
May	110,101	5,144	13,818	374	90,765
June	107,188	4,159	13,206	373	89,450
July	111,752	5,243	13,708	505	92,297
August	116,961	5,608	15,573	461	95,320
Sept	106,020	4,558	13,671	446	87,345
Year to Date					
2017	1,042,219	40,018	131,015	3,467	867,719
2018	1,044,462	42,779	126,972	4,038	870,673
2019	993,262	43,453	120,114	4,164	825,531
Rolling 12 Months Ending in September					
2018	1,402,640	57,223	170,820	5,553	1,169,045
2019	1,338,958	56,826	158,052	5,452	1,118,627

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 2018 and prior years are final. Values for 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.8.A. Consumption of Coal for Electricity Generation by State, by Sector, September 2019 and September 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	7	14	-47.0%	6	7	1	6	0	0	NM	0
Connecticut	0	6	-100.0%	0	0	0	6	0	0	0	0
Maine	1	1	23.0%	0	0	1	1	0	0	NM	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	6	7	-16.0%	6	7	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	1,515	1,554	-2.5%	0	0	1,513	1,552	0	0	3	2
New Jersey	37	40	-5.9%	0	0	37	40	0	0	0	0
New York	0	21	-100.0%	0	0	0	21	0	0	0	0
Pennsylvania	1,478	1,493	-1.0%	0	0	1,475	1,491	0	0	3	2
East North Central	9,435	12,071	-22.0%	5,438	7,001	3,944	5,010	1	1	52	59
Illinois	2,465	3,204	-23.0%	155	200	2,268	2,958	0	0	42	47
Indiana	2,327	3,168	-27.0%	2,136	2,950	190	217	1	1	0	0
Michigan	1,803	2,088	-14.0%	1,783	2,072	18	15	0	0	2	1
Ohio	1,710	2,002	-15.0%	242	182	1,468	1,821	0	0	0	0
Wisconsin	1,130	1,609	-30.0%	1,122	1,598	0	0	0	0	8	11
West North Central	8,206	9,487	-14.0%	8,115	9,394	0	0	2	2	90	90
Iowa	968	1,460	-34.0%	926	1,416	0	0	2	2	41	42
Kansas	1,071	1,044	2.6%	1,071	1,044	0	0	0	0	0	0
Minnesota	786	1,067	-26.0%	776	1,054	0	0	0	0	10	13
Missouri	2,483	2,790	-11.0%	2,483	2,790	0	0	0	0	0	0
Nebraska	1,207	1,224	-1.4%	1,171	1,193	0	0	0	0	36	32
North Dakota	1,569	1,846	-15.0%	1,566	1,843	0	0	0	0	3	3
South Dakota	121	55	120.0%	121	55	0	0	0	0	0	0
South Atlantic	6,659	7,378	-9.8%	5,884	6,677	758	687	1	1	15	14
Delaware	0	17	-100.0%	0	0	0	17	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	873	1,271	-31.0%	872	1,270	0	0	0	0	NM	1
Georgia	1,441	1,733	-17.0%	1,437	1,730	0	0	0	0	NM	3
Maryland	300	284	5.6%	0	0	300	283	0	0	0	1
North Carolina	1,429	1,146	25.0%	1,424	1,139	2	4	1	1	2	2
South Carolina	631	687	-8.1%	631	686	0	0	0	0	0	0
Virginia	91	288	-69.0%	82	264	2	17	0	0	7	7
West Virginia	1,893	1,954	-3.1%	1,439	1,588	454	366	0	0	0	0
East South Central	5,378	4,960	8.4%	5,234	4,867	134	79	0	0	11	13
Alabama	1,306	1,360	-4.0%	1,304	1,359	0	0	0	0	NM	1
Kentucky	2,392	2,474	-3.3%	2,392	2,474	0	0	0	0	0	0
Mississippi	325	251	29.0%	191	171	134	79	0	0	0	0
Tennessee	1,355	875	55.0%	1,347	862	0	0	0	0	8	12
West South Central	8,654	10,105	-14.0%	4,770	5,558	3,878	4,540	0	0	6	7
Arkansas	1,471	1,569	-6.2%	1,256	1,313	214	255	0	0	1	1
Louisiana	673	794	-15.0%	593	590	80	204	0	0	0	0
Oklahoma	562	700	-20.0%	465	584	92	110	0	0	6	6
Texas	5,948	7,043	-16.0%	2,456	3,072	3,492	3,971	0	0	0	0
Mountain	7,154	7,488	-4.5%	6,084	6,541	1,061	940	0	0	9	7
Arizona	1,232	1,512	-19.0%	1,232	1,512	0	0	0	0	0	0
Colorado	1,156	1,278	-9.5%	1,156	1,278	0	0	0	0	0	0
Idaho	NM	0	NM	0	0	0	0	0	0	NM	0
Montana	949	833	14.0%	23	18	926	815	0	0	NM	1
Nevada	146	144	1.0%	92	97	54	47	0	0	0	0
New Mexico	789	659	20.0%	789	659	0	0	0	0	0	0
Utah	1,002	1,017	-1.5%	966	984	36	33	0	0	0	0
Wyoming	1,881	2,044	-8.0%	1,827	1,993	46	45	0	0	8	7
Pacific Contiguous	689	729	-5.6%	173	202	512	522	0	0	3	6
California	3	5	-42.0%	0	0	0	0	0	0	3	5
Oregon	173	202	-14.0%	173	202	0	0	0	0	0	0
Washington	513	523	-1.9%	0	0	512	522	0	0	0	1
Pacific Noncontiguous	104	127	-18.0%	NM	45	75	79	2	3	0	0
Alaska	42	62	-32.0%	NM	45	13	14	2	3	0	0
Hawaii	62	64	-4.1%	0	0	62	64	0	0	0	0
U.S. Total	47,802	53,914	-11.0%	35,731	40,293	11,876	13,415	6	7	189	199

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 2019 are preliminary. Values for 2018 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 September 2019 and September 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	183	425	-57.0%	123	244	57	177	0	0	3	3
Connecticut	48	168	-72.0%	0	0	48	168	0	0	0	0
Maine	13	12	1.0%	0	0	9	9	0	0	3	3
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	123	244	-50.0%	123	244	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	16,316	18,586	-12.0%	0	0	16,288	18,555	0	0	28	32
New Jersey	335	392	-14.0%	0	0	335	392	0	0	0	0
New York	187	251	-26.0%	0	0	187	248	0	0	0	4
Pennsylvania	15,794	17,943	-12.0%	0	0	15,766	17,915	0	0	28	28
East North Central	91,619	109,917	-17.0%	54,427	66,334	36,685	43,046	15	17	491	520
Illinois	23,204	28,057	-17.0%	1,533	1,710	21,293	25,957	7	9	371	383
Indiana	24,333	29,182	-17.0%	22,860	27,618	1,466	1,557	7	8	0	0
Michigan	16,898	18,902	-11.0%	16,745	18,710	136	162	0	0	17	29
Ohio	15,635	18,953	-18.0%	1,844	3,581	13,791	15,371	0	0	0	1
Wisconsin	11,548	14,823	-22.0%	11,445	14,715	0	0	0	0	103	107
West North Central	79,396	89,384	-11.0%	78,574	88,469	0	0	15	16	807	899
Iowa	10,388	11,857	-12.0%	9,999	11,460	0	0	13	14	377	383
Kansas	8,881	9,910	-10.0%	8,881	9,910	0	0	0	0	0	0
Minnesota	8,224	9,822	-16.0%	8,081	9,619	0	0	1	0	142	203
Missouri	25,238	28,444	-11.0%	25,237	28,442	0	0	1	1	0	0
Nebraska	10,172	11,044	-7.9%	9,908	10,758	0	0	0	0	263	285
North Dakota	15,240	17,119	-11.0%	15,215	17,091	0	0	0	0	25	28
South Dakota	1,253	1,189	5.4%	1,253	1,189	0	0	0	0	0	0
South Atlantic	55,386	66,639	-17.0%	49,579	57,991	5,673	8,499	8	8	127	141
Delaware	81	161	-50.0%	0	0	81	161	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	7,147	10,179	-30.0%	7,137	10,164	0	0	0	0	10	15
Georgia	11,188	12,478	-10.0%	11,160	12,446	0	0	0	0	29	32
Maryland	2,063	3,637	-43.0%	0	0	2,055	3,626	0	0	8	11
North Carolina	9,749	10,200	-4.4%	9,684	10,137	38	35	7	7	20	21
South Carolina	4,981	6,119	-19.0%	4,980	6,116	0	0	0	0	2	3
Virginia	1,549	3,678	-58.0%	1,434	3,405	55	214	1	1	59	59
West Virginia	18,627	20,187	-7.7%	15,184	15,723	3,444	4,464	0	0	0	0
East South Central	41,373	46,235	-11.0%	39,087	43,931	2,199	2,183	0	0	87	121
Alabama	10,702	13,096	-18.0%	10,690	13,086	0	0	0	0	13	10
Kentucky	19,835	21,271	-6.8%	19,835	21,271	0	0	0	0	0	0
Mississippi	3,342	3,274	2.1%	1,143	1,091	2,199	2,183	0	0	0	0
Tennessee	7,492	8,594	-13.0%	7,418	8,483	0	0	0	0	74	111
West South Central	69,595	83,142	-16.0%	36,949	45,351	32,591	37,694	0	0	55	97
Arkansas	10,660	12,583	-15.0%	9,057	10,547	1,596	2,030	0	0	6	6
Louisiana	4,417	6,324	-30.0%	3,501	4,164	916	2,160	0	0	0	0
Oklahoma	4,691	7,533	-38.0%	4,372	6,643	270	800	0	0	50	90
Texas	49,828	56,702	-12.0%	20,019	23,998	29,809	32,704	0	0	0	0
Mountain	60,046	62,585	-4.1%	52,057	55,577	7,918	6,932	0	0	71	76
Arizona	10,378	12,648	-18.0%	10,378	12,648	0	0	0	0	0	0
Colorado	10,648	11,258	-5.4%	10,647	11,256	0	0	0	0	1	2
Idaho	3	3	11.0%	0	0	0	0	0	0	3	3
Montana	6,994	5,972	17.0%	214	156	6,777	5,812	0	0	2	3
Nevada	1,189	937	27.0%	751	512	438	425	0	0	0	0
New Mexico	6,085	4,950	23.0%	6,085	4,950	0	0	0	0	0	0
Utah	8,679	8,807	-1.5%	8,370	8,498	309	308	0	0	0	0
Wyoming	16,070	18,011	-11.0%	15,611	17,557	394	387	0	0	65	68
Pacific Contiguous	4,227	2,655	59.0%	1,032	519	3,158	2,086	0	0	38	49
California	33	44	-25.0%	0	0	0	0	0	0	33	44
Oregon	1,032	519	99.0%	1,032	519	0	0	0	0	0	0
Washington	3,163	2,091	51.0%	0	0	3,158	2,086	0	0	5	5
Pacific Noncontiguous	926	898	3.2%	274	208	631	663	22	27	0	0
Alaska	398	344	16.0%	274	208	102	109	22	27	0	0
Hawaii	528	554	-4.6%	0	0	528	554	0	0	0	0
U.S. Total	419,067	480,466	-13.0%	312,102	358,626	105,199	119,836	59	67	1,707	1,938

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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.9.A. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, September 2019 and September 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	23	18	24.0%	NM	9	17	8	2	1	0	0
Connecticut	NM	6	NM	1	1	NM	6	NM	0	0	0
Maine	2	1	119.0%	0	0	2	0	1	0	0	0
Massachusetts	7	7	-7.1%	NM	6	NM	1	NM	0	0	0
New Hampshire	1	2	-56.0%	1	2	NM	0	1	1	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	NM	0
Vermont	NM	1	NM	NM	1	0	0	0	0	0	0
Middle Atlantic	48	110	-57.0%	8	12	37	93	NM	2	2	3
New Jersey	NM	2	NM	0	0	NM	2	0	0	0	0
New York	18	37	-51.0%	8	12	9	23	NM	0	0	1
Pennsylvania	25	71	-64.0%	0	0	24	68	NM	1	2	2
East North Central	77	90	-14.0%	57	47	19	40	0	1	1	2
Illinois	7	7	-10.0%	1	1	6	7	NM	0	0	0
Indiana	19	18	5.4%	18	16	0	0	0	0	1	2
Michigan	20	21	-5.7%	20	20	0	0	NM	1	0	0
Ohio	25	37	-33.0%	11	3	14	33	0	0	0	0
Wisconsin	NM	7	NM	NM	7	0	0	NM	0	0	0
West North Central	46	51	-8.2%	45	49	NM	2	0	0	0	0
Iowa	8	14	-45.0%	7	13	1	1	0	0	0	0
Kansas	18	5	252.0%	18	5	0	0	0	0	0	0
Minnesota	7	6	9.6%	6	5	NM	1	0	0	0	0
Missouri	7	14	-51.0%	7	14	0	0	0	0	0	0
Nebraska	NM	2	NM	NM	2	0	0	0	0	0	0
North Dakota	3	8	-64.0%	3	8	0	0	0	0	0	0
South Dakota	NM	1	NM	NM	1	0	0	NM	0	0	0
South Atlantic	171	367	-53.0%	111	302	31	45	22	13	7	7
Delaware	NM	5	NM	0	0	NM	5	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	36	196	-81.0%	34	195	NM	1	0	0	1	1
Georgia	13	23	-44.0%	NM	16	NM	5	1	0	4	3
Maryland	16	18	-7.2%	NM	1	15	17	1	0	0	0
North Carolina	25	25	-2.1%	22	22	NM	1	NM	0	1	2
South Carolina	16	20	-19.0%	NM	19	1	0	NM	0	1	1
Virginia	41	63	-35.0%	NM	33	8	17	20	12	NM	0
West Virginia	20	17	18.0%	20	17	0	0	0	0	0	0
East South Central	32	50	-36.0%	31	49	NM	0	0	0	1	1
Alabama	2	4	-33.0%	2	3	NM	0	0	0	0	1
Kentucky	12	19	-37.0%	12	19	0	0	0	0	0	0
Mississippi	2	12	-86.0%	2	11	0	0	0	0	0	0
Tennessee	16	17	-1.2%	16	16	0	0	0	0	0	0
West South Central	13	13	-1.4%	12	10	NM	2	NM	0	1	1
Arkansas	3	4	-18.0%	2	3	1	0	0	0	0	0
Louisiana	NM	3	NM	NM	3	0	0	0	0	0	0
Oklahoma	3	1	341.0%	3	1	0	0	0	0	0	0
Texas	5	5	-3.5%	5	3	NM	2	NM	0	0	0
Mountain	31	23	32.0%	30	21	1	2	NM	0	0	0
Arizona	9	4	131.0%	9	4	0	0	NM	0	0	0
Colorado	NM	1	NM	NM	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	1	NM	NM	0	1	1	0	0	0	0
Nevada	2	2	-8.5%	2	1	0	1	0	0	0	0
New Mexico	4	5	-7.9%	4	5	0	0	0	0	0	0
Utah	6	4	34.0%	6	4	0	0	0	0	0	0
Wyoming	6	6	1.3%	6	6	0	0	0	0	0	0
Pacific Contiguous	9	7	29.0%	7	6	2	1	NM	0	NM	0
California	7	6	17.0%	6	5	1	0	NM	0	NM	0
Oregon	NM	1	NM	1	1	0	0	NM	0	0	0
Washington	2	1	110.0%	NM	0	1	1	0	0	NM	0
Pacific Noncontiguous	1,211	1,134	6.8%	959	895	226	218	3	1	24	19
Alaska	160	116	38.0%	153	111	0	0	0	0	7	5
Hawaii	1,052	1,018	3.3%	806	785	226	218	2	1	18	14
U.S. Total	1,661	1,863	-11.0%	1,262	1,401	336	411	27	18	37	33

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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 September 2019 and September 2018 (Thousand Barrels)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	416	2,014	-79.0%	49	317	330	1,658	29	27	8	12
Connecticut	143	584	-76.0%	7	8	131	573	3	2	2	1
Maine	36	300	-88.0%	0	0	24	285	6	4	6	10
Massachusetts	173	741	-77.0%	19	119	144	613	10	8	1	1
New Hampshire	32	271	-88.0%	21	181	NM	79	9	11	0	0
Rhode Island	30	109	-72.0%	0	0	NM	107	1	1	NM	0
Vermont	NM	10	NM	NM	9	0	0	0	0	0	0
Middle Atlantic	1,247	4,177	-70.0%	341	1,045	857	3,058	19	33	30	41
New Jersey	104	447	-77.0%	3	3	100	439	1	4	1	1
New York	728	2,554	-71.0%	338	1,039	366	1,470	11	18	12	26
Pennsylvania	415	1,176	-65.0%	0	3	391	1,149	7	11	18	14
East North Central	726	859	-16.0%	465	487	249	350	3	6	9	17
Illinois	64	75	-15.0%	9	10	55	65	NM	0	0	0
Indiana	188	175	7.3%	183	160	0	1	NM	0	5	14
Michigan	151	204	-26.0%	148	199	0	0	2	4	1	1
Ohio	252	341	-26.0%	60	56	189	282	0	1	2	2
Wisconsin	71	64	11.0%	64	62	6	2	1	0	0	0
West North Central	516	538	-4.1%	498	492	15	43	2	2	1	1
Iowa	102	104	-2.6%	96	98	6	6	0	0	0	0
Kansas	99	93	6.3%	99	93	0	0	0	0	0	0
Minnesota	63	84	-25.0%	51	44	NM	37	2	2	1	1
Missouri	147	170	-14.0%	147	170	0	0	0	0	0	0
Nebraska	35	26	34.0%	35	26	0	0	0	0	0	0
North Dakota	53	50	5.8%	53	50	0	0	0	0	0	0
South Dakota	18	11	67.0%	18	11	0	0	NM	0	0	0
South Atlantic	1,937	5,380	-64.0%	1,425	3,817	343	1,346	104	131	65	86
Delaware	64	325	-80.0%	0	12	64	313	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	416	864	-52.0%	400	825	5	26	0	0	10	13
Georgia	143	378	-62.0%	86	186	NM	146	5	6	37	39
Maryland	155	518	-70.0%	3	11	150	504	1	1	1	3
North Carolina	331	1,095	-70.0%	310	1,004	11	69	NM	4	8	17
South Carolina	143	535	-73.0%	133	516	4	10	NM	0	5	9
Virginia	512	1,443	-65.0%	321	1,068	92	251	96	119	3	5
West Virginia	173	221	-22.0%	172	195	2	26	0	0	0	0
East South Central	395	455	-13.0%	384	386	3	59	0	0	8	11
Alabama	25	126	-80.0%	17	61	2	58	0	0	5	7
Kentucky	116	129	-9.9%	116	129	0	0	0	0	0	0
Mississippi	21	38	-44.0%	20	35	0	0	0	0	1	3
Tennessee	233	162	44.0%	231	160	0	0	0	0	2	1
West South Central	178	194	-8.3%	136	149	35	37	1	1	7	6
Arkansas	54	49	12.0%	36	38	16	9	0	0	2	2
Louisiana	17	34	-51.0%	17	34	0	0	0	0	0	0
Oklahoma	33	23	41.0%	30	22	0	0	0	0	2	1
Texas	74	88	-16.0%	53	55	19	29	1	1	2	3
Mountain	314	270	16.0%	291	234	23	36	NM	0	0	0
Arizona	91	72	27.0%	91	72	0	0	NM	0	0	0
Colorado	23	24	-3.9%	23	24	0	0	0	0	0	0
Idaho	0	0	173.0%	0	0	0	0	0	0	0	0
Montana	21	31	-32.0%	NM	1	17	30	0	0	0	0
Nevada	20	16	22.0%	17	12	3	4	0	0	0	0
New Mexico	50	28	81.0%	50	28	0	0	0	0	0	0
Utah	49	45	9.2%	47	43	2	1	0	0	0	0
Wyoming	59	54	8.8%	59	54	0	0	0	0	0	0
Pacific Contiguous	97	125	-22.0%	58	56	20	26	NM	1	18	42
California	69	100	-31.0%	51	49	6	14	1	1	11	36
Oregon	6	NM	NM	6	NM	0	0	NM	0	0	0
Washington	23	19	21.0%	NM	1	14	11	0	0	7	6
Pacific Noncontiguous	9,610	9,249	3.9%	7,585	7,497	1,800	1,558	18	10	207	184
Alaska	1,216	1,069	14.0%	1,161	1,021	0	0	5	3	50	45
Hawaii	8,394	8,179	2.6%	6,424	6,476	1,800	1,558	13	7	157	139
U.S. Total	15,436	23,261	-34.0%	11,232	14,479	3,674	8,170	176	212	354	400

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.10.A. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, September 2019 and September 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
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	1	1	24.0%	0	0	0	0	0	0	1	1
New Jersey	1	1	-5.2%	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	79	88	-10.0%	26	45	46	36	0	0	7	6
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	29	48	-39.0%	22	42	0	0	0	0	7	6
Ohio	46	37	26.0%	0	0	46	36	0	0	0	0
Wisconsin	4	4	0.2%	4	4	0	0	0	0	0	0
West North Central	0	0	236.0%	0	0	0	0	0	0	0	0
Iowa	0	0	236.0%	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	39	73	-47.0%	36	71	0	0	0	0	3	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	36	71	-49.0%	36	71	0	0	0	0	0	0
Georgia	3	2	16.0%	0	0	0	0	0	0	3	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	126	149	-15.0%	121	143	0	0	0	0	5	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	123	145	-16.0%	121	143	0	0	0	0	2	2
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	4	-0.4%	0	0	0	0	0	0	4	4
Mountain	13	14	-4.3%	0	0	13	14	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	13	14	-4.3%	0	0	13	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	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	259	325	-20.0%	183	259	59	50	0	0	17	15

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, Year-to-Date through September 2019 and September 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	14	17	-19.0%	0	0	0	0	0	0	14	17
New Jersey	5	5	10.0%	0	0	0	0	0	0	5	5
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	8	12	-30.0%	0	0	0	0	0	0	8	12
East North Central	760	885	-14.0%	318	437	393	414	0	0	48	34
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	335	435	-23.0%	288	402	0	0	0	0	48	32
Ohio	394	415	-5.1%	0	0	393	414	0	0	0	1
Wisconsin	30	34	-12.0%	30	34	0	0	0	0	0	0
West North Central	11	6	71.0%	0	0	0	0	1	1	10	5
Iowa	11	6	71.0%	0	0	0	0	1	1	10	5
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	371	504	-26.0%	346	478	0	0	0	0	25	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	346	478	-28.0%	346	478	0	0	0	0	0	0
Georgia	25	27	-6.3%	0	0	0	0	0	0	25	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	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	1,144	1,281	-11.0%	1,101	1,231	0	0	0	0	42	50
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,104	1,250	-12.0%	1,101	1,231	0	0	0	0	3	19
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	40	31	27.0%	0	0	0	0	0	0	40	31
Mountain	129	108	19.0%	0	0	129	108	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	129	108	19.0%	0	0	129	108	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	2,428	2,802	-13.0%	1,765	2,146	522	522	1	1	139	133

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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, September 2019 and September 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	29,243	36,410	-20.0%	NM	312	27,856	34,756	480	538	741	804
Connecticut	12,123	12,949	-6.4%	28	49	11,585	12,356	186	212	324	333
Maine	1,127	1,368	-18.0%	0	0	936	1,179	14	13	177	176
Massachusetts	8,651	12,688	-32.0%	NM	214	8,163	12,081	254	289	107	104
New Hampshire	2,286	2,269	0.8%	12	47	2,254	2,202	3	3	16	16
Rhode Island	5,056	7,135	-29.0%	0	0	4,917	6,937	23	22	116	175
Vermont	0	2	-99.0%	0	1	0	0	0	0	0	0
Middle Atlantic	119,950	122,061	-1.7%	6,606	8,323	111,512	111,642	658	726	1,174	1,369
New Jersey	24,742	27,840	-11.0%	NM	183	24,297	27,382	81	98	181	177
New York	32,727	40,670	-20.0%	6,412	8,135	25,504	31,533	524	587	287	415
Pennsylvania	62,481	53,550	17.0%	11	5	61,711	52,727	53	41	706	778
East North Central	101,328	89,006	14.0%	38,473	29,782	60,280	56,669	695	734	1,881	1,821
Illinois	14,351	15,289	-6.1%	1,083	1,096	12,723	13,761	171	213	374	220
Indiana	20,490	15,859	29.0%	9,900	5,583	9,672	9,292	103	62	815	922
Michigan	21,756	19,127	14.0%	9,983	7,963	11,265	10,640	259	279	249	245
Ohio	31,263	27,128	15.0%	5,620	5,318	25,459	21,603	112	130	73	78
Wisconsin	13,469	11,602	16.0%	11,887	9,822	1,161	1,373	51	50	370	357
West North Central	25,834	19,417	33.0%	22,733	17,223	2,700	1,737	149	125	253	333
Iowa	5,391	5,024	7.3%	5,169	4,754	NM	8	51	31	166	231
Kansas	3,566	1,935	84.0%	3,550	1,906	0	0	0	0	16	29
Minnesota	6,903	5,899	17.0%	5,987	5,219	827	588	36	38	53	54
Missouri	6,180	4,695	32.0%	4,242	3,490	1,867	1,140	62	56	9	10
Nebraska	1,331	438	204.0%	1,331	437	0	0	0	1	0	0
North Dakota	1,229	871	41.0%	1,220	863	0	0	0	0	9	8
South Dakota	1,234	554	123.0%	1,234	554	0	0	0	0	0	0
South Atlantic	271,456	271,233	0.1%	221,644	213,221	46,226	54,894	1,015	990	2,571	2,128
Delaware	2,966	4,270	-31.0%	25	47	2,435	3,834	0	0	507	389
District of Columbia	68	69	-0.7%	0	0	0	0	68	69	0	0
Florida	130,706	129,841	0.7%	123,267	122,655	6,718	6,445	9	12	711	729
Georgia	41,018	36,503	12.0%	30,100	26,998	10,605	9,221	0	0	313	284
Maryland	8,837	11,886	-26.0%	826	2,797	7,140	8,231	851	817	21	40
North Carolina	28,686	30,314	-5.4%	22,985	24,479	5,543	5,696	81	86	77	53
South Carolina	17,860	21,253	-16.0%	16,603	15,432	1,188	5,761	2	0	67	60
Virginia	38,680	35,210	9.9%	27,232	20,565	10,817	14,162	3	7	628	476
West Virginia	2,633	1,886	40.0%	605	248	1,780	1,542	0	0	248	96
East South Central	103,282	99,087	4.2%	74,109	66,650	27,957	31,190	90	104	1,127	1,144
Alabama	42,733	41,929	1.9%	16,454	13,358	25,717	28,005	0	0	563	565
Kentucky	10,651	11,403	-6.6%	10,046	10,371	539	971	0	0	66	60
Mississippi	37,606	33,687	12.0%	35,747	31,204	1,691	2,213	0	0	168	271
Tennessee	12,292	12,069	1.8%	11,862	11,717	10	0	90	104	330	248
West South Central	289,092	242,892	19.0%	111,493	91,330	143,359	117,974	531	433	33,709	33,155
Arkansas	14,096	10,952	29.0%	13,331	10,309	621	486	NM	31	110	126
Louisiana	47,984	41,708	15.0%	30,043	27,125	4,810	2,608	70	71	13,060	11,903
Oklahoma	35,039	31,653	11.0%	22,256	18,625	12,486	12,635	0	0	297	393
Texas	191,973	158,579	21.0%	45,863	35,270	125,441	102,245	426	331	20,243	20,734
Mountain	84,502	86,342	-2.1%	67,873	68,248	15,497	16,806	188	186	943	1,101
Arizona	36,539	35,594	2.7%	27,741	26,819	8,747	8,725	50	49	0	0
Colorado	10,227	10,875	-6.0%	8,757	8,248	1,440	2,604	0	0	30	23
Idaho	3,056	3,111	-1.8%	1,689	1,875	1,295	1,190	14	13	58	32
Montana	534	403	32.0%	412	293	122	108	0	0	NM	2
Nevada	18,122	20,224	-10.0%	16,582	18,642	1,302	1,317	24	23	213	242
New Mexico	9,875	9,131	8.1%	7,284	6,265	2,547	2,818	44	48	0	0
Utah	5,545	6,462	-14.0%	5,172	5,968	44	44	56	52	273	397
Wyoming	605	541	12.0%	238	136	0	0	0	0	368	405
Pacific Contiguous	87,735	83,280	5.3%	35,625	33,491	45,775	42,994	857	1,000	5,477	5,796
California	62,224	57,278	8.6%	21,025	18,422	34,959	32,140	838	981	5,402	5,736
Oregon	14,334	14,088	1.8%	7,174	7,219	7,102	6,821	19	14	39	33
Washington	11,176	11,914	-6.2%	7,426	7,850	3,714	4,033	0	5	36	27
Pacific Noncontiguous	3,055	2,015	52.0%	3,031	1,992	0	0	0	1	23	23
Alaska	3,055	2,015	52.0%	3,031	1,992	0	0	0	1	23	23
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,115,478	1,051,744	6.1%	581,753	530,570	481,162	468,661	4,663	4,838	47,900	47,675

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 2019 are preliminary. Values for 2018 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.11.B. Consumption of Nautral Gas for Electricity Generation by State, by Sector, Year-to-Date through September 2019 and September 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	271,071	283,157	-4.3%	1,544	2,169	258,848	269,974	4,173	4,487	6,506	6,527
Connecticut	110,461	102,816	7.4%	242	386	105,846	97,972	1,591	1,687	2,782	2,770
Maine	9,048	12,149	-26.0%	0	0	7,428	10,507	112	113	1,508	1,528
Massachusetts	88,975	107,224	-17.0%	1,233	1,383	84,479	102,364	2,252	2,477	1,012	1,000
New Hampshire	18,600	16,651	12.0%	59	390	18,364	16,087	36	24	141	149
Rhode Island	43,973	44,306	-0.8%	0	0	42,731	43,043	178	182	1,064	1,081
Vermont	14	12	17.0%	10	8	0	0	4	3	0	0
Middle Atlantic	1,013,296	927,198	9.3%	72,754	77,020	923,946	832,657	5,858	6,373	10,739	11,149
New Jersey	214,010	209,223	2.3%	1,230	1,255	210,557	205,505	640	891	1,583	1,573
New York	295,245	310,699	-5.0%	71,492	75,711	216,234	226,882	4,684	4,944	2,834	3,162
Pennsylvania	504,041	407,276	24.0%	32	54	497,155	400,271	534	538	6,321	6,413
East North Central	879,359	791,750	11.0%	322,901	300,394	530,149	465,380	6,065	6,122	20,244	19,854
Illinois	121,184	115,576	4.9%	10,489	9,363	105,929	101,383	1,628	1,611	3,138	3,219
Indiana	171,147	154,128	11.0%	77,585	72,538	82,298	71,113	727	709	10,538	9,768
Michigan	191,598	186,976	2.5%	75,330	75,725	111,443	106,280	2,419	2,413	2,405	2,558
Ohio	279,401	235,516	19.0%	56,170	55,482	221,579	178,308	886	975	766	751
Wisconsin	116,029	99,554	17.0%	103,327	87,286	8,900	8,296	405	414	3,397	3,558
West North Central	197,332	183,116	7.8%	170,428	159,644	23,106	19,719	1,336	1,211	2,462	2,541
Iowa	42,012	40,014	5.0%	40,005	37,974	NM	62	429	376	1,520	1,602
Kansas	24,231	23,945	1.2%	23,898	23,652	0	0	0	0	333	293
Minnesota	57,040	52,608	8.4%	49,457	45,388	6,782	6,427	358	356	443	437
Missouri	47,674	44,366	7.5%	30,813	30,572	16,265	13,230	515	451	80	113
Nebraska	9,334	6,934	35.0%	9,300	6,905	0	0	34	28	0	0
North Dakota	8,938	7,774	15.0%	8,853	7,678	0	0	0	0	85	96
South Dakota	8,102	7,475	8.4%	8,102	7,475	0	0	0	0	0	0
South Atlantic	2,167,909	2,046,324	5.9%	1,781,818	1,655,083	354,742	363,862	8,918	7,915	22,431	19,464
Delaware	27,605	32,571	-15.0%	279	207	23,036	29,455	0	0	4,291	2,908
District of Columbia	487	511	-4.7%	0	0	0	0	487	511	0	0
Florida	1,024,622	972,448	5.4%	973,813	915,911	44,424	50,439	80	110	6,305	5,988
Georgia	315,549	292,807	7.8%	236,106	221,345	76,671	68,673	1	0	2,771	2,789
Maryland	85,476	80,451	6.2%	21,510	20,406	56,113	53,175	7,598	6,525	255	346
North Carolina	236,768	250,824	-5.6%	189,243	214,553	46,244	35,062	695	720	586	490
South Carolina	139,441	126,459	10.0%	133,690	106,344	5,163	19,542	3	1	585	572
Virginia	325,677	280,957	16.0%	224,923	174,689	94,942	100,813	54	48	5,758	5,407
West Virginia	12,283	9,295	32.0%	2,254	1,628	8,149	6,704	0	0	1,881	963
East South Central	777,175	794,267	-2.2%	545,068	549,760	220,590	233,675	767	840	10,750	9,991
Alabama	320,080	324,299	-1.3%	122,692	117,892	191,963	201,170	0	0	5,425	5,237
Kentucky	80,015	88,578	-9.7%	76,120	81,806	3,197	6,199	0	0	698	573
Mississippi	281,549	300,583	-6.3%	254,645	272,435	25,315	26,193	0	40	1,589	1,915
Tennessee	95,531	80,807	18.0%	91,611	77,628	114	113	767	800	3,039	2,267
West South Central	2,194,429	2,083,019	5.3%	864,126	806,521	1,028,299	983,046	4,068	3,250	297,936	290,201
Arkansas	116,408	123,478	-5.7%	109,522	116,632	5,414	5,325	311	356	1,161	1,166
Louisiana	402,039	344,110	17.0%	250,406	212,750	31,058	23,738	534	557	120,041	107,065
Oklahoma	265,553	255,992	3.7%	173,042	159,824	89,955	93,744	0	0	2,556	2,423
Texas	1,410,428	1,359,439	3.8%	331,155	317,315	901,873	860,239	3,222	2,337	174,178	179,548
Mountain	677,574	610,728	11.0%	547,119	497,335	119,874	101,633	1,683	1,613	8,898	10,147
Arizona	266,772	211,703	26.0%	204,257	169,584	62,061	41,653	454	466	0	0
Colorado	97,134	94,085	3.2%	81,192	76,924	15,672	16,920	8	0	261	241
Idaho	22,542	16,695	35.0%	11,629	8,412	10,362	7,867	124	126	427	289
Montana	4,251	3,524	21.0%	3,203	2,921	1,036	590	0	0	12	12
Nevada	146,137	156,874	-6.8%	132,645	143,115	11,253	11,169	204	201	2,035	2,389
New Mexico	79,950	75,121	6.4%	60,808	51,540	18,697	23,023	393	378	53	181
Utah	55,632	48,146	16.0%	51,057	43,550	781	401	500	442	3,294	3,754
Wyoming	5,157	4,581	13.0%	2,328	1,290	11	10	0	0	2,817	3,280
Pacific Contiguous	607,947	615,785	-1.3%	247,292	245,918	303,792	310,846	7,544	8,688	49,320	50,332
California	433,125	468,836	-7.6%	149,213	161,562	227,924	249,149	7,345	8,467	48,643	49,658
Oregon	104,123	86,173	21.0%	51,539	45,422	52,066	40,275	170	158	348	317
Washington	70,700	60,777	16.0%	46,540	38,934	23,802	21,423	30	64	329	357
Pacific Noncontiguous	23,746	19,646	21.0%	23,522	19,445	0	0	0	3	224	198
Alaska	23,746	19,646	21.0%	23,522	19,445	0	0	0	3	224	198
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,809,838	8,354,989	5.4%	4,576,572	4,313,291	3,763,345	3,580,792	40,410	40,502	429,510	420,405

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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, September 2019 and September 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	778	964	-19.0%	0	0	757	941	21	23	0	0
Connecticut	NM	23	NM	0	0	NM	23	0	0	0	0
Maine	49	58	-15.0%	0	0	49	58	0	0	0	0
Massachusetts	298	326	-8.6%	0	0	298	326	0	0	0	0
New Hampshire	85	148	-43.0%	0	0	64	125	21	23	0	0
Rhode Island	310	386	-20.0%	0	0	310	386	0	0	0	0
Vermont	NM	24	NM	0	0	NM	24	0	0	0	0
Middle Atlantic	3,760	4,027	-6.6%	0	0	3,616	3,918	NM	42	93	67
New Jersey	453	565	-20.0%	0	0	439	552	NM	12	0	0
New York	1,232	1,340	-8.0%	0	0	1,232	1,340	0	0	0	0
Pennsylvania	2,075	2,123	-2.3%	0	0	1,945	2,026	NM	30	93	67
East North Central	4,651	4,664	-0.3%	751	714	3,861	3,909	21	20	18	20
Illinois	819	868	-5.7%	194	206	625	662	0	0	0	0
Indiana	652	606	7.5%	557	508	95	98	0	0	0	0
Michigan	1,515	1,488	1.8%	0	0	1,515	1,488	0	0	0	0
Ohio	870	876	-0.7%	0	0	870	876	0	0	0	0
Wisconsin	795	825	-3.6%	0	0	756	786	21	20	18	20
West North Central	718	759	-5.4%	226	262	492	497	0	0	0	0
Iowa	193	183	5.7%	0	0	193	183	0	0	0	0
Kansas	117	120	-2.7%	0	0	117	120	0	0	0	0
Minnesota	162	167	-3.1%	NM	56	111	111	0	0	0	0
Missouri	131	150	-13.0%	60	67	70	83	0	0	0	0
Nebraska	115	139	-17.0%	115	139	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,869	3,459	12.0%	320	292	3,354	2,917	NM	145	NM	105
Delaware	85	79	7.0%	0	0	77	72	0	0	NM	8
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	754	654	15.0%	130	121	624	533	0	0	0	0
Georgia	537	457	17.0%	0	0	519	456	0	0	18	2
Maryland	178	177	0.5%	0	0	124	117	NM	61	0	0
North Carolina	820	781	5.1%	0	0	806	709	NM	72	0	0
South Carolina	297	285	4.2%	183	165	NM	24	0	0	NM	96
Virginia	1,198	1,026	17.0%	7	5	1,177	1,008	NM	13	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	397	413	-3.9%	167	182	229	230	0	0	0	0
Alabama	62	63	-2.3%	0	0	62	63	0	0	0	0
Kentucky	180	202	-11.0%	167	182	NM	20	0	0	0	0
Mississippi	NM	18	NM	0	0	NM	18	0	0	0	0
Tennessee	135	129	4.4%	0	0	135	129	0	0	0	0
West South Central	858	1,009	-15.0%	0	0	858	959	0	50	0	0
Arkansas	88	85	3.5%	0	0	88	85	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	36	NM	0	0	NM	36	0	0	0	0
Texas	733	887	-17.0%	0	0	733	837	0	50	0	0
Mountain	486	504	-3.5%	NM	25	423	430	42	49	0	0
Arizona	70	73	-4.3%	0	0	70	73	0	0	0	0
Colorado	79	105	-24.0%	0	0	79	105	0	0	0	0
Idaho	43	56	-24.0%	NM	25	NM	12	15	19	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	119	116	2.2%	0	0	119	116	0	0	0	0
New Mexico	NM	13	NM	0	0	NM	13	0	0	0	0
Utah	166	140	19.0%	0	0	140	111	27	30	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,178	4,614	-9.4%	107	128	3,093	3,202	979	1,254	0	29
California	3,639	4,038	-9.9%	NM	9	2,676	2,779	955	1,221	0	29
Oregon	448	478	-6.2%	100	119	325	325	NM	33	0	0
Washington	91	98	-6.9%	0	0	91	98	0	0	0	0
Pacific Noncontiguous	69	61	14.0%	0	0	0	0	69	61	0	0
Alaska	69	61	14.0%	0	0	0	0	69	61	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	19,763	20,472	-3.5%	1,592	1,604	16,684	17,004	1,264	1,643	224	222

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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 September 2019 and September 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	7,256	8,279	-12.0%	0	0	7,084	8,112	173	167	0	0
Connecticut	167	197	-15.0%	0	0	167	197	0	0	0	0
Maine	442	527	-16.0%	0	0	442	527	0	0	0	0
Massachusetts	2,671	2,988	-11.0%	0	0	2,671	2,988	0	0	0	0
New Hampshire	773	1,245	-38.0%	0	0	601	1,078	173	167	0	0
Rhode Island	3,038	3,115	-2.4%	0	0	3,038	3,115	0	0	0	0
Vermont	165	208	-21.0%	0	0	165	208	0	0	0	0
Middle Atlantic	34,768	38,555	-9.8%	0	0	33,552	37,233	405	402	810	920
New Jersey	4,742	5,652	-16.0%	0	0	4,624	5,534	118	118	0	0
New York	11,237	12,070	-6.9%	0	0	11,237	12,070	0	0	0	0
Pennsylvania	18,789	20,833	-9.8%	0	0	17,692	19,629	287	284	810	920
East North Central	43,666	46,506	-6.1%	6,725	7,149	36,476	38,926	282	241	183	189
Illinois	7,475	8,937	-16.0%	1,778	1,980	5,696	6,958	0	0	0	0
Indiana	5,791	6,077	-4.7%	4,946	5,169	844	908	0	0	0	0
Michigan	14,623	14,826	-1.4%	0	0	14,623	14,826	0	0	0	0
Ohio	8,277	8,470	-2.3%	0	0	8,277	8,470	0	0	0	0
Wisconsin	7,501	8,196	-8.5%	0	0	7,035	7,765	282	241	183	189
West North Central	6,440	7,578	-15.0%	2,078	2,428	4,362	5,149	0	0	0	0
Iowa	1,682	1,844	-8.8%	0	0	1,682	1,844	0	0	0	0
Kansas	1,050	1,130	-7.0%	0	0	1,050	1,130	0	0	0	0
Minnesota	1,457	1,919	-24.0%	458	518	998	1,401	0	0	0	0
Missouri	1,179	1,407	-16.0%	547	633	631	774	0	0	0	0
Nebraska	1,072	1,278	-16.0%	1,072	1,278	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	35,158	39,471	-11.0%	2,837	3,093	30,371	33,581	839	1,584	1,110	1,213
Delaware	768	859	-11.0%	0	0	691	776	0	0	77	82
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,842	8,341	-18.0%	1,132	1,272	5,710	7,069	0	0	0	0
Georgia	5,078	5,019	1.2%	0	0	4,971	4,926	0	0	107	93
Maryland	1,700	1,994	-15.0%	0	0	1,114	1,335	586	659	0	0
North Carolina	7,495	8,396	-11.0%	0	0	7,371	7,622	124	773	0	0
South Carolina	2,819	3,078	-8.4%	1,647	1,783	246	257	0	0	926	1,038
Virginia	10,456	11,785	-11.0%	58	38	10,268	11,595	130	152	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,599	3,938	-8.6%	1,519	1,759	2,080	2,179	0	0	0	0
Alabama	557	613	-9.2%	0	0	557	613	0	0	0	0
Kentucky	1,659	1,906	-13.0%	1,519	1,759	140	147	0	0	0	0
Mississippi	174	172	1.0%	0	0	174	172	0	0	0	0
Tennessee	1,210	1,247	-3.0%	0	0	1,210	1,247	0	0	0	0
West South Central	8,281	9,734	-15.0%	0	0	8,092	9,293	189	442	0	0
Arkansas	791	814	-2.9%	0	0	791	814	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	326	349	-6.6%	0	0	326	349	0	0	0	0
Texas	7,165	8,571	-16.0%	0	0	6,976	8,130	189	442	0	0
Mountain	4,237	4,791	-12.0%	190	243	3,738	4,149	309	399	0	0
Arizona	628	707	-11.0%	0	0	628	707	0	0	0	0
Colorado	711	1,012	-30.0%	0	0	711	1,012	0	0	0	0
Idaho	383	503	-24.0%	190	243	65	117	127	143	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,066	1,120	-4.8%	0	0	1,066	1,120	0	0	0	0
New Mexico	79	125	-37.0%	0	0	79	125	0	0	0	0
Utah	1,371	1,325	3.5%	0	0	1,189	1,068	182	257	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	36,083	42,763	-16.0%	938	3,501	26,888	28,080	8,256	10,925	0	256
California	31,401	35,985	-13.0%	61	845	23,327	24,266	8,013	10,618	0	256
Oregon	3,862	4,315	-10.0%	877	1,094	2,741	2,913	243	308	0	0
Washington	820	2,463	-67.0%	0	1,562	820	902	0	0	0	0
Pacific Noncontiguous	529	618	-14.0%	0	0	0	0	529	618	0	0
Alaska	529	618	-14.0%	0	0	0	0	529	618	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	180,018	202,233	-11.0%	14,287	18,173	152,645	166,703	10,983	14,778	2,103	2,579

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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, September 2019 and September 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	280	298	-6.1%	0	0	270	284	10	14	0	0
Connecticut	100	100	0.0%	0	0	100	100	0	0	0	0
Maine	19	23	-19.0%	0	0	9	9	10	14	0	0
Massachusetts	152	165	-7.6%	0	0	152	165	0	0	0	0
New Hampshire	9	10	-12.0%	0	0	9	10	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	405	439	-7.7%	0	0	317	342	88	97	0	0
New Jersey	102	113	-9.4%	0	0	74	83	28	30	0	0
New York	155	173	-11.0%	0	0	116	125	39	48	0	0
Pennsylvania	148	153	-3.0%	0	0	127	134	21	19	0	0
East North Central	14	17	-18.0%	3	2	0	0	11	15	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	1	16.0%	0	0	0	0	2	1	0	0
Michigan	10	13	-29.0%	0	0	0	0	10	13	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	2	29.0%	3	2	0	0	0	0	0	0
West North Central	35	54	-36.0%	18	34	16	19	NM	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	35	54	-36.0%	18	34	16	19	NM	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	432	433	-0.2%	0	0	401	396	32	37	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	291	310	-6.0%	0	0	291	310	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	48	53	-10.0%	0	0	48	53	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	93	70	33.0%	0	0	61	33	32	37	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	1	1	-30.0%	0	0	0	0	0	0	1	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	1	-30.0%	0	0	0	0	0	0	1	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	57	55	3.8%	0	0	57	55	0	0	0	0
California	36	32	14.0%	0	0	36	32	0	0	0	0
Oregon	10	9	15.0%	0	0	10	9	0	0	0	0
Washington	11	15	-24.0%	0	0	11	15	0	0	0	0
Pacific Noncontiguous	40	36	13.0%	0	0	0	0	40	36	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	40	36	13.0%	0	0	0	0	40	36	0	0
U.S. Total	1,265	1,334	-5.2%	21	36	1,061	1,097	182	199	1	1

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Table 2.13.B. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, Year-to-Date through September 2019 and September 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	2,465	2,691	-8.4%	0	0	2,359	2,558	105	133	0	0
Connecticut	858	880	-2.5%	0	0	858	880	0	0	0	0
Maine	187	218	-14.0%	0	0	81	85	105	133	0	0
Massachusetts	1,333	1,502	-11.0%	0	0	1,333	1,502	0	0	0	0
New Hampshire	87	91	-5.2%	0	0	87	91	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,747	4,059	-7.7%	0	0	2,963	3,194	784	865	0	0
New Jersey	952	1,079	-12.0%	0	0	703	814	249	265	0	0
New York	1,381	1,522	-9.3%	0	0	1,027	1,106	354	417	0	0
Pennsylvania	1,414	1,458	-3.0%	0	0	1,233	1,275	181	183	0	0
East North Central	138	174	-21.0%	26	26	0	0	112	149	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	13	15	-9.3%	0	0	0	0	13	15	0	0
Michigan	99	134	-26.0%	0	0	0	0	99	134	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	26	26	3.0%	26	26	0	0	0	0	0	0
West North Central	350	504	-31.0%	199	322	151	173	0	9	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	350	504	-31.0%	199	322	151	173	0	9	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,973	4,313	-7.9%	0	0	3,655	3,970	318	343	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,649	2,956	-10.0%	0	0	2,649	2,956	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	465	489	-4.8%	0	0	465	489	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	859	867	-1.0%	0	0	540	524	318	343	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	7	8	-7.8%	0	0	0	0	0	0	7	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	7	8	-7.8%	0	0	0	0	0	0	7	8
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	488	529	-7.7%	0	0	488	529	0	0	0	0
California	291	324	-10.0%	0	0	291	324	0	0	0	0
Oregon	84	85	-0.6%	0	0	84	85	0	0	0	0
Washington	112	120	-6.2%	0	0	112	120	0	0	0	0
Pacific Noncontiguous	343	333	2.9%	0	0	0	0	343	333	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	343	333	2.9%	0	0	0	0	343	333	0	0
U.S. Total	11,511	12,611	-8.7%	225	348	9,616	10,424	1,662	1,832	7	8

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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, September 2019 and September 2018 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	3,953	3,981	-0.7%	489	705	3,010	2,761	1	1	453	514
Connecticut	270	265	1.8%	0	0	270	265	0	0	0	0
Maine	1,601	1,894	-15.0%	0	0	1,148	1,381	0	0	453	514
Massachusetts	173	94	85.0%	0	0	173	94	0	0	0	0
New Hampshire	1,412	1,277	11.0%	191	441	1,221	836	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	497	451	10.0%	298	264	198	186	1	1	0	0
Middle Atlantic	782	763	2.5%	0	0	506	496	0	0	277	267
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	584	557	4.9%	0	0	506	496	0	0	79	61
Pennsylvania	198	206	-4.1%	0	0	0	0	0	0	198	206
East North Central	1,977	1,824	8.4%	407	183	1,052	1,065	0	0	518	576
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,284	1,317	-2.5%	0	0	1,041	1,054	0	0	243	263
Ohio	77	92	-17.0%	0	0	11	11	0	0	66	80
Wisconsin	616	416	48.0%	407	183	0	0	0	0	209	232
West North Central	525	500	4.8%	88	30	115	151	39	36	283	283
Iowa	6	0	--	0	0	0	0	6	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	486	467	4.1%	88	30	115	151	0	3	283	283
Missouri	33	34	-3.4%	0	0	0	0	33	34	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	10,319	9,948	3.7%	2,233	1,938	2,931	2,562	11	15	5,143	5,434
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	1,604	1,965	-18.0%	740	784	159	338	0	0	705	844
Georgia	3,143	2,800	12.0%	0	0	1,142	608	0	0	2,001	2,192
Maryland	11	44	-74.0%	0	0	0	0	11	15	0	30
North Carolina	1,267	1,102	15.0%	0	0	764	707	0	0	503	395
South Carolina	1,504	1,316	14.0%	141	117	544	471	0	0	819	728
Virginia	2,789	2,720	2.5%	1,352	1,037	322	438	0	0	1,115	1,245
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,715	2,933	-7.4%	0	0	119	179	0	0	2,596	2,754
Alabama	1,612	1,954	-18.0%	0	0	119	179	0	0	1,493	1,775
Kentucky	136	79	72.0%	0	0	0	0	0	0	136	79
Mississippi	580	482	20.0%	0	0	0	0	0	0	580	482
Tennessee	388	418	-7.2%	0	0	0	0	0	0	388	418
West South Central	2,186	2,185	0.0%	0	0	147	2	0	0	2,039	2,183
Arkansas	506	359	41.0%	0	0	0	0	0	0	506	359
Louisiana	1,122	1,278	-12.0%	0	0	0	0	0	0	1,122	1,278
Oklahoma	71	160	-55.0%	0	0	0	2	0	0	71	158
Texas	486	388	25.0%	0	0	147	0	0	0	339	388
Mountain	509	495	2.9%	0	0	406	388	0	0	104	107
Arizona	266	245	8.6%	0	0	266	245	0	0	0	0
Colorado	109	121	-9.6%	0	0	109	121	0	0	0	0
Idaho	111	106	5.2%	0	0	30	22	0	0	81	84
Montana	23	23	-2.1%	0	0	0	0	0	0	23	23
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	5,746	6,140	-6.4%	427	485	3,505	3,674	0	0	1,813	1,982
California	4,044	4,206	-3.8%	0	0	3,250	3,336	0	0	794	870
Oregon	677	716	-5.4%	0	0	255	338	0	0	422	378
Washington	1,024	1,219	-16.0%	427	485	0	0	0	0	597	734
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	28,712	28,770	-0.2%	3,644	3,340	11,790	11,278	51	52	13,227	14,100

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Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through September 2019 and September 2018 (Billion Btus)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	37,322	40,081	-6.9%	5,699	5,704	27,445	30,317	8	16	4,170	4,044
Connecticut	2,427	2,353	3.2%	0	0	2,427	2,353	0	0	0	0
Maine	14,880	17,409	-15.0%	0	0	10,710	13,356	0	9	4,170	4,044
Massachusetts	1,577	1,540	2.4%	0	0	1,577	1,540	0	0	0	0
New Hampshire	14,123	14,296	-1.2%	3,159	2,936	10,964	11,360	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	4,314	4,484	-3.8%	2,540	2,767	1,767	1,709	8	7	0	0
Middle Atlantic	6,679	8,203	-19.0%	0	0	4,210	4,779	0	0	2,470	3,425
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	4,912	5,522	-11.0%	0	0	4,209	4,777	0	0	703	746
Pennsylvania	1,767	2,681	-34.0%	0	0	1	2	0	0	1,766	2,679
East North Central	18,273	18,114	0.9%	3,455	3,448	9,470	9,175	0	0	5,347	5,491
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	11,986	11,835	1.3%	0	0	9,369	9,065	0	0	2,617	2,770
Ohio	828	859	-3.6%	0	0	101	110	0	0	727	750
Wisconsin	5,459	5,419	0.7%	3,455	3,448	0	0	0	0	2,004	1,971
West North Central	4,430	6,744	-34.0%	827	872	1,074	3,322	352	303	2,176	2,247
Iowa	52	2	NM	0	0	0	0	52	2	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	4,197	6,503	-35.0%	827	872	1,074	3,322	120	62	2,176	2,247
Missouri	180	240	-25.0%	0	0	0	0	180	240	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	93,819	98,171	-4.4%	21,319	21,956	24,167	25,747	110	103	48,225	50,365
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	15,320	17,346	-12.0%	6,716	5,467	1,858	4,775	0	0	6,746	7,104
Georgia	27,077	26,105	3.7%	0	0	8,008	6,136	0	0	19,068	19,969
Maryland	367	497	-26.0%	0	0	0	0	110	103	257	394
North Carolina	11,618	11,673	-0.5%	0	0	6,857	6,819	0	0	4,761	4,854
South Carolina	13,199	13,735	-3.9%	1,337	1,386	4,546	4,662	0	0	7,316	7,686
Virginia	26,240	28,816	-8.9%	13,266	15,103	2,898	3,357	0	0	10,077	10,357
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	27,001	27,697	-2.5%	0	0	1,131	1,538	0	0	25,870	26,159
Alabama	17,662	18,113	-2.5%	0	0	1,131	1,538	0	0	16,531	16,575
Kentucky	1,220	1,082	13.0%	0	0	0	0	0	0	1,220	1,082
Mississippi	4,904	5,092	-3.7%	0	0	0	0	0	0	4,904	5,092
Tennessee	3,216	3,410	-5.7%	0	0	0	0	0	0	3,216	3,410
West South Central	20,578	23,374	-12.0%	0	0	1,466	2,191	0	0	19,112	21,182
Arkansas	5,117	5,042	1.5%	0	0	0	0	0	0	5,117	5,042
Louisiana	9,566	11,271	-15.0%	0	0	0	0	0	0	9,566	11,271
Oklahoma	1,179	1,423	-17.0%	0	0	0	22	0	0	1,179	1,400
Texas	4,716	5,637	-16.0%	0	0	1,466	2,169	0	0	3,250	3,468
Mountain	4,910	4,639	5.8%	0	0	3,561	3,321	0	0	1,349	1,318
Arizona	2,377	2,167	9.7%	0	0	2,377	2,167	0	0	0	0
Colorado	945	922	2.5%	0	0	945	922	0	0	0	0
Idaho	1,404	1,363	3.0%	0	0	238	232	0	0	1,166	1,131
Montana	183	187	-2.2%	0	0	0	0	0	0	183	187
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	51,061	49,045	4.1%	3,823	3,432	31,066	29,959	0	0	16,172	15,653
California	35,607	34,130	4.3%	0	0	28,770	27,905	0	0	6,837	6,225
Oregon	5,911	5,355	10.0%	0	0	2,296	2,055	0	0	3,615	3,301
Washington	9,543	9,560	-0.2%	3,823	3,432	0	0	0	0	5,720	6,128
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	264,073	276,069	-4.3%	35,123	35,412	103,590	110,350	470	422	124,891	129,884

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 2019 are preliminary. Values for 2018 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, 2009 - September 2019

	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									
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
2018	103,043	27,337	539	84,978	17,850	521	18,065	9,487	19
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	123,692	27,399	720	104,185	19,126	579	19,508	8,273	141
February	120,945	28,361	692	101,922	19,671	561	19,023	8,690	131
March	126,422	28,295	736	106,761	19,761	612	19,660	8,534	124
April	128,965	28,144	731	108,237	19,700	647	20,728	8,444	84
May	128,356	28,327	709	107,525	19,777	648	20,831	8,550	61
June	121,394	28,000	591	101,828	19,400	526	19,567	8,600	65
July	110,677	27,385	668	93,408	18,817	614	17,269	8,568	53
August	104,048	26,214	625	88,230	17,935	580	15,818	8,278	45
Sept	100,680	25,989	608	84,975	17,707	557	15,705	8,282	51
October	105,134	25,949	541	87,656	17,477	511	17,478	8,472	30
November	104,336	26,073	557	86,496	17,404	540	17,840	8,669	16
December	103,043	27,337	539	84,978	17,850	521	18,065	9,487	19
Year 2019, End of Month Stocks									
January	99,378	27,060	528	81,756	17,719	518	17,622	9,341	9
February	98,835	27,317	506	81,339	17,962	495	17,497	9,356	11
March	97,102	27,335	498	79,627	18,076	482	17,475	9,259	16
April	108,852	27,473	510	88,960	18,238	501	19,891	9,236	10
May	115,888	27,584	445	93,643	18,351	435	22,245	9,233	10
June	117,710	27,350	389	94,364	18,140	382	23,346	9,211	7
July	110,932	26,960	355	89,637	17,851	348	21,295	9,109	8
August	110,560	26,260	381	89,229	17,323	373	21,331	8,937	8
Sept	111,204	26,473	293	90,128	17,529	282	21,075	8,944	11

Notes: See Glossary for definitions. Values for 2018 and prior years are final. Values for 2019 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, September 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	September 2019	September 2018	Percentage Change	September 2019	September 2018	Percentage Change	September 2019	September 2018	Percentage Change
New England	W	684	W	3,313	3,081	7.5%	0	0	--
Connecticut	W	W	W	1,185	1,138	4.1%	0	0	--
Maine	0	0	--	232	182	27.6%	0	0	--
Massachusetts	W	W	W	1,307	1,337	-2.2%	0	0	--
New Hampshire	W	W	W	354	215	64.6%	0	0	--
Rhode Island	0	W	W	195	166	17.5%	0	0	--
Vermont	0	0	--	40	43	-7.1%	0	0	--
Middle Atlantic	4,238	2,688	57.7%	5,193	4,817	7.8%	0	0	--
New Jersey	W	W	W	632	634	-0.2%	0	0	--
New York	W	W	W	3,286	3,085	6.5%	0	0	--
Pennsylvania	4,110	2,508	63.9%	1,275	1,098	16.1%	0	0	--
East North Central	24,147	19,706	22.5%	1,004	1,059	-5.2%	84	98	-14.7%
Illinois	4,439	4,784	-7.2%	70	74	-5.4%	0	0	--
Indiana	7,111	6,134	15.9%	74	96	-22.9%	W	W	W
Michigan	4,013	3,025	32.7%	239	299	-20.0%	W	W	W
Ohio	5,113	2,619	95.2%	435	380	14.3%	0	W	W
Wisconsin	3,472	3,144	10.4%	186	210	-11.2%	W	W	W
West North Central	19,345	20,667	-6.4%	795	907	-12.3%	0	0	--
Iowa	3,431	3,847	-10.8%	123	131	-6.1%	0	0	--
Kansas	2,562	3,285	-22.0%	105	111	-5.5%	0	0	--
Minnesota	3,858	2,545	51.6%	83	115	-27.4%	0	0	--
Missouri	5,621	7,153	-21.4%	324	372	-12.7%	0	0	--
Nebraska	2,282	2,135	6.9%	85	107	-20.4%	0	0	--
North Dakota	W	W	W	26	28	-6.1%	0	0	--
South Dakota	W	W	W	48	43	11.7%	0	0	--
South Atlantic	19,907	16,023	24.2%	10,847	10,445	3.9%	W	W	W
Delaware	W	W	W	596	467	27.6%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	2,780	3,154	-11.9%	3,977	4,312	-7.8%	W	W	W
Georgia	4,093	3,479	17.6%	871	740	17.6%	0	0	--
Maryland	1,463	1,062	37.7%	670	564	18.7%	0	0	--
North Carolina	3,113	3,203	-2.8%	1,297	1,181	9.8%	0	0	--
South Carolina	2,459	2,135	15.1%	749	636	17.8%	0	0	--
Virginia	W	494	W	2,535	2,427	4.5%	0	0	--
West Virginia	4,865	W	W	154	118	30.3%	W	W	W
East South Central	10,784	9,153	17.8%	1,171	1,327	-11.8%	0	W	W
Alabama	W	W	W	210	195	7.6%	0	0	--
Kentucky	5,571	4,548	22.5%	219	248	-11.9%	0	W	W
Mississippi	W	W	W	36	185	-80.8%	0	0	--
Tennessee	2,560	2,020	26.7%	708	699	1.2%	0	0	--
West South Central	14,730	13,924	5.8%	1,319	1,462	-9.8%	W	W	W
Arkansas	3,377	2,391	41.2%	167	162	2.9%	0	0	--
Louisiana	2,319	1,676	38.3%	227	351	-35.3%	W	W	W
Oklahoma	2,341	3,147	-25.6%	98	96	2.5%	0	0	--
Texas	6,693	6,709	-0.2%	827	853	-3.0%	0	0	--
Mountain	16,277	17,012	-4.3%	351	380	-7.6%	W	W	W
Arizona	2,943	2,979	-1.2%	133	137	-2.5%	0	0	--
Colorado	3,895	4,038	-3.5%	114	127	-10.2%	0	0	--
Idaho	0	0	--	0	0	-42.1%	0	0	--
Montana	W	W	W	14	18	-19.9%	W	W	W
Nevada	W	W	W	3	3	7.3%	0	0	--
New Mexico	W	W	W	19	28	-33.5%	0	0	--
Utah	3,005	4,160	-27.8%	39	35	9.3%	0	0	--
Wyoming	4,080	3,633	12.3%	29	32	-9.6%	0	0	--
Pacific Contiguous	W	W	W	350	364	-3.6%	0	0	--
California	0	0	--	174	193	-9.8%	0	0	--
Oregon	W	W	W	76	71	7.0%	0	0	--
Washington	W	W	W	100	100	0.8%	0	0	--
Pacific Noncontiguous	W	W	W	2,128	2,149	-1.0%	0	0	--
Alaska	0	W	W	72	253	-71.4%	0	0	--
Hawaii	W	W	W	2,056	1,896	8.4%	0	0	--
U.S. Total	111,204	100,680	10.5%	26,473	25,989	1.9%	293	608	-51.8%

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 2019 are preliminary. Values for 2018 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, September 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**September 2019**	**September 2018**	**Percentage Change**	**September 2019**	**September 2018**	**September 2019**	**September 2018**
Coal (Thousand Tons)							
New England	W	684	W	W	W	W	W
Middle Atlantic	4,238	2,688	57.7%	0	0	4,238	2,688
East North Central	24,147	19,706	22.5%	15,596	13,619	8,551	6,087
West North Central	19,345	20,667	-6.4%	19,345	20,667	0	0
South Atlantic	19,907	16,023	24.2%	17,549	14,357	2,357	1,666
East South Central	10,784	9,153	17.8%	10,784	9,153	0	0
West South Central	14,730	13,924	5.8%	10,777	10,451	3,953	3,472
Mountain	16,277	17,012	-4.3%	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	**111,204**	**100,680**	**10.5%**	**90,128**	**84,975**	**21,075**	**15,705**
Petroleum Liquids (Thousand Barrels)							
New England	3,313	3,081	7.5%	488	433	2,824	2,648
Middle Atlantic	5,193	4,817	7.8%	2,110	1,894	3,083	2,923
East North Central	1,004	1,059	-5.2%	661	713	343	347
West North Central	795	907	-12.3%	770	886	25	21
South Atlantic	10,847	10,445	3.9%	8,674	8,649	2,174	1,796
East South Central	1,171	1,327	-11.8%	1,081	1,255	91	72
West South Central	1,319	1,462	-9.8%	1,056	1,140	263	322
Mountain	351	380	-7.6%	322	350	29	30
Pacific Contiguous	350	364	-3.6%	269	266	81	97
Pacific Noncontiguous	2,128	2,149	-1.0%	2,098	2,121	30	28
U.S. Total	**26,473**	**25,989**	**1.9%**	**17,529**	**17,707**	**8,944**	**8,282**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	84	98	-14.7%	84	W	0	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	**293**	**608**	**-51.8%**	**282**	**557**	**11**	**51**

W = Withheld to avoid disclosure of individual company data.
Notes: See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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, 2009 - September 2019
(Thousand Tons)

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
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
2018	41,766	58,238	3,039	103,043
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	48,376	72,242	3,074	123,692
February	48,090	69,946	2,909	120,945
March	49,456	73,752	3,213	126,422
April	50,915	74,726	3,324	128,965
May	51,788	73,355	3,212	128,356
June	48,787	69,416	3,191	121,394
July	44,841	62,989	2,847	110,677
August	42,691	58,541	2,816	104,048
Sept	40,700	57,136	2,845	100,680
October	42,887	59,231	3,016	105,134
November	42,673	58,554	3,108	104,336
December	41,766	58,238	3,039	103,043
Year 2019, End of Month Stocks				
January	40,184	56,311	2,883	99,378
February	41,501	54,596	2,738	98,835
March	44,493	49,383	3,054	97,102
April	49,163	56,333	3,344	108,852
May	52,191	60,281	3,023	115,888
June	54,298	60,523	2,551	117,710
July	50,264	57,645	2,558	110,932
August	49,819	58,007	2,240	110,560
Sept	49,073	59,147	2,211	111,204

Notes: See Glossary for definitions.
Values for 2018 and prior years are final. Values for 2019 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), 2009 - September 2019

	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												
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
2018	11,371,117	596,215	2.06	39.25	1.31	91.7	134,069	22,290	14.42	86.80	0.42	71.4
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	955,176	50,541	2.06	39.01	1.24	76.3	35,958	6,008	14.02	84.17	0.47	59.1
February	852,358	44,837	2.07	39.27	1.27	95.2	12,093	1,993	12.79	77.72	0.47	122.2
March	941,236	48,946	2.04	39.20	1.34	107.0	7,979	1,331	13.56	81.30	0.42	80.5
April	816,396	42,555	2.07	39.66	1.33	102.3	6,902	1,141	13.90	84.04	0.41	65.7
May	892,542	46,186	2.04	39.50	1.38	95.5	9,619	1,591	14.40	87.12	0.34	79.2
June	930,650	48,563	2.04	39.14	1.36	85.0	9,287	1,546	14.96	89.81	0.33	75.2
July	989,524	52,065	2.05	38.98	1.29	80.2	7,532	1,244	14.74	89.24	0.33	65.2
August	1,076,062	56,499	2.06	39.16	1.31	87.2	7,016	1,163	15.41	92.94	0.38	57.8
Sept	943,820	49,892	2.05	38.76	1.25	90.8	7,903	1,316	15.42	92.57	0.38	66.0
October	1,000,010	52,357	2.04	39.05	1.36	106.0	9,389	1,556	15.77	95.13	0.42	77.7
November	954,234	50,315	2.06	39.02	1.32	95.2	8,917	1,494	15.87	94.65	0.46	73.7
December	1,019,110	53,461	2.11	40.25	1.30	94.0	11,474	1,908	13.96	83.90	0.47	94.1
Year 2019												
January	1,002,966	52,325	2.10	40.31	1.32	91.6	8,613	1,426	12.40	74.90	0.46	51.0
February	847,217	44,418	2.07	39.54	1.28	96.2	8,421	1,380	13.15	80.25	0.48	86.4
March	820,727	41,993	2.08	40.69	1.51	93.0	7,501	1,243	14.41	86.95	0.47	76.7
April	869,217	44,771	2.07	40.19	1.37	129.9	6,948	1,152	14.83	89.43	0.52	74.0
May	890,175	45,861	2.06	39.91	1.39	111.7	6,587	1,095	14.47	87.01	0.50	57.1
June	867,346	44,942	2.03	39.18	1.35	99.2	6,735	1,120	13.68	82.26	0.49	59.8
July	938,765	49,119	2.02	38.68	1.28	86.1	5,853	977	13.78	82.54	0.48	50.4
August	979,702	51,071	2.00	38.44	1.27	95.4	5,115	860	14.24	84.72	0.51	42.1
Sept	889,826	46,443	1.96	37.59	1.27	95.3	8,156	1,344	12.62	76.57	0.48	73.9
Year to Date												
2017	9,295,097	485,964	2.06	39.48	1.29	94.3	68,860	11,477	11.46	68.78	0.49	70.5
2018	8,397,763	440,083	2.05	39.17	1.31	89.7	104,289	17,332	14.22	85.66	0.41	68.9
2019	8,105,943	420,943	2.04	39.37	1.33	98.2	63,927	10,597	13.65	82.33	0.49	61.7
Rolling 12 Months Ending in September												
2018	11,363,696	596,482	2.05	39.03	1.30	91.2	132,406	21,983	13.92	83.89	0.43	67.4
2019	11,079,297	577,075	2.05	39.39	1.33	98.2	93,707	15,555	14.11	84.99	0.47	67.0

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 2018 and prior years are final. Values for 2019 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), 2009 - September 2019 (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												
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
2018	85,122	3,010	2.54	71.76	5.74	66.1	11,244,158	10,885,764	3.55	3.67	90.4	2.83
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	53.2	836,690	809,816	5.06	5.23	88.7	3.59
February	7,769	277	2.43	68.09	5.49	72.4	734,114	711,064	3.61	3.73	88.8	2.82
March	7,841	281	2.54	70.89	5.54	86.2	805,795	779,565	3.18	3.29	89.3	2.59
April	6,564	232	2.56	72.38	6.09	65.5	758,992	735,470	3.14	3.24	90.2	2.61
May	4,344	152	2.41	68.58	6.09	54.2	894,444	866,280	3.06	3.16	89.9	2.59
June	7,382	260	2.73	77.61	5.97	62.9	1,014,537	982,204	3.13	3.23	91.7	2.64
July	8,307	293	2.71	76.81	5.73	65.3	1,272,002	1,231,687	3.23	3.34	91.1	2.73
August	8,443	298	2.79	78.94	5.67	69.4	1,243,192	1,203,931	3.28	3.38	91.6	2.72
Sept	8,158	288	2.94	83.35	5.63	72.2	1,093,336	1,057,919	3.12	3.22	91.9	2.65
October	5,892	208	2.48	70.32	5.77	68.1	951,710	921,416	3.43	3.55	91.4	2.76
November	6,696	235	2.21	63.10	5.87	68.6	817,552	791,715	4.18	4.31	89.3	3.05
December	6,718	238	2.03	57.24	5.90	59.0	821,793	794,697	4.72	4.89	89.5	3.29
Year 2019												
January	5,447	192	2.08	59.13	5.93	47.6	861,144	833,542	4.01	4.14	85.6	2.99
February	4,486	155	2.27	65.75	5.78	44.5	786,837	759,087	3.64	3.77	84.9	2.85
March	3,725	130	2.43	69.63	6.15	37.9	805,916	780,541	3.45	3.56	84.8	2.79
April	3,159	111	2.71	76.93	5.65	43.2	735,819	713,023	2.89	2.99	83.7	2.49
May	4,631	162	2.24	63.78	5.41	43.2	840,905	815,615	2.77	2.85	85.8	2.43
June	3,740	130	2.18	62.61	5.15	44.7	972,827	942,687	2.59	2.67	84.8	2.36
July	5,766	201	2.01	57.67	5.22	51.0	1,201,858	1,162,227	2.53	2.62	83.1	2.33
August	7,308	258	1.72	48.66	5.20	74.0	1,219,038	1,177,687	2.41	2.50	83.2	2.25
Sept	3,777	131	1.67	48.38	5.58	37.3	1,053,061	1,018,596	2.59	2.68	83.8	2.33
Year to Date												
2017	68,933	2,458	2.07	58.10	5.52	72.1	7,565,715	7,318,962	3.37	3.49	90.5	2.65
2018	65,816	2,329	2.63	74.25	5.70	66.5	8,653,102	8,377,935	3.39	3.50	90.5	2.77
2019	42,040	1,470	2.10	59.93	5.53	47.2	8,477,403	8,203,005	2.92	3.02	84.3	2.52
Rolling 12 Months Ending in September												
2018	89,720	3,179	2.55	71.80	5.69	69.8	11,039,202	10,687,706	3.39	3.50	90.3	2.74
2019	61,346	2,152	2.14	60.98	5.63	51.7	11,068,459	10,710,834	3.19	3.30	85.6	2.65

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 2018 and prior years are final. Values for 2019 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, 2009 - September 2019

	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												
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
2018	8,351,036	435,964	2.11	40.35	1.18	91.6	84,050	13,896	14.39	87.09	0.37	75.3
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	689,121	36,230	2.08	39.57	1.11	75.5	16,449	2,762	14.38	85.73	0.43	61.0
February	637,294	33,294	2.10	40.18	1.17	97.3	8,657	1,413	12.58	77.10	0.46	126.0
March	696,264	36,224	2.09	40.20	1.18	111.4	5,472	906	13.38	80.86	0.36	82.4
April	600,033	31,096	2.12	40.93	1.23	101.8	5,321	875	13.78	83.81	0.36	74.7
May	654,477	33,757	2.09	40.57	1.24	95.3	6,739	1,108	14.37	87.44	0.29	82.5
June	689,040	35,857	2.10	40.33	1.21	84.0	6,566	1,085	14.63	88.49	0.28	78.5
July	738,864	38,675	2.10	40.13	1.15	79.8	5,620	920	14.34	87.60	0.27	75.5
August	802,045	41,889	2.11	40.43	1.19	87.2	5,016	826	15.26	92.68	0.34	63.6
Sept	695,648	36,530	2.12	40.31	1.15	90.3	5,665	940	15.53	93.63	0.35	66.8
October	713,410	37,228	2.10	40.20	1.21	104.3	6,170	1,011	15.78	96.34	0.39	73.6
November	691,145	36,346	2.10	39.90	1.17	95.3	5,383	896	15.89	95.50	0.41	69.8
December	743,694	38,838	2.17	41.48	1.17	93.2	6,991	1,155	13.83	83.69	0.44	94.7
Year 2019												
January	735,203	38,213	2.16	41.64	1.18	92.1	6,100	1,008	12.56	76.05	0.42	61.8
February	628,506	32,866	2.14	40.93	1.15	97.9	6,343	1,033	12.99	79.78	0.46	101.1
March	585,096	29,813	2.14	42.08	1.37	93.5	6,135	1,012	14.34	86.89	0.42	94.1
April	643,745	33,151	2.13	41.45	1.21	134.6	5,352	882	14.68	89.05	0.47	89.0
May	661,447	34,035	2.12	41.24	1.22	112.1	4,914	810	14.11	85.55	0.48	65.7
June	645,744	33,285	2.11	40.91	1.20	98.9	5,128	848	13.28	80.32	0.47	63.9
July	718,410	37,414	2.09	40.04	1.16	88.2	4,389	728	13.28	79.99	0.46	56.4
August	741,678	38,617	2.07	39.70	1.14	97.0	3,843	643	13.64	81.54	0.48	44.2
Sept	671,720	34,843	2.02	38.89	1.17	97.0	6,701	1,097	12.38	75.64	0.45	86.7
Year to Date												
2017	6,836,172	353,749	2.12	41.02	1.17	94.9	52,004	8,616	11.34	68.46	0.48	75.8
2018	6,202,786	323,552	2.10	40.28	1.18	89.8	65,507	10,835	14.20	85.88	0.36	74.4
2019	6,031,549	312,238	2.11	40.73	1.20	99.5	48,905	8,062	13.43	81.45	0.45	71.4
Rolling 12 Months Ending in September												
2018	8,378,243	437,397	2.10	40.26	1.17	92.1	83,925	13,859	13.79	83.52	0.38	73.5
2019	8,179,798	424,649	2.11	40.68	1.19	98.9	67,449	11,123	13.88	84.17	0.44	73.3

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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 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, 2009 - September 2019 (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												
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
2018	83,211	2,940	2.56	72.34	5.74	106.8	5,553,558	5,379,459	3.68	3.80	96.2	2.80
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	423,606	410,310	5.20	5.37	95.5	3.41
February	7,769	277	2.43	68.09	5.49	117.9	359,760	348,729	3.81	3.93	95.0	2.79
March	7,841	281	2.54	70.89	5.54	141.5	397,572	384,900	3.46	3.57	96.4	2.64
April	6,564	232	2.56	72.38	6.09	119.0	377,302	365,948	3.30	3.40	97.5	2.63
May	4,344	152	2.41	68.58	6.09	108.3	452,870	438,567	3.24	3.35	94.8	2.63
June	7,382	260	2.73	77.61	5.97	96.2	525,751	509,192	3.28	3.39	97.2	2.67
July	8,147	287	2.73	77.48	5.73	100.4	632,133	612,044	3.27	3.38	95.1	2.69
August	8,183	288	2.82	80.03	5.67	105.4	607,246	588,293	3.33	3.44	96.5	2.68
Sept	7,493	263	3.05	86.74	5.59	101.2	535,618	518,216	3.28	3.39	97.0	2.68
October	5,415	191	2.55	72.24	5.80	120.4	464,777	450,302	3.57	3.68	97.8	2.74
November	6,524	229	2.23	63.55	5.88	116.4	390,167	378,446	4.26	4.39	94.9	2.93
December	6,541	232	2.04	57.52	5.91	96.0	386,756	374,513	4.92	5.08	96.2	3.16
Year 2019												
January	5,447	192	2.08	59.13	5.93	73.8	406,718	394,290	4.19	4.32	90.4	2.93
February	4,486	155	2.27	65.75	5.78	69.4	379,182	364,891	3.79	3.94	89.0	2.82
March	3,725	130	2.43	69.63	6.15	66.9	386,643	374,985	3.66	3.77	89.5	2.81
April	3,159	111	2.71	76.93	5.65	101.5	359,064	348,045	3.09	3.18	87.9	2.54
May	4,631	162	2.24	63.78	5.41	73.8	422,966	410,771	2.94	3.03	90.7	2.49
June	3,740	130	2.18	62.61	5.15	85.7	492,404	477,327	2.76	2.84	88.2	2.44
July	5,723	199	2.01	57.76	5.22	86.8	592,859	573,479	2.65	2.74	84.6	2.38
August	6,693	235	1.72	48.82	5.15	115.7	604,226	584,158	2.55	2.64	84.4	2.31
Sept	3,034	105	1.68	48.71	5.58	56.6	519,620	503,066	2.77	2.86	85.9	2.40
Year to Date												
2017	67,855	2,420	2.08	58.41	5.52	115.1	3,660,179	3,542,114	3.61	3.73	96.9	2.68
2018	64,731	2,288	2.64	74.73	5.70	106.2	4,311,858	4,176,197	3.53	3.65	96.1	2.76
2019	40,639	1,420	2.11	60.39	5.53	79.9	4,163,682	4,031,011	3.08	3.18	87.4	2.55
Rolling 12 Months Ending in September												
2018	87,357	3,092	2.57	72.47	5.69	110.6	5,446,062	5,274,910	3.55	3.67	96.2	2.74
2019	59,119	2,072	2.16	61.51	5.63	87.3	5,405,382	5,234,272	3.34	3.45	89.3	2.65

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - September 2019

	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												
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
2018	2,849,062	152,015	1.89	35.41	1.70	94.2	47,699	8,022	14.52	86.39	0.44	81.7
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	250,209	13,549	1.99	36.82	1.60	79.9	19,101	3,180	13.71	82.73	0.46	63.7
February	200,760	10,859	1.93	35.69	1.58	93.0	3,249	550	13.53	79.99	0.43	195.1
March	229,355	11,974	1.84	35.33	1.83	99.4	2,273	388	14.17	82.79	0.43	107.3
April	202,887	10,815	1.88	35.20	1.61	107.5	1,427	242	14.45	84.93	0.44	61.3
May	223,521	11,725	1.87	35.68	1.78	98.4	2,731	459	14.46	86.28	0.46	95.4
June	227,121	12,009	1.84	34.83	1.84	89.2	2,614	444	15.89	93.43	0.40	92.9
July	235,760	12,666	1.87	34.83	1.73	82.1	1,775	301	16.08	94.43	0.45	64.8
August	260,087	13,942	1.86	34.73	1.68	88.4	1,864	315	15.92	93.84	0.42	59.8
Sept	235,579	12,761	1.82	33.63	1.56	94.5	2,082	351	15.17	89.90	0.39	82.5
October	274,139	14,529	1.89	35.60	1.72	113.8	3,039	517	15.83	92.93	0.41	127.4
November	248,768	13,265	1.92	35.95	1.73	97.0	3,328	566	15.95	93.64	0.42	119.9
December	260,878	13,920	1.94	36.42	1.68	99.1	4,215	709	14.20	84.15	0.46	132.8
Year 2019												
January	255,058	13,482	1.90	36.07	1.76	93.2	2,359	393	11.93	71.58	0.50	49.8
February	205,832	10,934	1.83	34.49	1.67	94.5	1,879	314	13.63	81.50	0.46	86.2
March	222,160	11,549	1.88	36.18	1.88	94.0	1,239	210	14.88	87.69	0.54	61.1
April	212,491	10,991	1.84	35.58	1.89	123.7	1,373	233	15.69	92.33	0.51	63.5
May	216,008	11,203	1.83	35.24	1.92	114.8	1,581	270	15.62	91.40	0.49	69.6
June	209,895	11,090	1.76	33.36	1.83	103.4	1,476	250	15.09	89.05	0.48	67.8
July	208,969	11,154	1.79	33.51	1.69	81.3	1,384	236	15.49	90.86	0.48	48.3
August	227,149	11,923	1.78	33.87	1.68	93.4	1,160	199	16.40	95.66	0.49	50.1
Sept	206,975	11,060	1.75	32.81	1.58	92.6	1,301	222	13.76	80.79	0.57	62.1
Year to Date												
2017	2,313,307	125,278	1.86	34.40	1.64	94.5	15,617	2,662	11.90	69.84	0.45	79.1
2018	2,065,278	110,301	1.88	35.19	1.69	91.3	37,117	6,230	14.31	85.38	0.44	74.1
2019	1,964,536	103,386	1.82	34.61	1.77	97.4	13,751	2,328	14.48	85.54	0.50	60.2
Rolling 12 Months Ending in September												
2018	2,808,186	150,590	1.86	34.74	1.68	90.7	46,205	7,758	14.21	84.76	0.45	72.3
2019	2,748,320	145,100	1.85	35.00	1.75	99.0	24,334	4,120	14.80	87.33	0.47	78.1

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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, 2009 - September 2019 (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												
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
2018	0	0	--	--	--	0.0	4,889,212	4,727,692	3.40	3.52	94.7	2.84
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	343,076	331,643	5.21	5.39	93.1	3.99
February	0	0	--	--	--	0.0	312,835	302,657	3.38	3.49	93.8	2.80
March	0	0	--	--	--	0.0	346,290	334,497	2.87	2.97	93.7	2.46
April	0	0	--	--	--	0.0	319,774	309,352	2.96	3.06	94.2	2.51
May	0	0	--	--	--	0.0	377,388	365,397	2.79	2.89	94.9	2.46
June	0	0	--	--	--	0.0	422,237	408,330	2.89	2.98	95.3	2.53
July	0	0	--	--	--	0.0	570,783	552,360	3.21	3.32	95.3	2.79
August	0	0	--	--	--	0.0	565,773	547,533	3.22	3.33	95.1	2.76
Sept	0	0	--	--	--	0.0	489,149	472,958	2.90	3.00	95.4	2.54
October	0	0	--	--	--	0.0	419,722	405,657	3.20	3.31	94.9	2.68
November	0	0	--	--	--	0.0	355,192	343,013	4.12	4.27	94.2	3.19
December	0	0	--	--	--	0.0	366,993	354,295	4.49	4.65	95.0	3.39
Year 2019												
January	0	0	--	--	--	0.0	381,402	368,347	3.83	3.97	91.0	3.01
February	0	0	--	--	--	0.0	342,971	331,583	3.47	3.60	90.5	2.83
March	0	0	--	--	--	0.0	352,850	341,038	3.25	3.37	90.0	2.70
April	0	0	--	--	--	0.0	312,139	302,155	2.63	2.72	88.9	2.31
May	0	0	--	--	--	0.0	351,823	340,587	2.51	2.60	90.0	2.26
June	0	0	--	--	--	0.0	416,432	403,183	2.33	2.41	89.2	2.15
July	0	0	--	--	--	0.0	540,331	522,062	2.37	2.46	87.7	2.21
August	0	0	--	--	--	0.0	545,846	526,699	2.23	2.31	88.4	2.10
Sept	0	0	--	--	--	0.0	468,552	452,716	2.36	2.44	89.0	2.17
Year to Date												
2017	0	0	--	--	--	0.0	3,297,934	3,188,027	3.08	3.18	94.1	2.53
2018	0	0	--	--	--	0.0	3,747,305	3,624,728	3.24	3.35	94.6	2.76
2019	0	0	--	--	--	0.0	3,712,346	3,588,371	2.72	2.82	89.3	2.40
Rolling 12 Months Ending in September												
2018	0	0	--	--	--	0.0	4,795,527	4,638,274	3.21	3.31	94.4	2.71
2019	0	0	--	--	--	0.0	4,854,253	4,691,335	2.99	3.10	90.5	2.57

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.

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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 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2009 - September 2019

	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												
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
2018	290	13	2.94	66.52	3.04	2.2	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	5.5	0	0	--	--	--	0.0
February	31	1	2.92	66.05	3.19	2.3	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	5.5	0	0	--	--	--	0.0
November	62	3	2.94	66.44	2.99	5.8	0	0	--	--	--	0.0
December	46	2	2.97	66.83	3.05	4.4	0	0	--	--	--	0.0
Year 2019												
January	27	1	2.90	65.89	3.00	2.1	0	0	--	--	--	0.0
February	37	2	2.90	65.51	2.95	3.1	0	0	--	--	--	0.0
March	48	2	2.90	65.86	2.94	3.9	0	0	--	--	--	0.0
April	2	0	2.90	65.28	2.90	0.3	0	0	--	--	--	0.0
May	0	0	--	--	--	0.0	0	0	--	--	--	0.0
June	2	0	2.90	66.38	3.02	0.4	0	0	--	--	--	0.0
July	1	0	2.97	67.69	2.94	0.1	0	0	--	--	--	0.0
August	0	0	--	--	--	0.0	0	0	--	--	--	0.0
Sept	0	0	--	--	--	0.0	0	0	--	--	--	0.0
Year to Date												
2017	411	18	2.77	63.20	2.99	4.0	0	0	--	--	--	0.0
2018	130	6	2.92	66.44	3.13	1.3	0	0	--	--	--	0.0
2019	119	5	2.90	65.77	2.96	1.3	0	0	--	--	--	0.0
Rolling 12 Months Ending in September												
2018	267	12	2.85	65.01	3.06	2.0	0	0	--	--	--	0.0
2019	278	12	2.93	66.24	2.96	2.3	0	0	--	--	--	0.0

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - September 2019 (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												
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
2018	0	0	--	--	--	0.0	9,090	8,823	3.49	3.59	6.6	3.47
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	7.1	3.56
February	0	0	--	--	--	0.0	709	688	3.72	3.84	6.5	3.69
March	0	0	--	--	--	0.0	768	746	3.59	3.69	6.8	3.58
April	0	0	--	--	--	0.0	732	713	3.49	3.58	7.3	3.49
May	0	0	--	--	--	0.0	776	758	3.47	3.55	7.4	3.47
June	0	0	--	--	--	0.0	670	650	3.57	3.67	5.8	3.57
July	0	0	--	--	--	0.0	790	760	3.39	3.52	5.8	3.39
August	0	0	--	--	--	0.0	786	764	3.42	3.52	5.8	3.42
Sept	0	0	--	--	--	0.0	744	723	3.38	3.48	6.3	3.38
October	0	0	--	--	--	0.0	792	770	3.36	3.45	7.2	3.33
November	0	0	--	--	--	0.0	723	701	3.41	3.52	6.6	3.37
December	0	0	--	--	--	0.0	756	732	3.41	3.52	6.6	3.39
Year 2019												
January	0	0	--	--	--	0.0	778	751	3.40	3.52	6.2	3.38
February	0	0	--	--	--	0.0	772	745	3.37	3.50	6.7	3.35
March	0	0	--	--	--	0.0	839	812	3.36	3.47	7.2	3.33
April	0	0	--	--	--	0.0	775	748	3.30	3.41	7.3	3.29
May	0	0	--	--	--	0.0	811	782	3.26	3.38	7.7	3.26
June	0	0	--	--	--	0.0	807	776	3.23	3.36	7.3	3.22
July	0	0	--	--	--	0.0	721	701	3.17	3.26	5.9	3.17
August	0	0	--	--	--	0.0	838	808	3.13	3.25	6.8	3.13
Sept	0	0	--	--	--	0.0	747	717	3.15	3.28	6.5	3.15
Year to Date												
2017	0	0	--	--	--	0.0	5,753	5,568	3.85	3.97	4.8	3.78
2018	0	0	--	--	--	0.0	6,819	6,621	3.52	3.62	6.5	3.51
2019	0	0	--	--	--	0.0	7,088	6,838	3.26	3.38	6.8	3.26
Rolling 12 Months Ending in September												
2018	0	0	--	--	--	0.0	8,908	8,645	3.57	3.68	6.1	3.55
2019	0	0	--	--	--	0.0	9,358	9,041	3.30	3.41	6.8	3.28

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Notes:
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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 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - September 2019

	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												
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
2018	170,730	8,224	2.47	51.38	1.30	67.2	2,319	372	13.46	83.97	1.35	15.9
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	15,751	758	2.46	51.13	1.18	61.0	408	65	12.64	79.32	1.32	13.7
February	14,274	683	2.48	51.82	1.32	60.9	187	30	11.38	71.32	1.20	15.9
March	15,612	747	2.51	52.40	1.31	67.4	234	38	12.59	78.52	1.32	23.5
April	13,476	643	2.52	52.79	1.35	67.0	153	24	13.24	83.77	1.23	17.6
May	14,544	704	2.51	51.92	1.24	71.9	149	24	14.33	87.27	1.47	16.1
June	14,489	697	2.49	51.65	1.28	71.9	107	17	13.54	84.39	1.48	10.5
July	14,900	724	2.41	49.69	1.32	75.3	138	22	14.64	89.87	1.42	13.2
August	13,930	668	2.48	51.76	1.31	70.4	135	22	14.45	89.97	1.39	15.5
Sept	12,593	600	2.53	53.10	1.35	63.7	155	25	14.38	89.73	1.12	19.7
October	12,410	598	2.47	51.18	1.38	67.1	180	29	14.50	91.01	1.37	14.9
November	14,259	701	2.50	50.92	1.15	69.1	206	33	14.01	87.74	1.58	15.0
December	14,492	701	2.35	48.52	1.47	64.1	268	43	13.75	85.58	1.46	19.7
Year 2019												
January	12,678	629	2.49	50.14	1.13	57.5	154	25	12.98	80.23	1.24	8.0
February	12,842	617	2.61	54.43	1.16	61.6	199	33	13.77	82.99	1.45	19.3
March	13,424	629	2.68	57.20	1.49	66.7	126	21	13.43	82.27	1.63	13.2
April	12,978	629	2.63	54.29	1.15	68.6	223	36	12.89	79.74	1.54	21.8
May	12,720	623	2.51	51.21	0.97	68.2	92	15	14.12	86.68	1.48	9.4
June	11,705	567	2.49	51.38	1.22	64.4	131	21	13.04	79.96	1.55	14.7
July	11,385	551	2.45	50.57	1.32	63.6	80	13	11.99	74.33	1.41	11.8
August	10,876	530	2.39	49.14	1.23	60.0	112	18	12.56	77.49	1.66	12.4
Sept	11,131	539	2.48	51.28	1.24	63.9	154	25	13.15	80.17	1.58	18.0
Year to Date												
2017	145,207	6,919	2.50	52.51	1.28	71.6	1,239	199	11.07	69.08	1.28	15.9
2018	129,569	6,224	2.49	51.77	1.29	67.4	1,665	267	13.23	82.49	1.30	15.6
2019	109,739	5,314	2.53	52.28	1.21	63.7	1,271	207	13.14	80.62	1.51	13.8
Rolling 12 Months Ending in September												
2018	176,999	8,484	2.48	51.73	1.37	67.6	2,276	366	12.73	79.27	1.42	15.1
2019	150,900	7,314	2.51	51.70	1.24	64.5	1,925	312	13.45	83.01	1.49	14.6

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 2018 and prior years are final. Values for 2019 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 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - September 2019 (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												
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
2018	1,911	71	1.75	47.47	5.74	7.1	792,297	769,790	3.39	3.49	58.6	3.25
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	69,164	67,045	3.59	3.70	58.1	3.42
February	0	0	--	--	--	0.0	60,810	58,990	3.41	3.52	58.6	3.26
March	0	0	--	--	--	0.0	61,164	59,423	2.85	2.94	56.5	2.81
April	0	0	--	--	--	0.0	61,184	59,457	2.92	3.01	58.4	2.87
May	0	0	--	--	--	0.0	63,410	61,557	2.99	3.08	58.8	2.92
June	0	0	--	--	--	0.0	65,879	64,032	3.14	3.23	59.8	3.03
July	160	6	1.70	45.10	5.83	6.8	68,296	66,523	3.03	3.11	57.4	2.93
August	260	10	1.78	46.99	5.55	12.2	69,386	67,341	3.12	3.21	58.1	3.03
Sept	664	25	1.78	47.54	6.02	31.0	67,825	66,022	3.12	3.20	60.1	3.04
October	477	17	1.76	48.96	5.45	20.6	66,419	64,687	3.75	3.85	59.0	3.56
November	172	6	1.69	46.62	5.85	8.4	71,469	69,556	3.97	4.08	61.6	3.75
December	178	6	1.70	47.00	5.53	7.3	67,289	65,157	4.70	4.85	56.6	4.31
Year 2019												
January	0	0	--	--	--	0.0	72,247	70,154	3.77	3.88	58.2	3.59
February	0	0	--	--	--	0.0	63,912	61,868	3.45	3.56	58.1	3.34
March	0	0	--	--	--	0.0	65,584	63,706	3.13	3.22	57.2	3.07
April	0	0	--	--	--	0.0	63,841	62,075	2.85	2.93	58.4	2.84
May	0	0	--	--	--	0.0	65,305	63,475	2.75	2.83	58.1	2.73
June	0	0	--	--	--	0.0	63,184	61,402	2.63	2.71	56.8	2.63
July	43	2	1.71	46.96	5.81	1.6	67,946	65,986	2.49	2.57	57.9	2.49
August	615	23	1.75	46.99	5.75	29.3	68,127	66,022	2.38	2.45	57.6	2.39
Sept	743	26	1.63	47.00	5.56	26.1	64,141	62,097	2.56	2.65	56.7	2.56
Year to Date												
2017	1,078	39	1.37	38.29	5.82	4.9	601,849	583,254	3.21	3.32	62.4	3.09
2018	1,084	41	1.77	47.05	5.88	5.5	587,120	570,389	3.13	3.23	58.4	3.04
2019	1,401	50	1.68	46.99	5.65	6.8	594,287	576,785	2.90	2.98	57.7	2.86
Rolling 12 Months Ending in September												
2018	2,363	87	1.77	48.04	5.86	8.7	788,706	765,876	3.12	3.21	59.0	3.02
2019	2,227	80	1.70	47.39	5.62	8.2	799,465	776,186	3.22	3.31	58.0	3.12

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Notes:
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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.

- Values for 2018 and prior years are final. Values for 2019 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, September 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	7	4	63.0%	0	0	7	4	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	7	4	63.0%	0	0	7	4	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	944	1,640	-42.0%	0	0	933	1,640	0	0	11	0
New Jersey	16	45	-64.0%	0	0	16	45	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	928	1,595	-42.0%	0	0	917	1,595	0	0	11	0
East North Central	9,518	10,800	-12.0%	5,424	6,400	3,935	4,218	0	0	159	183
Illinois	2,559	3,548	-28.0%	336	657	2,079	2,708	0	0	144	183
Indiana	1,983	2,530	-22.0%	1,800	2,363	183	167	0	0	0	0
Michigan	1,725	1,713	0.7%	1,712	1,681	13	32	0	0	0	0
Ohio	1,862	1,485	25.0%	202	176	1,660	1,310	0	0	0	0
Wisconsin	1,388	1,523	-8.8%	1,374	1,523	0	0	0	0	14	0
West North Central	9,419	9,933	-5.2%	9,187	9,718	0	0	0	0	232	214
Iowa	1,514	1,307	16.0%	1,352	1,155	0	0	0	0	163	151
Kansas	947	1,262	-25.0%	947	1,262	0	0	0	0	0	0
Minnesota	1,100	1,211	-9.2%	1,100	1,211	0	0	0	0	0	0
Missouri	2,981	2,887	3.3%	2,981	2,887	0	0	0	0	0	0
Nebraska	1,050	1,069	-1.8%	980	1,006	0	0	0	0	69	63
North Dakota	1,630	2,112	-23.0%	1,630	2,112	0	0	0	0	0	0
South Dakota	197	85	131.0%	197	85	0	0	0	0	0	0
South Atlantic	6,341	6,609	-4.1%	5,886	5,636	395	897	0	0	61	77
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	689	1,029	-33.0%	679	1,029	0	0	0	0	10	0
Georgia	1,549	1,471	5.3%	1,538	1,447	0	0	0	0	11	24
Maryland	232	415	-44.0%	0	0	232	406	0	0	0	8
North Carolina	1,042	1,074	-3.1%	1,021	1,049	2	6	0	0	19	19
South Carolina	577	442	31.0%	577	442	0	0	0	0	0	0
Virginia	135	285	-53.0%	96	203	19	56	0	0	21	26
West Virginia	2,117	1,893	12.0%	1,975	1,465	142	428	0	0	0	0
East South Central	4,961	4,384	13.0%	4,782	4,239	134	79	0	0	46	66
Alabama	1,423	1,114	28.0%	1,423	1,114	0	0	0	0	0	0
Kentucky	2,607	2,637	-1.1%	2,607	2,637	0	0	0	0	0	0
Mississippi	314	229	37.0%	180	150	134	79	0	0	0	0
Tennessee	618	404	53.0%	572	338	0	0	0	0	46	66
West South Central	8,082	9,253	-13.0%	3,909	4,599	4,153	4,649	0	0	20	5
Arkansas	1,358	1,546	-12.0%	1,189	1,294	164	246	0	0	5	5
Louisiana	473	799	-41.0%	342	480	131	319	0	0	0	0
Oklahoma	567	852	-33.0%	476	737	76	116	0	0	16	0
Texas	5,684	6,056	-6.1%	1,903	2,088	3,781	3,968	0	0	0	0
Mountain	6,529	6,602	-1.1%	5,510	5,760	1,019	842	0	0	0	0
Arizona	861	1,462	-41.0%	861	1,462	0	0	0	0	0	0
Colorado	1,121	1,110	1.0%	1,121	1,110	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	914	739	24.0%	22	21	892	718	0	0	0	0
Nevada	141	144	-1.9%	95	98	46	46	0	0	0	0
New Mexico	781	632	24.0%	781	632	0	0	0	0	0	0
Utah	972	738	32.0%	936	705	36	33	0	0	0	0
Wyoming	1,738	1,777	-2.2%	1,693	1,732	46	45	0	0	0	0
Pacific Contiguous	558	563	-1.0%	123	137	424	371	0	0	11	55
California	11	55	-80.0%	0	0	0	0	0	0	11	55
Oregon	123	137	-10.0%	123	137	0	0	0	0	0	0
Washington	424	371	14.0%	0	0	424	371	0	0	0	0
Pacific Noncontiguous	84	102	-17.0%	24	41	60	61	0	0	0	0
Alaska	24	41	-42.0%	24	41	0	0	0	0	0	0
Hawaii	60	61	-0.7%	0	0	60	61	0	0	0	0
U.S. Total	46,443	49,892	-6.9%	34,843	36,530	11,060	12,761	0	0	539	600

Displayed values of zero may represent small values that round to zero.
NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
See Glossary for definitions. Values for 2018 are final. Values for 2019 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) September 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	98	212	-54.0%	49	45	49	167	0	0	0	0
Connecticut	0	105	-100.0%	0	0	0	105	0	0	0	0
Maine	49	46	6.4%	0	0	49	46	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	49	45	7.6%	49	45	0	0	0	0	0	0
Rhode Island	0	15	-100.0%	0	0	0	15	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	13,640	16,073	-15.0%	0	0	13,586	15,999	0	0	54	74
New Jersey	416	426	-2.4%	0	0	416	426	0	0	0	0
New York	69	271	-74.0%	0	0	69	262	0	0	0	9
Pennsylvania	13,155	15,377	-14.0%	0	0	13,101	15,311	0	0	54	66
East North Central	93,151	99,846	-6.7%	54,282	59,095	37,492	39,108	0	0	1,377	1,643
Illinois	26,909	31,484	-15.0%	5,293	5,826	20,294	24,072	0	0	1,322	1,586
Indiana	21,619	22,285	-3.0%	20,093	20,770	1,526	1,515	0	0	0	0
Michigan	15,821	15,725	0.6%	15,681	15,530	138	192	0	0	1	4
Ohio	17,414	16,484	5.6%	1,880	3,154	15,534	13,330	0	0	0	0
Wisconsin	11,388	13,869	-18.0%	11,334	13,816	0	0	0	0	55	53
West North Central	78,531	85,236	-7.9%	76,234	82,808	0	0	5	6	2,291	2,422
Iowa	11,946	10,859	10.0%	10,293	9,158	0	0	0	0	1,652	1,702
Kansas	7,955	9,101	-13.0%	7,955	9,101	0	0	0	0	0	0
Minnesota	9,279	9,014	2.9%	9,211	8,895	0	0	0	0	68	119
Missouri	22,294	26,826	-17.0%	22,289	26,821	0	0	5	6	0	0
Nebraska	9,556	9,892	-3.4%	8,985	9,290	0	0	0	0	571	601
North Dakota	16,201	18,317	-12.0%	16,201	18,317	0	0	0	0	0	0
South Dakota	1,301	1,226	6.1%	1,301	1,226	0	0	0	0	0	0
South Atlantic	58,653	58,824	-0.3%	52,459	49,704	5,606	8,437	0	0	589	684
Delaware	71	0	--	0	0	71	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,808	8,610	-21.0%	6,766	8,551	0	0	0	0	43	59
Georgia	12,002	10,780	11.0%	11,909	10,672	0	0	0	0	93	107
Maryland	2,106	3,323	-37.0%	0	0	2,013	3,185	0	0	92	138
North Carolina	9,739	8,799	11.0%	9,547	8,517	38	93	0	0	154	188
South Carolina	6,094	4,278	42.0%	6,079	4,267	0	0	0	0	15	11
Virginia	2,131	3,697	-42.0%	1,704	2,982	235	535	0	0	191	180
West Virginia	19,702	19,338	1.9%	16,454	14,714	3,248	4,623	0	0	0	0
East South Central	42,437	42,678	-0.6%	39,761	39,818	2,198	2,181	0	0	478	679
Alabama	10,938	11,480	-4.7%	10,938	11,480	0	0	0	0	0	0
Kentucky	23,111	23,485	-1.6%	23,111	23,485	0	0	0	0	0	0
Mississippi	3,306	3,368	-1.8%	1,108	1,187	2,198	2,181	0	0	0	0
Tennessee	5,082	4,344	17.0%	4,604	3,666	0	0	0	0	478	679
West South Central	69,646	73,046	-4.7%	36,461	37,557	33,033	35,247	0	0	152	242
Arkansas	10,907	12,133	-10.0%	9,286	10,079	1,575	1,992	0	0	47	62
Louisiana	4,720	5,351	-12.0%	3,692	3,375	1,028	1,976	0	0	0	0
Oklahoma	4,094	7,029	-42.0%	3,647	6,059	341	790	0	0	106	180
Texas	49,924	48,533	2.9%	19,836	18,044	30,089	30,489	0	0	0	0
Mountain	59,146	60,823	-2.8%	51,583	54,095	7,562	6,728	0	0	0	0
Arizona	10,665	12,448	-14.0%	10,665	12,448	0	0	0	0	0	0
Colorado	10,470	10,737	-2.5%	10,470	10,737	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	6,617	5,778	15.0%	209	163	6,408	5,615	0	0	0	0
Nevada	1,390	796	74.0%	938	378	452	418	0	0	0	0
New Mexico	6,429	5,207	23.0%	6,429	5,207	0	0	0	0	0	0
Utah	8,376	8,379	0.0%	8,068	8,071	309	308	0	0	0	0
Wyoming	15,199	17,479	-13.0%	14,805	17,092	394	387	0	0	0	0
Pacific Contiguous	4,915	2,627	87.0%	1,166	261	3,378	1,886	0	0	371	480
California	371	480	-23.0%	0	0	0	0	0	0	371	480
Oregon	1,166	261	347.0%	1,166	261	0	0	0	0	0	0
Washington	3,378	1,886	79.0%	0	0	3,378	1,886	0	0	0	0
Pacific Noncontiguous	726	718	1.1%	243	170	483	548	0	0	0	0
Alaska	243	170	43.0%	243	170	0	0	0	0	0	0
Hawaii	483	548	-12.0%	0	0	483	548	0	0	0	0
U.S. Total	420,943	440,083	-4.3%	312,238	323,552	103,386	110,301	5	6	5,314	6,224

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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, September 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	9	5	89.0%	0	0	9	5	0	0	0	0
Connecticut	0	3	-100.0%	0	0	0	3	0	0	0	0
Maine	9	2	455.0%	0	0	9	2	0	0	0	0
Massachusetts	0	0	-70.0%	0	0	0	0	0	0	0	0
New Hampshire	0	0	118.0%	0	0	0	0	0	0	0	0
Rhode Island	0	0	-100.0%	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	123	123	-0.6%	108	2	8	114	0	0	6	7
New Jersey	0	0	-100.0%	0	0	0	0	0	0	0	0
New York	109	47	130.0%	108	2	1	44	0	0	0	1
Pennsylvania	13	76	-82.0%	0	0	7	69	0	0	6	6
East North Central	62	96	-35.0%	47	43	12	51	0	0	3	3
Illinois	4	7	-45.0%	1	0	3	7	0	0	0	0
Indiana	11	23	-53.0%	11	23	0	0	0	0	0	0
Michigan	10	12	-21.0%	8	11	0	0	0	0	2	1
Ohio	35	49	-28.0%	26	4	8	43	0	0	1	2
Wisconsin	2	4	-48.0%	2	4	0	0	0	0	0	0
West North Central	31	40	-24.0%	31	40	0	0	0	0	0	0
Iowa	7	7	1.3%	7	7	0	0	0	0	0	0
Kansas	11	6	107.0%	11	6	0	0	0	0	0	0
Minnesota	3	3	-4.1%	3	3	0	0	0	0	0	0
Missouri	4	14	-71.0%	4	14	0	0	0	0	0	0
Nebraska	0	1	-100.0%	0	1	0	0	0	0	0	0
North Dakota	5	9	-44.0%	5	9	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	228	125	83.0%	191	88	22	22	0	0	15	15
Delaware	0	9	-100.0%	0	0	0	9	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	59	34	76.0%	55	33	0	0	0	0	4	1
Georgia	15	19	-19.0%	9	13	0	2	0	0	7	4
Maryland	22	9	160.0%	0	0	22	9	0	0	0	0
North Carolina	14	26	-44.0%	10	21	0	1	0	0	4	4
South Carolina	2	19	-88.0%	2	15	0	0	0	0	0	4
Virginia	100	8	NM	100	6	0	1	0	0	0	2
West Virginia	15	2	825.0%	15	2	0	0	0	0	0	0
East South Central	13	138	-91.0%	12	138	0	0	0	0	1	0
Alabama	2	4	-58.0%	2	4	0	0	0	0	0	0
Kentucky	3	18	-82.0%	3	18	0	0	0	0	0	0
Mississippi	1	12	-88.0%	1	12	0	0	0	0	0	0
Tennessee	7	105	-93.0%	6	105	0	0	0	0	1	0
West South Central	19	12	56.0%	18	10	1	1	0	0	0	0
Arkansas	5	8	-40.0%	5	8	0	0	0	0	0	0
Louisiana	0	1	-100.0%	0	1	0	0	0	0	0	0
Oklahoma	10	0	--	10	0	0	0	0	0	0	0
Texas	4	3	42.0%	4	1	1	1	0	0	0	0
Mountain	19	24	-22.0%	19	24	0	1	0	0	0	0
Arizona	3	10	-67.0%	3	10	0	0	0	0	0	0
Colorado	2	0	--	2	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2	3	-34.0%	2	2	0	0	0	0	0	0
New Mexico	4	7	-49.0%	4	7	0	0	0	0	0	0
Utah	1	1	-13.0%	1	1	0	0	0	0	0	0
Wyoming	7	3	146.0%	7	3	0	0	0	0	0	0
Pacific Contiguous	1	0	--	0	0	1	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	1	0	--	0	0	1	0	0	0	0	0
Pacific Noncontiguous	840	752	12.0%	670	594	169	158	0	0	0	0
Alaska	1	1	43.0%	1	1	0	0	0	0	0	0
Hawaii	838	751	12.0%	669	593	169	158	0	0	0	0
U.S. Total	1,344	1,316	2.1%	1,097	940	222	351	0	0	25	25

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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) September 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	202	1,451	-86.0%	9	129	194	1,322	0	0	0	0
Connecticut	6	382	-98.0%	0	0	6	382	0	0	0	0
Maine	137	256	-46.0%	0	0	137	256	0	0	0	0
Massachusetts	51	465	-89.0%	0	25	51	440	0	0	0	0
New Hampshire	9	184	-95.0%	9	104	0	80	0	0	0	0
Rhode Island	0	165	-100.0%	0	0	0	165	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	788	3,283	-76.0%	403	943	332	2,268	0	0	53	72
New Jersey	23	261	-91.0%	0	0	23	261	0	0	0	0
New York	491	2,186	-78.0%	403	943	88	1,227	0	0	0	17
Pennsylvania	274	835	-67.0%	0	0	222	780	0	0	53	55
East North Central	665	655	1.5%	403	372	235	261	0	0	27	22
Illinois	62	69	-9.5%	3	3	59	66	0	0	0	0
Indiana	161	154	4.7%	161	153	0	1	0	0	0	0
Michigan	111	115	-3.9%	100	109	0	0	0	0	11	6
Ohio	300	249	20.0%	115	49	168	184	0	0	16	16
Wisconsin	32	68	-54.0%	24	58	8	11	0	0	0	0
West North Central	362	420	-14.0%	362	418	0	2	0	0	0	0
Iowa	87	91	-3.7%	87	91	0	0	0	0	0	0
Kansas	77	76	1.1%	77	76	0	0	0	0	0	0
Minnesota	28	30	-4.7%	28	28	0	2	0	0	0	0
Missouri	103	160	-35.0%	103	160	0	0	0	0	0	0
Nebraska	11	8	39.0%	11	8	0	0	0	0	0	0
North Dakota	54	52	4.1%	54	52	0	0	0	0	0	0
South Dakota	2	4	-45.0%	2	4	0	0	0	0	0	0
South Atlantic	1,328	4,272	-69.0%	1,080	3,171	126	931	0	0	123	171
Delaware	4	273	-98.0%	0	0	4	273	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	394	391	0.8%	366	356	0	0	0	0	28	35
Georgia	153	331	-54.0%	91	235	1	59	0	0	61	37
Maryland	108	411	-74.0%	0	0	108	411	0	0	0	0
North Carolina	194	997	-81.0%	176	916	0	42	0	0	19	39
South Carolina	71	509	-86.0%	65	473	0	0	0	0	6	37
Virginia	213	1,153	-82.0%	192	1,003	12	127	0	0	9	23
West Virginia	190	208	-8.3%	190	187	0	20	0	0	0	0
East South Central	216	391	-45.0%	203	330	8	58	0	0	5	3
Alabama	23	116	-81.0%	14	58	8	58	0	0	0	0
Kentucky	95	98	-3.0%	95	98	0	0	0	0	0	0
Mississippi	19	25	-21.0%	19	25	0	0	0	0	0	0
Tennessee	78	151	-48.0%	73	149	0	0	0	0	5	3
West South Central	165	150	9.8%	126	118	39	32	0	0	0	0
Arkansas	47	42	12.0%	30	31	17	11	0	0	0	0
Louisiana	9	22	-56.0%	9	22	0	0	0	0	0	0
Oklahoma	33	22	51.0%	33	22	0	0	0	0	0	0
Texas	76	65	16.0%	53	44	22	21	0	0	0	0
Mountain	285	221	29.0%	265	195	20	27	0	0	0	0
Arizona	97	71	36.0%	97	71	0	0	0	0	0	0
Colorado	4	5	-25.0%	4	5	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	15	21	-28.0%	0	0	15	21	0	0	0	0
Nevada	21	16	31.0%	18	12	3	4	0	0	0	0
New Mexico	35	22	55.0%	35	22	0	0	0	0	0	0
Utah	62	47	32.0%	60	45	2	1	0	0	0	0
Wyoming	51	38	34.0%	51	38	0	0	0	0	0	0
Pacific Contiguous	18	10	86.0%	6	0	12	10	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	18	10	86.0%	6	0	12	10	0	0	0	0
Pacific Noncontiguous	6,567	6,480	1.3%	5,206	5,159	1,361	1,320	0	0	0	0
Alaska	17	9	88.0%	17	9	0	0	0	0	0	0
Hawaii	6,549	6,470	1.2%	5,189	5,150	1,361	1,320	0	0	0	0
U.S. Total	10,597	17,332	-39.0%	8,062	10,835	2,328	6,230	0	0	207	267

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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, September 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
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	14	17	-16.0%	14	17	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	11	11	-0.9%	11	11	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	5	-48.0%	3	5	0	0	0	0	0	0
West North Central	26	25	3.3%	0	0	0	0	0	0	26	25
Iowa	26	25	3.3%	0	0	0	0	0	0	26	25
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	75	-51.0%	37	75	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	37	75	-51.0%	37	75	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	54	171	-68.0%	54	171	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	54	171	-68.0%	54	171	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	131	288	-55.0%	105	263	0	0	0	0	26	25

Displayed values of zero may represent small values that round to zero.
NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
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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) September 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 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	251	438	-43.0%	251	438	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	219	392	-44.0%	219	392	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	32	46	-30.0%	32	46	0	0	0	0	0	0
West North Central	50	41	23.0%	0	0	0	0	0	0	50	41
Iowa	50	41	23.0%	0	0	0	0	0	0	50	41
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	340	695	-51.0%	340	695	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	340	695	-51.0%	340	695	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	829	1,155	-28.0%	829	1,155	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	829	1,155	-28.0%	829	1,155	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	1,470	2,329	-37.0%	1,420	2,288	0	0	0	0	50	41

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

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

Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State, September 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	24,221	34,699	-30.0%	19	156	24,201	34,543	0	0	0	0
Connecticut	11,067	11,985	-7.7%	0	0	11,067	11,985	0	0	0	0
Maine	662	1,181	-44.0%	0	0	662	1,181	0	0	0	0
Massachusetts	7,351	12,368	-41.0%	7	109	7,344	12,259	0	0	0	0
New Hampshire	2,267	2,250	0.7%	12	47	2,255	2,203	0	0	0	0
Rhode Island	2,874	6,916	-58.0%	0	0	2,874	6,916	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	111,118	118,598	-6.3%	6,087	7,623	104,300	110,116	0	0	730	859
New Jersey	23,075	28,718	-20.0%	0	0	23,075	28,718	0	0	0	0
New York	28,259	38,181	-26.0%	6,087	7,623	21,636	29,923	0	0	536	636
Pennsylvania	59,783	51,699	16.0%	0	0	59,589	51,475	0	0	195	224
East North Central	83,209	84,543	-1.6%	28,210	27,300	53,465	55,763	533	558	1,001	923
Illinois	7,547	14,332	-47.0%	579	1,017	6,968	13,312	0	0	0	3
Indiana	17,275	14,336	20.0%	7,655	5,317	9,621	9,020	0	0	0	0
Michigan	19,814	18,938	4.6%	6,660	6,327	12,207	11,715	533	558	414	338
Ohio	27,904	25,957	7.5%	4,153	5,306	23,412	20,235	0	0	339	417
Wisconsin	10,669	10,979	-2.8%	9,163	9,334	1,258	1,481	0	0	248	164
West North Central	16,808	19,961	-16.0%	14,617	17,673	1,613	1,604	184	165	395	519
Iowa	5,749	6,701	-14.0%	5,371	6,211	0	0	0	0	378	489
Kansas	2,230	1,497	49.0%	2,230	1,497	0	0	0	0	0	0
Minnesota	3,708	5,535	-33.0%	3,598	4,869	92	635	1	2	17	30
Missouri	4,636	4,505	2.9%	2,932	3,373	1,521	969	183	163	0	0
Nebraska	301	422	-29.0%	301	422	0	0	0	0	0	0
North Dakota	185	910	-80.0%	185	910	0	0	0	0	0	0
South Dakota	0	391	-100.0%	0	391	0	0	0	0	0	0
South Atlantic	250,528	267,582	-6.4%	208,405	212,377	39,442	52,313	0	0	2,681	2,892
Delaware	2,084	3,544	-41.0%	0	0	2,084	3,544	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	124,490	126,508	-1.6%	119,127	121,076	4,972	5,058	0	0	391	374
Georgia	34,354	36,747	-6.5%	25,924	26,809	7,800	9,174	0	0	631	765
Maryland	7,480	10,992	-32.0%	840	2,824	6,640	7,880	0	0	0	289
North Carolina	26,656	30,440	-12.0%	21,616	24,473	4,806	5,766	0	0	234	201
South Carolina	17,192	21,328	-19.0%	16,185	15,916	930	5,320	0	0	78	92
Virginia	35,408	35,780	-1.0%	24,107	21,046	10,591	14,001	0	0	709	732
West Virginia	2,863	2,243	28.0%	606	234	1,619	1,571	0	0	639	438
East South Central	98,432	98,654	-0.2%	68,009	65,807	28,430	31,274	0	0	1,993	1,573
Alabama	41,141	40,757	0.9%	14,944	12,668	26,197	28,089	0	0	0	0
Kentucky	9,782	11,288	-13.0%	9,243	10,317	539	971	0	0	0	0
Mississippi	34,775	33,319	4.4%	33,080	31,105	1,695	2,214	0	0	0	0
Tennessee	12,734	13,290	-4.2%	10,742	11,717	0	0	0	0	1,993	1,573
West South Central	284,914	276,389	3.1%	86,752	89,383	145,528	130,331	0	0	52,633	56,675
Arkansas	11,150	11,178	-0.2%	9,877	10,057	1,138	898	0	0	136	222
Louisiana	48,313	46,754	3.3%	25,692	26,562	4,990	3,195	0	0	17,630	16,997
Oklahoma	31,473	31,161	1.0%	18,848	18,276	12,101	12,331	0	0	525	553
Texas	193,976	187,297	3.6%	32,335	34,488	127,299	113,907	0	0	34,343	38,902
Mountain	76,491	80,546	-5.0%	64,284	65,738	12,164	14,766	0	0	43	42
Arizona	36,060	35,167	2.5%	27,346	26,441	8,714	8,725	0	0	0	0
Colorado	9,546	10,301	-7.3%	8,487	8,137	1,059	2,164	0	0	0	0
Idaho	1,062	2,639	-60.0%	1,062	1,449	0	1,190	0	0	0	0
Montana	247	164	50.0%	247	162	0	2	0	0	0	0
Nevada	16,486	18,683	-12.0%	16,486	18,683	0	0	0	0	0	0
New Mexico	8,185	7,930	3.2%	5,795	5,245	2,390	2,686	0	0	0	0
Utah	4,736	5,534	-14.0%	4,693	5,492	0	0	0	0	43	42
Wyoming	170	128	33.0%	170	128	0	0	0	0	0	0
Pacific Contiguous	72,823	75,677	-3.8%	26,628	30,890	43,573	42,249	0	0	2,622	2,538
California	53,840	50,124	7.4%	17,565	16,137	33,654	31,449	0	0	2,622	2,538
Oregon	11,388	14,397	-21.0%	4,359	7,630	7,029	6,767	0	0	0	0
Washington	7,595	11,156	-32.0%	4,704	7,123	2,890	4,033	0	0	0	0
Pacific Noncontiguous	53	1,270	-96.0%	53	1,270	0	0	0	0	0	0
Alaska	53	1,270	-96.0%	53	1,270	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,018,596	1,057,919	-3.7%	503,066	518,216	452,716	472,958	717	723	62,097	66,022

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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) September 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	228,866	272,605	-16.0%	479	1,225	228,387	271,381	0	0	0	0
Connecticut	102,125	96,225	6.1%	0	0	102,125	96,225	0	0	0	0
Maine	5,503	10,452	-47.0%	0	0	5,503	10,452	0	0	0	0
Massachusetts	77,611	106,444	-27.0%	420	834	77,191	105,610	0	0	0	0
New Hampshire	18,443	16,504	12.0%	59	390	18,384	16,114	0	0	0	0
Rhode Island	25,184	42,980	-41.0%	0	0	25,184	42,980	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	950,773	898,978	5.8%	70,166	74,210	873,260	816,845	0	0	7,347	7,923
New Jersey	204,263	215,311	-5.1%	0	0	204,263	215,311	0	0	0	0
New York	263,346	295,386	-11.0%	70,166	74,210	187,686	215,468	0	0	5,494	5,708
Pennsylvania	483,164	388,282	24.0%	0	0	481,310	386,066	0	0	1,853	2,216
East North Central	747,364	751,877	-0.6%	252,809	273,644	478,989	462,474	5,222	5,047	10,344	10,713
Illinois	66,834	105,640	-37.0%	7,004	8,713	59,814	96,900	0	0	17	27
Indiana	143,725	139,435	3.1%	60,537	70,054	83,188	69,381	0	0	0	0
Michigan	184,222	184,868	-0.3%	52,417	57,755	122,264	117,447	5,222	5,047	4,319	4,619
Ohio	252,954	228,830	11.0%	45,037	54,928	203,809	169,830	0	0	4,108	4,072
Wisconsin	99,628	93,104	7.0%	87,814	82,194	9,914	8,915	0	0	1,900	1,994
West North Central	141,676	182,115	-22.0%	121,824	158,140	14,801	18,556	1,616	1,574	3,435	3,844
Iowa	49,488	51,028	-3.0%	46,131	47,255	0	0	0	0	3,357	3,773
Kansas	15,851	20,166	-21.0%	15,851	20,166	0	0	0	0	0	0
Minnesota	34,219	48,051	-29.0%	33,384	41,096	751	6,877	6	7	78	70
Missouri	37,989	42,122	-9.8%	22,329	28,876	14,050	11,679	1,610	1,567	0	0
Nebraska	2,629	6,805	-61.0%	2,629	6,805	0	0	0	0	0	0
North Dakota	1,500	7,945	-81.0%	1,500	7,945	0	0	0	0	0	0
South Dakota	0	5,997	-100.0%	0	5,997	0	0	0	0	0	0
South Atlantic	2,020,362	2,005,581	0.7%	1,684,908	1,639,194	309,138	339,872	0	0	26,316	26,515
Delaware	20,305	27,386	-26.0%	0	0	20,305	27,386	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	971,740	938,346	3.6%	937,157	897,559	31,134	37,730	0	0	3,449	3,057
Georgia	275,087	294,595	-6.6%	207,872	221,037	61,123	66,915	0	0	6,093	6,644
Maryland	75,345	69,273	8.8%	21,592	16,234	52,601	50,952	0	0	1,151	2,088
North Carolina	224,173	250,147	-10.0%	180,969	214,504	41,239	33,612	0	0	1,965	2,031
South Carolina	136,473	126,530	7.9%	132,606	109,334	3,121	16,530	0	0	745	665
Virginia	302,883	286,220	5.8%	202,485	178,977	92,689	99,847	0	0	7,709	7,396
West Virginia	14,357	13,084	9.7%	2,226	1,550	6,927	6,900	0	0	5,203	4,635
East South Central	744,976	791,275	-5.9%	501,634	541,789	223,662	235,033	0	0	19,680	14,453
Alabama	302,343	310,380	-2.6%	107,244	107,780	195,099	202,600	0	0	0	0
Kentucky	73,930	87,861	-16.0%	70,732	81,661	3,197	6,199	0	0	0	0
Mississippi	266,379	300,353	-11.0%	241,013	274,119	25,366	26,234	0	0	0	0
Tennessee	102,325	92,680	10.0%	82,645	78,228	0	0	0	0	19,680	14,453
West South Central	2,260,248	2,358,471	-4.2%	692,763	782,115	1,078,976	1,091,286	0	0	488,508	485,070
Arkansas	97,978	123,997	-21.0%	85,836	112,336	10,152	9,838	0	0	1,991	1,824
Louisiana	416,538	387,975	7.4%	218,798	205,060	33,588	28,352	0	0	164,151	154,563
Oklahoma	239,642	254,259	-5.7%	147,145	158,692	88,508	92,357	0	0	3,989	3,210
Texas	1,506,089	1,592,240	-5.4%	240,983	306,027	946,729	960,739	0	0	318,378	325,474
Mountain	613,076	559,442	9.6%	521,440	473,117	91,435	85,855	0	0	200	470
Arizona	261,574	205,696	27.0%	199,902	164,277	61,673	41,419	0	0	0	0
Colorado	91,962	90,553	1.6%	79,793	75,970	12,169	14,583	0	0	0	0
Idaho	7,729	13,630	-43.0%	7,729	5,763	0	7,867	0	0	0	0
Montana	2,056	2,014	2.1%	2,056	2,007	0	7	0	0	0	0
Nevada	132,451	143,319	-7.6%	132,451	143,319	0	0	0	0	0	0
New Mexico	67,929	62,797	8.2%	50,347	40,828	17,582	21,968	0	0	0	0
Utah	47,438	40,191	18.0%	47,238	39,721	0	0	0	0	200	470
Wyoming	1,937	1,242	56.0%	1,926	1,232	11	10	0	0	0	0
Pacific Contiguous	495,173	544,887	-9.1%	184,496	220,059	289,724	303,426	0	0	20,953	21,402
California	368,603	404,131	-8.8%	126,707	139,144	220,943	243,585	0	0	20,953	21,402
Oregon	82,229	86,660	-5.1%	30,488	46,526	51,741	40,134	0	0	0	0
Washington	44,341	54,096	-18.0%	27,301	34,389	17,040	19,707	0	0	0	0
Pacific Noncontiguous	492	12,705	-96.0%	492	12,705	0	0	0	0	0	0
Alaska	492	12,705	-96.0%	492	12,705	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,203,005	8,377,935	-2.1%	4,031,011	4,176,197	3,588,371	3,624,728	6,838	6,621	576,785	570,389

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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 4.10.A. Average Cost of Coal Delivered for Electricity Generation by State, September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.80	1.96	-8.2%	--	--	1.80	1.96
New Jersey	W	W	W	--	--	W	W
New York	--	--	--	--	--	--	--
Pennsylvania	W	W	W	--	--	W	W
East North Central	1.96	1.99	-1.5%	2.08	2.13	1.79	1.77
Illinois	W	1.68	W	1.92	1.90	W	1.62
Indiana	W	W	W	2.08	2.11	W	W
Michigan	W	W	W	2.08	2.15	W	W
Ohio	1.77	W	W	1.78	1.71	1.77	W
Wisconsin	2.20	2.35	-6.4%	2.20	2.35	--	--
West North Central	1.61	1.70	-5.3%	1.61	1.70	--	--
Iowa	1.52	1.63	-6.7%	1.52	1.63	--	--
Kansas	1.60	1.70	-5.9%	1.60	1.70	--	--
Minnesota	1.96	2.22	-12.0%	1.96	2.22	--	--
Missouri	1.63	1.74	-6.3%	1.63	1.74	--	--
Nebraska	1.21	1.29	-6.2%	1.21	1.29	--	--
North Dakota	1.67	1.55	7.7%	1.67	1.55	--	--
South Dakota	1.64	1.59	3.1%	1.64	1.59	--	--
South Atlantic	2.54	2.67	-4.9%	2.55	2.72	2.42	2.36
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.83	2.79	1.4%	2.83	2.79	--	--
Georgia	2.68	2.68	0.0%	2.68	2.68	--	--
Maryland	W	2.56	W	--	--	W	2.56
North Carolina	W	W	W	2.68	3.21	W	W
South Carolina	3.13	3.31	-5.4%	3.13	3.31	--	--
Virginia	W	W	W	3.24	2.81	W	W
West Virginia	2.09	2.11	-0.9%	2.11	2.16	1.85	1.93
East South Central	W	W	W	2.04	2.05	W	W
Alabama	2.25	2.27	-0.9%	2.25	2.27	--	--
Kentucky	1.89	1.95	-3.1%	1.89	1.95	--	--
Mississippi	W	W	W	2.90	2.72	W	W
Tennessee	2.01	2.00	0.5%	2.01	2.00	--	--
West South Central	1.69	1.88	-10.0%	1.83	2.10	1.56	1.64
Arkansas	W	W	W	1.90	1.98	W	W
Louisiana	W	W	W	1.83	3.12	W	W
Oklahoma	W	W	W	1.64	1.78	W	W
Texas	1.62	1.74	-6.9%	1.82	2.07	1.52	1.56
Mountain	W	W	W	1.93	2.02	W	W
Arizona	2.36	2.36	0.0%	2.36	2.36	--	--
Colorado	1.70	1.71	-0.6%	1.70	1.71	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.97	2.27	W	W
Nevada	W	W	W	2.61	3.00	W	W
New Mexico	2.21	2.63	-16.0%	2.21	2.63	--	--
Utah	1.99	1.94	2.6%	1.99	1.94	--	--
Wyoming	W	W	W	1.62	1.67	W	W
Pacific Contiguous	W	W	W	2.39	2.29	W	W
California	--	--	--	--	--	--	--
Oregon	2.39	2.29	4.4%	2.39	2.29	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.73	3.25	W	W
Alaska	3.73	3.25	15.0%	3.73	3.25	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	1.95	2.04	-4.4%	2.02	2.12	1.75	1.82

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

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

Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	W	4.29	W	3.54	3.61	W	4.49
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	3.54	3.61	-1.9%	3.54	3.61	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.95	2.17	-10.0%	--	--	1.95	2.17
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.88	2.10	-10.0%	--	--	1.88	2.10
East North Central	1.99	1.98	0.5%	2.11	2.10	1.81	1.80
Illinois	W	1.74	W	1.97	1.87	W	1.71
Indiana	W	W	W	2.14	2.11	W	W
Michigan	W	W	W	2.07	2.12	W	W
Ohio	1.80	W	W	1.82	1.77	1.80	W
Wisconsin	2.24	2.27	-1.3%	2.24	2.27	--	--
West North Central	1.62	1.71	-5.3%	1.62	1.71	--	--
Iowa	1.55	1.67	-7.2%	1.55	1.67	--	--
Kansas	1.62	1.70	-4.7%	1.62	1.70	--	--
Minnesota	2.01	2.17	-7.4%	2.01	2.17	--	--
Missouri	1.67	1.82	-8.2%	1.67	1.82	--	--
Nebraska	1.22	1.27	-3.9%	1.22	1.27	--	--
North Dakota	1.59	1.53	3.9%	1.59	1.53	--	--
South Dakota	1.82	1.91	-4.7%	1.82	1.91	--	--
South Atlantic	2.60	2.63	-1.1%	2.63	2.69	2.36	2.28
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.87	2.86	0.3%	2.87	2.86	--	--
Georgia	2.71	2.76	-1.8%	2.71	2.76	--	--
Maryland	2.67	2.54	5.1%	--	--	2.67	2.54
North Carolina	W	3.12	W	2.86	3.11	W	3.95
South Carolina	3.23	3.32	-2.7%	3.23	3.32	--	--
Virginia	W	2.84	W	2.78	2.67	W	3.60
West Virginia	W	2.08	W	2.11	2.14	W	1.89
East South Central	W	W	W	2.08	2.08	W	W
Alabama	2.35	2.28	3.1%	2.35	2.28	--	--
Kentucky	1.92	1.96	-2.0%	1.92	1.96	--	--
Mississippi	W	W	W	3.08	2.64	W	W
Tennessee	2.14	2.15	-0.5%	2.14	2.15	--	--
West South Central	1.87	1.85	1.1%	2.10	2.02	1.59	1.65
Arkansas	W	W	W	1.98	1.96	W	W
Louisiana	W	W	W	3.14	2.65	W	W
Oklahoma	W	W	W	1.72	1.77	W	W
Texas	1.74	1.75	-0.6%	2.04	2.03	1.54	1.58
Mountain	W	W	W	2.09	2.01	W	W
Arizona	2.63	2.44	7.8%	2.63	2.44	--	--
Colorado	1.78	1.67	6.6%	1.78	1.67	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.98	2.04	W	W
Nevada	W	W	W	2.78	2.96	W	W
New Mexico	2.45	2.45	0.0%	2.45	2.45	--	--
Utah	1.98	2.04	-2.9%	1.98	2.04	--	--
Wyoming	W	W	W	1.75	1.69	W	W
Pacific Contiguous	W	W	W	2.27	2.28	W	W
California	--	--	--	--	--	--	--
Oregon	2.27	2.28	-0.4%	2.27	2.28	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.49	3.32	W	W
Alaska	3.49	3.32	5.1%	3.49	3.32	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.04	2.05	-0.5%	2.11	2.10	1.82	1.88

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

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

Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018
New England	W	15.05	W	16.10	13.46	W	15.08
Connecticut	--	16.60	--	--	--	--	16.60
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	19.07	W	W
New Hampshire	16.10	10.00	61.0%	16.10	10.00	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	14.89	W	10.69	13.30	W	14.92
New Jersey	--	W	W	--	--	--	W
New York	W	W	W	10.69	13.30	W	W
Pennsylvania	W	15.38	W	--	--	W	15.38
East North Central	14.97	17.39	-14.0%	15.08	17.00	14.52	17.70
Illinois	14.85	18.17	-18.0%	15.95	--	14.62	18.17
Indiana	15.55	16.92	-8.1%	15.55	16.92	--	--
Michigan	14.34	16.92	-15.0%	14.34	16.92	--	--
Ohio	15.11	17.61	-14.0%	15.31	17.45	14.48	17.63
Wisconsin	12.53	17.27	-27.0%	12.53	17.27	--	--
West North Central	14.41	17.36	-17.0%	14.41	17.36	--	--
Iowa	13.82	17.46	-21.0%	13.82	17.46	--	--
Kansas	14.81	16.60	-11.0%	14.81	16.60	--	--
Minnesota	15.43	16.91	-8.8%	15.43	16.91	--	--
Missouri	13.76	17.47	-21.0%	13.76	17.47	--	--
Nebraska	--	17.97	--	--	17.97	--	--
North Dakota	14.23	17.67	-19.0%	14.23	17.67	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	W	17.18	W	11.94	17.20	W	17.04
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	15.53	17.12	-9.3%	15.53	17.12	--	--
Georgia	15.49	W	W	15.49	16.97	--	W
Maryland	W	16.76	W	--	--	W	16.76
North Carolina	14.61	W	W	14.61	17.22	--	W
South Carolina	14.76	17.21	-14.0%	14.76	17.21	--	--
Virginia	8.97	W	W	8.97	17.86	--	W
West Virginia	15.90	18.38	-13.0%	15.90	18.38	--	--
East South Central	14.50	16.56	-12.0%	14.50	16.56	--	--
Alabama	15.42	16.96	-9.1%	15.42	16.96	--	--
Kentucky	14.24	16.41	-13.0%	14.24	16.41	--	--
Mississippi	14.46	16.36	-12.0%	14.46	16.36	--	--
Tennessee	14.43	16.59	-13.0%	14.43	16.59	--	--
West South Central	W	W	W	14.73	17.21	W	W
Arkansas	14.68	17.30	-15.0%	14.68	17.30	--	--
Louisiana	--	16.83	--	--	16.83	--	--
Oklahoma	14.76	--	--	14.76	--	--	--
Texas	W	W	W	14.71	16.98	W	W
Mountain	16.85	W	W	16.85	19.40	--	W
Arizona	14.33	18.68	-23.0%	14.33	18.68	--	--
Colorado	18.73	--	--	18.73	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	16.62	W	W	16.62	19.85	--	W
New Mexico	19.11	20.17	-5.3%	19.11	20.17	--	--
Utah	16.80	W	W	16.80	16.97	--	W
Wyoming	16.46	20.45	-20.0%	16.46	20.45	--	--
Pacific Contiguous	W	--	W	--	--	W	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	--	W	--	--	W	--
Pacific Noncontiguous	W	W	W	12.31	14.70	W	W
Alaska	16.34	18.18	-10.0%	16.34	18.18	--	--
Hawaii	W	W	W	12.30	14.70	W	W
U.S. Total	12.61	15.44	-18.0%	12.38	15.53	13.76	15.17

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

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

Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) September 2019 and 2018 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	10.46	W	W	16.92	11.89	10.19	W
Connecticut	W	14.92	W	--	--	W	14.92
Maine	W	W	W	--	--	W	W
Massachusetts	W	12.45	W	--	15.69	W	12.24
New Hampshire	16.92	W	W	16.92	11.06	--	W
Rhode Island	--	15.05	--	--	--	--	15.05
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	13.88	W	11.59	12.28	W	14.70
New Jersey	W	15.71	W	--	--	W	15.71
New York	12.16	13.11	-7.2%	11.59	12.28	14.90	13.80
Pennsylvania	13.64	16.35	-17.0%	--	--	13.64	16.35
East North Central	W	16.36	W	14.73	16.37	W	16.36
Illinois	16.39	W	W	15.72	16.11	16.42	W
Indiana	14.78	W	W	14.78	16.36	--	W
Michigan	13.81	15.96	-13.0%	13.81	15.96	--	--
Ohio	W	16.21	W	15.45	16.31	W	16.18
Wisconsin	W	17.22	W	14.73	17.22	W	--
West North Central	14.61	16.34	-11.0%	14.61	16.34	--	--
Iowa	14.51	16.22	-11.0%	14.51	16.22	--	--
Kansas	14.84	16.41	-9.6%	14.84	16.41	--	--
Minnesota	15.30	16.89	-9.4%	15.30	16.89	--	--
Missouri	14.46	16.26	-11.0%	14.46	16.26	--	--
Nebraska	14.91	17.24	-14.0%	14.91	17.24	--	--
North Dakota	14.33	16.19	-11.0%	14.33	16.19	--	--
South Dakota	13.99	17.15	-18.0%	13.99	17.15	--	--
South Atlantic	14.41	14.84	-2.9%	14.45	14.96	14.07	14.29
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	15.35	16.23	-5.4%	15.35	16.23	--	--
Georgia	W	W	W	14.90	15.84	W	W
Maryland	14.20	14.37	-1.2%	--	--	14.20	14.37
North Carolina	14.67	W	W	14.67	17.27	--	W
South Carolina	15.13	17.45	-13.0%	15.13	17.45	--	--
Virginia	W	11.25	W	11.33	11.18	W	11.82
West Virginia	15.38	W	W	15.38	16.62	--	W
East South Central	W	W	W	14.45	16.17	W	W
Alabama	W	W	W	15.13	16.34	W	W
Kentucky	14.53	15.94	-8.8%	14.53	15.94	--	--
Mississippi	14.34	15.81	-9.3%	14.34	15.81	--	--
Tennessee	14.25	16.33	-13.0%	14.25	16.33	--	--
West South Central	W	W	W	14.57	16.05	W	W
Arkansas	W	W	W	14.98	16.31	W	W
Louisiana	14.48	15.42	-6.1%	14.48	15.42	--	--
Oklahoma	15.29	16.01	-4.5%	15.29	16.01	--	--
Texas	W	W	W	13.89	16.20	W	W
Mountain	16.74	W	W	16.80	18.07	15.94	W
Arizona	16.78	16.59	1.1%	16.78	16.59	--	--
Colorado	17.93	17.43	2.9%	17.93	17.43	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	16.07	18.58	W	W
New Mexico	18.70	18.87	-0.9%	18.70	18.87	--	--
Utah	W	W	W	16.69	19.19	W	W
Wyoming	15.87	18.87	-16.0%	15.87	18.87	--	--
Pacific Contiguous	W	W	W	16.52	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	16.52	--	W	W
Pacific Noncontiguous	W	W	W	12.97	13.58	W	W
Alaska	15.43	17.55	-12.0%	15.43	17.55	--	--
Hawaii	W	W	W	12.96	13.57	W	W
U.S. Total	13.66	14.24	-4.1%	13.43	14.20	14.48	14.31

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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, September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.60	1.65	-3.0%	1.60	1.65	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.53	1.57	-2.5%	1.53	1.57	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.86	1.84	1.1%	1.86	1.84	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.36	3.69	-36.0%	2.36	3.69	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.36	3.69	-36.0%	2.36	3.69	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	1.26	2.89	-56.0%	1.26	2.89	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	1.26	2.89	-56.0%	1.26	2.89	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	1.68	3.05	-45.0%	1.68	3.05	--	--

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NM = Not meaningful due to large relative standard error or excessive percentage change.
W = Withheld to avoid disclosure of individual company data.

Notes:
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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 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) September 2019 and 2018 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.58	1.53	3.3%	1.58	1.53	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.53	1.50	2.0%	1.53	1.50	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.87	1.78	5.1%	1.87	1.78	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.67	3.20	-17.0%	2.67	3.20	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.67	3.20	-17.0%	2.67	3.20	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.04	2.71	-25.0%	2.04	2.71	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.04	2.71	-25.0%	2.04	2.71	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.11	2.64	-20.0%	2.11	2.64	--	--

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W = Withheld to avoid disclosure of individual company data.

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See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum Coke includes petroleum coke-derived synthesis gas.
See the Technical Notes for fuel conversion factors.

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

Table 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019	September 2018	Percentage Change	September 2019	September 2018	September 2019	September 2018
New England	W	W	W	4.93	4.30	W	W
Connecticut	2.22	3.31	-33.0%	--	--	2.22	3.31
Maine	W	W	W	--	--	W	W
Massachusetts	2.85	3.01	-5.3%	2.52	3.35	2.85	3.00
New Hampshire	W	W	W	6.28	6.50	W	W
Rhode Island	W	3.00	W	--	--	W	3.00
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.00	2.66	-25.0%	2.10	3.13	1.99	2.62
New Jersey	2.39	2.52	-5.2%	--	--	2.39	2.52
New York	2.12	2.99	-29.0%	2.10	3.13	2.13	2.94
Pennsylvania	1.81	2.50	-28.0%	--	--	1.81	2.50
East North Central	2.32	3.05	-24.0%	2.48	3.16	2.24	3.00
Illinois	W	3.14	W	2.51	3.41	W	3.12
Indiana	2.42	3.11	-22.0%	2.54	3.38	2.33	2.95
Michigan	2.47	3.21	-23.0%	2.70	3.48	2.35	3.07
Ohio	2.14	2.91	-26.0%	2.21	2.91	2.13	2.91
Wisconsin	W	2.93	W	2.41	2.93	W	--
West North Central	W	W	W	2.28	2.95	W	W
Iowa	2.02	2.75	-27.0%	2.02	2.75	--	--
Kansas	2.44	3.05	-20.0%	2.44	3.05	--	--
Minnesota	W	W	W	2.68	3.38	W	W
Missouri	W	W	W	2.05	2.75	W	W
Nebraska	2.66	3.58	-26.0%	2.66	3.58	--	--
North Dakota	3.46	2.45	41.0%	3.46	2.45	--	--
South Dakota	--	2.68	--	--	2.68	--	--
South Atlantic	3.08	3.69	-17.0%	3.14	3.80	2.64	3.05
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.36	3.99	W	W
Georgia	W	3.65	W	2.68	3.81	W	3.16
Maryland	2.79	3.27	-15.0%	3.33	3.34	2.73	3.24
North Carolina	W	3.48	W	3.26	3.56	W	3.18
South Carolina	3.07	3.62	-15.0%	3.07	3.62	--	--
Virginia	2.53	3.06	-17.0%	2.57	3.23	2.39	2.70
West Virginia	W	W	W	2.13	2.94	W	W
East South Central	2.73	3.09	-12.0%	2.71	3.08	2.79	3.13
Alabama	W	W	W	2.78	3.23	W	W
Kentucky	W	W	W	2.98	3.22	W	W
Mississippi	W	W	W	2.62	3.03	W	W
Tennessee	2.66	2.93	-9.2%	2.66	2.93	--	--
West South Central	2.36	2.86	-17.0%	2.37	2.82	2.35	2.90
Arkansas	W	W	W	2.43	3.21	W	W
Louisiana	W	W	W	2.65	3.16	W	W
Oklahoma	W	W	W	2.08	2.29	W	W
Texas	2.35	2.88	-18.0%	2.29	2.74	2.36	2.93
Mountain	2.37	2.69	-12.0%	2.30	2.67	2.93	2.87
Arizona	W	W	W	2.22	2.57	W	W
Colorado	W	W	W	2.88	3.23	W	W
Idaho	2.53	2.87	-12.0%	2.53	2.87	--	--
Montana	0.65	W	W	0.65	1.35	--	W
Nevada	2.29	2.72	-16.0%	2.29	2.72	--	--
New Mexico	1.84	2.09	-12.0%	1.84	2.09	--	--
Utah	2.22	2.63	-16.0%	2.22	2.63	--	--
Wyoming	W	3.49	W	2.14	3.49	W	--
Pacific Contiguous	3.04	2.97	2.4%	3.11	2.93	2.98	3.00
California	3.38	3.48	-2.9%	3.70	3.87	3.17	3.20
Oregon	W	W	W	1.73	1.61	W	W
Washington	W	W	W	2.54	2.49	W	W
Pacific Noncontiguous	7.87	6.53	21.0%	7.87	6.53	--	--
Alaska	7.87	6.53	21.0%	7.87	6.53	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.59	3.12	-17.0%	2.77	3.28	2.36	2.90

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See Technical Notes for a discussion of the sample design for the Form EIA-923.
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Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

Table 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) September 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2019 YTD	September 2018 YTD	Percentage Change	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	W	4.36	W	3.14	4.59	W	4.36
Connecticut	3.29	4.38	-25.0%	--	--	3.29	4.38
Maine	W	W	W	--	--	W	W
Massachusetts	4.64	4.56	1.8%	2.72	4.01	4.66	4.57
New Hampshire	W	W	W	6.11	5.83	W	W
Rhode Island	W	3.72	W	--	--	W	3.72
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.68	3.18	-16.0%	3.22	3.92	2.63	3.10
New Jersey	2.91	3.00	-3.0%	--	--	2.91	3.00
New York	2.99	3.63	-18.0%	3.22	3.92	2.88	3.51
Pennsylvania	2.42	2.95	-18.0%	--	--	2.42	2.95
East North Central	2.62	3.04	-14.0%	2.77	3.16	2.54	2.97
Illinois	W	3.23	W	2.58	3.47	W	3.21
Indiana	2.67	3.10	-14.0%	2.82	3.25	2.57	2.96
Michigan	2.66	3.09	-14.0%	2.76	3.33	2.62	2.97
Ohio	2.48	2.88	-14.0%	2.60	2.97	2.46	2.85
Wisconsin	W	3.06	W	2.83	3.06	W	--
West North Central	W	W	W	2.64	3.01	W	W
Iowa	2.41	2.81	-14.0%	2.41	2.81	--	--
Kansas	2.79	3.02	-7.6%	2.79	3.02	--	--
Minnesota	W	W	W	3.00	3.24	W	W
Missouri	W	W	W	2.40	3.08	W	W
Nebraska	2.84	3.34	-15.0%	2.84	3.34	--	--
North Dakota	3.66	2.75	33.0%	3.66	2.75	--	--
South Dakota	--	2.64	--	--	2.64	--	--
South Atlantic	3.46	4.11	-16.0%	3.56	4.22	2.83	3.42
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.74	4.22	W	W
Georgia	W	3.74	W	2.98	3.83	W	3.42
Maryland	3.12	3.77	-17.0%	3.41	3.30	3.01	3.92
North Carolina	W	4.35	W	3.76	4.46	W	3.65
South Carolina	3.20	4.12	-22.0%	3.20	4.12	--	--
Virginia	3.20	4.10	-22.0%	3.38	4.53	2.62	2.96
West Virginia	W	W	W	2.40	3.13	W	W
East South Central	2.88	3.14	-8.3%	2.91	3.13	2.80	3.15
Alabama	W	W	W	2.90	3.21	W	W
Kentucky	W	W	W	3.34	3.41	W	W
Mississippi	W	W	W	2.79	3.07	W	W
Tennessee	2.88	2.96	-2.7%	2.88	2.96	--	--
West South Central	2.46	2.97	-17.0%	2.46	2.95	2.47	2.98
Arkansas	W	W	W	2.58	3.19	W	W
Louisiana	W	W	W	2.73	3.16	W	W
Oklahoma	W	W	W	2.41	2.60	W	W
Texas	2.41	2.97	-19.0%	2.19	2.90	2.48	3.00
Mountain	2.56	W	W	2.51	2.92	3.00	W
Arizona	W	2.88	W	2.04	2.87	W	3.07
Colorado	W	W	W	3.05	3.49	W	W
Idaho	4.50	2.79	61.0%	4.50	2.79	--	--
Montana	1.44	W	W	1.44	1.33	--	W
Nevada	3.02	2.88	4.9%	3.02	2.88	--	--
New Mexico	1.14	2.44	-53.0%	1.14	2.44	--	--
Utah	3.08	2.71	14.0%	3.08	2.71	--	--
Wyoming	W	W	W	2.50	3.47	W	W
Pacific Contiguous	3.65	3.68	-0.8%	3.80	3.35	3.51	4.03
California	3.88	4.34	-11.0%	4.28	4.19	3.58	4.47
Oregon	W	W	W	2.41	1.74	W	W
Washington	W	W	W	3.48	2.59	W	W
Pacific Noncontiguous	7.81	6.80	15.0%	7.81	6.80	--	--
Alaska	7.81	6.80	15.0%	7.81	6.80	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.93	3.41	-14.0%	3.08	3.53	2.72	3.24

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See Technical Notes for a discussion of the sample design for the Form EIA-923.
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Source: U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report."

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, September 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	7	0.77	5.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	7	0.77	5.7	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	858	2.62	10.2	0	--	--	0	--	--
New Jersey	16	1.42	6.3	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	842	2.65	10.3	0	--	--	0	--	--
East North Central	4,494	3.29	10.4	5,024	0.25	4.6	0	--	--
Illinois	688	3.35	19.4	1,872	0.22	4.7	0	--	--
Indiana	1,791	2.87	9.1	192	0.22	4.4	0	--	--
Michigan	91	2.28	7.8	1,634	0.28	4.5	0	--	--
Ohio	1,862	3.74	9.3	0	--	--	0	--	--
Wisconsin	61	2.04	8.5	1,327	0.26	4.8	0	--	--
West North Central	94	3.14	9.1	7,695	0.28	5.0	1,619	0.73	9.6
Iowa	25	3.56	7.7	1,489	0.25	4.7	0	--	--
Kansas	11	3.25	12.1	936	0.32	5.0	0	--	--
Minnesota	0	--	--	1,100	0.38	6.1	0	--	--
Missouri	58	2.93	9.2	2,924	0.25	4.7	0	--	--
Nebraska	0	--	--	1,050	0.27	5.0	0	--	--
North Dakota	0	--	--	0	--	--	1,619	0.73	9.6
South Dakota	0	--	--	197	0.37	5.9	0	--	--
South Atlantic	5,480	2.51	9.7	841	0.29	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	689	2.58	8.5	0	--	--	0	--	--
Georgia	708	2.52	8.1	841	0.29	4.7	0	--	--
Maryland	232	2.38	10.3	0	--	--	0	--	--
North Carolina	1,042	1.74	9.4	0	--	--	0	--	--
South Carolina	577	1.85	9.3	0	--	--	0	--	--
Virginia	135	0.90	9.9	0	--	--	0	--	--
West Virginia	2,097	3.15	10.8	0	--	--	0	--	--
East South Central	2,722	2.64	9.4	2,105	0.31	5.2	134	0.48	14.4
Alabama	347	0.97	11.8	1,075	0.33	5.1	0	--	--
Kentucky	1,778	2.99	9.3	829	0.28	5.3	0	--	--
Mississippi	37	0.42	7.7	143	0.34	5.1	134	0.48	14.4
Tennessee	560	2.61	8.4	58	0.27	5.0	0	--	--
West South Central	11	0.60	23.0	6,318	0.26	5.0	1,753	1.07	17.2
Arkansas	5	0.48	8.2	1,353	0.23	4.8	0	--	--
Louisiana	0	--	--	345	0.28	5.0	128	0.60	15.1
Oklahoma	6	0.74	39.1	561	0.23	4.6	0	--	--
Texas	0	--	--	4,059	0.27	5.1	1,625	1.11	17.4
Mountain	1,347	0.64	13.7	5,123	0.52	8.9	22	0.52	8.5
Arizona	0	--	--	861	0.55	9.1	0	--	--
Colorado	109	0.47	10.8	1,013	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	892	0.70	10.2	22	0.52	8.5
Nevada	72	0.49	12.8	70	0.45	7.3	0	--	--
New Mexico	260	0.89	22.3	521	0.83	20.0	0	--	--
Utah	907	0.61	12.0	28	0.97	9.5	0	--	--
Wyoming	0	--	--	1,738	0.43	6.7	0	--	--
Pacific Contiguous	11	0.56	12.1	547	0.38	7.9	0	--	--
California	11	0.56	12.1	0	--	--	0	--	--
Oregon	0	--	--	123	0.22	5.4	0	--	--
Washington	0	--	--	424	0.43	8.7	0	--	--
Pacific Noncontiguous	0	--	--	60	0.24	3.8	18	0.16	9.9
Alaska	0	--	--	0	--	--	18	0.16	9.9
Hawaii	0	--	--	60	0.24	3.8	0	--	--
U.S. Total	15,024	2.61	10.2	27,714	0.32	5.7	3,547	0.88	13.5

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Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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, September 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	2,088	2.90	9.1	3,336	0.27	4.6	0	--	--
Illinois	152	2.62	9.6	184	0.22	4.5	0	--	--
Indiana	1,608	2.81	9.1	192	0.22	4.4	0	--	--
Michigan	78	2.42	8.0	1,634	0.28	4.5	0	--	--
Ohio	202	4.03	9.2	0	--	--	0	--	--
Wisconsin	47	2.46	7.9	1,327	0.26	4.8	0	--	--
West North Central	69	2.98	9.6	7,489	0.28	5.0	1,619	0.73	9.6
Iowa	0	--	--	1,352	0.25	4.7	0	--	--
Kansas	11	3.25	12.1	936	0.32	5.0	0	--	--
Minnesota	0	--	--	1,100	0.38	6.1	0	--	--
Missouri	58	2.93	9.2	2,924	0.25	4.7	0	--	--
Nebraska	0	--	--	980	0.27	5.0	0	--	--
North Dakota	0	--	--	0	--	--	1,619	0.73	9.6
South Dakota	0	--	--	197	0.37	5.9	0	--	--
South Atlantic	5,045	2.53	9.7	841	0.29	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	679	2.61	8.6	0	--	--	0	--	--
Georgia	697	2.55	8.0	841	0.29	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,021	1.76	9.4	0	--	--	0	--	--
South Carolina	577	1.85	9.3	0	--	--	0	--	--
Virginia	96	0.90	11.5	0	--	--	0	--	--
West Virginia	1,975	3.16	10.9	0	--	--	0	--	--
East South Central	2,677	2.67	9.4	2,105	0.31	5.2	0	--	--
Alabama	347	0.97	11.8	1,075	0.33	5.1	0	--	--
Kentucky	1,778	2.99	9.3	829	0.28	5.3	0	--	--
Mississippi	37	0.42	7.7	143	0.34	5.1	0	--	--
Tennessee	515	2.77	8.5	58	0.27	5.0	0	--	--
West South Central	0	--	--	3,509	0.25	4.9	400	1.81	22.5
Arkansas	0	--	--	1,189	0.23	4.8	0	--	--
Louisiana	0	--	--	214	0.27	5.0	128	0.60	15.1
Oklahoma	0	--	--	476	0.23	4.6	0	--	--
Texas	0	--	--	1,630	0.27	5.1	272	2.53	26.9
Mountain	1,347	0.64	13.7	4,140	0.48	8.7	22	0.52	8.5
Arizona	0	--	--	861	0.55	9.1	0	--	--
Colorado	109	0.47	10.8	1,013	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	22	0.52	8.5
Nevada	72	0.49	12.8	24	0.48	9.9	0	--	--
New Mexico	260	0.89	22.3	521	0.83	20.0	0	--	--
Utah	907	0.61	12.0	28	0.97	9.5	0	--	--
Wyoming	0	--	--	1,693	0.43	6.7	0	--	--
Pacific Contiguous	0	--	--	123	0.22	5.4	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	123	0.22	5.4	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	18	0.16	9.9
Alaska	0	--	--	0	--	--	18	0.16	9.9
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	11,225	2.42	10.0	21,542	0.32	5.6	2,060	0.91	11.8

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 2019 are preliminary. Values for 2018 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, September 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	7	0.77	5.7	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	7	0.77	5.7	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	847	2.63	10.2	0	--	--	0	--	--
New Jersey	16	1.42	6.3	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	831	2.65	10.3	0	--	--	0	--	--
East North Central	2,296	3.65	11.7	1,640	0.22	4.6	0	--	--
Illinois	439	3.63	26.8	1,640	0.22	4.6	0	--	--
Indiana	183	3.34	9.2	0	--	--	0	--	--
Michigan	13	1.35	6.4	0	--	--	0	--	--
Ohio	1,660	3.70	9.3	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	375	2.49	9.6	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	232	2.38	10.3	0	--	--	0	--	--
North Carolina	2	0.71	6.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	19	1.05	5.7	0	--	--	0	--	--
West Virginia	122	2.95	9.0	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	134	0.48	14.4
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	134	0.48	14.4
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	6	0.74	39.1	2,794	0.28	5.1	1,353	0.88	15.8
Arkansas	0	--	--	164	0.22	4.8	0	--	--
Louisiana	0	--	--	131	0.30	5.0	0	--	--
Oklahoma	6	0.74	39.1	70	0.22	4.7	0	--	--
Texas	0	--	--	2,429	0.28	5.1	1,353	0.88	15.8
Mountain	0	--	--	984	0.67	9.8	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	892	0.70	10.2	0	--	--
Nevada	0	--	--	46	0.43	5.9	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	46	0.37	5.2	0	--	--
Pacific Contiguous	0	--	--	424	0.43	8.7	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	424	0.43	8.7	0	--	--
Pacific Noncontiguous	0	--	--	60	0.24	3.8	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	60	0.24	3.8	0	--	--
U.S. Total	3,531	3.26	11.1	5,901	0.34	6.0	1,487	0.85	15.7

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2019 are preliminary. Values for 2018 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, September 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	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	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	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	0	--	--	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 2019 are preliminary. Values for 2018 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, September 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	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	110	3.09	9.1	48	0.22	5.6	0	--	--
Illinois	96	3.50	8.8	48	0.22	5.6	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	14	0.50	10.7	0	--	--	0	--	--
West North Central	25	3.56	7.7	207	0.21	4.4	0	--	--
Iowa	25	3.56	7.7	137	0.20	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	69	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	61	0.79	8.2	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	10	0.77	6.3	0	--	--	0	--	--
Georgia	11	0.80	12.4	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	19	0.83	8.1	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	21	0.75	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	46	1.05	7.4	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	46	1.05	7.4	0	--	--	0	--	--
West South Central	5	0.48	8.2	16	0.24	4.7	0	--	--
Arkansas	5	0.48	8.2	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	16	0.24	4.7	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	11	0.56	12.1	0	--	--	0	--	--
California	11	0.56	12.1	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	268	1.99	8.5	271	0.21	4.7	0	--	--

Displayed values of zero may represent small values that round to zero.
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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 2019 are preliminary. Values for 2018 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, 2009 - September 2019 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	1,469,096	1,381,761	1,001,597	7,665	3,860,119
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	148,918	114,926	79,964	745	344,552
February	113,752	102,686	75,730	634	292,802
March	107,219	108,109	81,127	620	297,074
April	95,454	103,332	79,157	599	278,543
May	103,848	113,176	85,717	587	303,328
June	129,913	122,012	85,615	623	338,163
July	153,566	131,522	89,384	634	375,107
August	153,497	134,849	92,189	680	381,215
Sept	128,910	122,034	85,758	640	337,342
October	107,049	116,134	85,380	631	309,194
November	103,790	104,984	81,195	616	290,584
December	123,181	107,999	80,380	655	312,215
Year 2019					
January	133,010	111,645	78,179	671	323,506
February	116,248	101,740	72,375	704	291,068
March	112,139	107,086	76,985	689	296,899
April	89,863	102,076	76,383	614	268,936
May	99,809	110,759	80,549	608	291,725
June	119,518	115,243	80,378	614	315,753
July	153,139	130,253	86,270	645	370,306
August	149,660	130,136	86,457	658	366,910
Sept	131,038	121,379	81,940	682	335,038
Year to Date					
2017	1,055,512	1,025,322	741,785	5,635	2,828,254
2018	1,135,076	1,052,645	754,642	5,763	2,948,126
2019	1,104,423	1,030,316	719,516	5,885	2,860,141
Rolling 12 Months Ending in September					
2018	1,458,213	1,380,211	997,154	7,651	3,843,228
2019	1,438,443	1,359,432	966,472	7,787	3,772,134

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 2018 and prior years are final. Values for 2019 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, 2009 - September 2019 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	189,033	147,426	69,296	744	406,498
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	18,193	12,053	5,550	70	35,866
February	14,364	10,936	5,133	62	30,496
March	13,905	11,365	5,379	58	30,707
April	12,290	10,806	5,200	57	28,353
May	13,625	11,890	5,825	55	31,395
June	16,922	13,223	6,143	64	36,351
July	20,156	14,466	6,547	64	41,233
August	20,351	14,874	6,680	65	41,970
Sept	16,775	13,085	6,045	64	35,969
October	13,751	12,506	5,870	62	32,189
November	13,389	11,069	5,563	60	30,081
December	15,311	11,155	5,359	64	31,889
Year 2019					
January	16,586	11,485	5,143	66	33,280
February	14,788	10,704	4,842	72	30,406
March	14,406	11,180	5,182	64	30,832
April	11,928	10,719	4,976	58	27,680
May	13,303	11,661	5,402	58	30,424
June	15,949	12,554	5,563	62	34,129
July	20,323	14,360	6,190	63	40,937
August	19,907	14,319	6,433	64	40,722
Sept	17,252	13,317	5,811	67	36,447
Year to Date					
2017	136,587	109,778	51,371	550	298,286
2018	146,582	112,696	52,503	559	312,340
2019	144,441	110,298	49,543	574	304,856
Rolling 12 Months Ending in September					
2018	187,656	147,160	68,823	737	404,377
2019	186,892	145,027	66,335	760	399,014

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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, 2009 - September 2019 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	12.87	10.67	6.92	9.70	10.53
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	12.22	10.49	6.94	9.39	10.41
February	12.63	10.65	6.78	9.78	10.42
March	12.97	10.51	6.63	9.40	10.34
April	12.88	10.46	6.57	9.47	10.18
May	13.12	10.51	6.80	9.39	10.35
June	13.03	10.84	7.18	10.23	10.75
July	13.13	11.00	7.32	10.05	10.99
August	13.26	11.03	7.25	9.50	11.01
Sept	13.01	10.72	7.05	10.05	10.66
October	12.85	10.77	6.88	9.79	10.41
November	12.90	10.54	6.85	9.70	10.35
December	12.43	10.33	6.67	9.71	10.21
Year 2019					
January	12.47	10.29	6.58	9.86	10.29
February	12.72	10.52	6.69	10.28	10.45
March	12.85	10.44	6.73	9.28	10.38
April	13.27	10.50	6.51	9.46	10.29
May	13.33	10.53	6.71	9.50	10.43
June	13.34	10.89	6.92	10.04	10.81
July	13.27	11.02	7.18	9.85	11.05
August	13.30	11.00	7.44	9.71	11.10
Sept	13.17	10.97	7.09	9.83	10.88
Year to Date					
2017	12.94	10.71	6.93	9.76	10.55
2018	12.91	10.71	6.96	9.69	10.59
2019	13.08	10.71	6.89	9.76	10.66
Rolling 12 Months Ending in September					
2018	12.87	10.66	6.90	9.64	10.52
2019	12.99	10.67	6.86	9.75	10.58

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
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Sources: U.S. Energy Information Administration, Form EIA-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, September 2019 and 2018 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	3,481	4,107	4,179	4,536	1,209	1,433	43	44	8,912	10,120
Connecticut	852	1,048	1,007	1,017	249	276	15	16	2,122	2,358
Maine	360	398	339	366	164	257	0	0	863	1,021
Massachusetts	1,554	1,828	2,027	2,294	467	557	26	26	4,074	4,706
New Hampshire	324	388	354	383	165	168	0	0	844	938
Rhode Island	243	280	293	303	54	57	2	2	591	643
Vermont	148	165	159	172	111	116	0	0	418	453
Middle Atlantic	11,182	12,736	13,161	14,183	6,392	6,639	314	337	31,049	33,895
New Jersey	2,506	2,736	3,168	3,280	560	608	26	24	6,259	6,648
New York	4,357	5,146	6,618	7,072	1,420	1,596	240	247	12,636	14,062
Pennsylvania	4,319	4,854	3,375	3,832	4,412	4,434	48	65	12,154	13,185
East North Central	15,121	15,752	15,681	15,785	15,339	16,322	48	52	46,188	47,911
Illinois	3,853	3,925	4,227	4,311	3,584	3,621	43	48	11,707	11,905
Indiana	2,772	2,829	2,132	2,118	3,434	3,812	2	2	8,339	8,761
Michigan	2,485	2,788	3,276	3,328	2,445	2,564	1	1	8,207	8,680
Ohio	4,346	4,537	4,095	4,018	3,864	4,226	2	2	12,306	12,783
Wisconsin	1,665	1,673	1,951	2,010	2,012	2,100	0	0	5,629	5,783
West North Central	8,581	8,357	8,892	8,711	7,608	7,981	4	4	25,084	25,053
Iowa	1,054	1,069	1,025	988	2,030	2,020	0	0	4,109	4,078
Kansas	1,392	1,212	1,487	1,421	935	999	0	0	3,813	3,633
Minnesota	1,591	1,663	1,874	1,918	1,720	1,907	2	2	5,186	5,490
Missouri	3,148	3,031	2,770	2,666	1,000	1,148	2	2	6,919	6,847
Nebraska	774	752	828	797	899	928	0	0	2,500	2,477
North Dakota	290	293	498	516	774	724	0	0	1,562	1,533
South Dakota	331	336	411	405	251	255	0	0	994	995
South Atlantic	34,648	34,215	28,902	29,458	11,772	12,227	166	109	75,488	76,009
Delaware	422	458	397	371	155	196	0	0	975	1,024
District of Columbia	229	241	648	709	15	12	65	27	957	988
Florida	12,788	12,619	8,919	9,137	1,381	1,511	7	7	23,095	23,274
Georgia	6,039	5,823	4,492	4,485	2,667	2,839	14	14	13,212	13,161
Maryland	2,151	2,249	2,485	2,520	300	350	61	43	4,998	5,162
North Carolina	5,504	5,351	4,670	4,757	2,283	2,152	2	2	12,459	12,262
South Carolina	2,984	2,886	1,978	2,059	2,329	2,512	0	0	7,291	7,458
Virginia	3,738	3,780	4,677	4,781	1,443	1,524	17	15	9,874	10,101
West Virginia	793	809	637	638	1,199	1,133	0	0	2,628	2,580
East South Central	11,944	11,335	8,920	8,895	7,911	8,571	0	0	28,775	28,801
Alabama	3,354	3,147	2,211	2,214	2,675	2,805	0	0	8,240	8,166
Kentucky	2,374	2,233	1,793	1,771	2,277	2,487	0	0	6,445	6,491
Mississippi	2,031	1,908	1,400	1,429	1,398	1,408	0	0	4,829	4,745
Tennessee	4,185	4,047	3,516	3,482	1,560	1,870	0	0	9,262	9,399
West South Central	24,561	22,353	19,020	18,539	16,454	17,224	18	18	60,054	58,133
Arkansas	1,902	1,775	1,209	1,178	1,535	1,603	0	0	4,645	4,556
Louisiana	3,406	3,213	2,425	2,371	3,020	3,294	1	1	8,852	8,879
Oklahoma	2,454	2,024	1,898	1,821	1,730	1,700	0	0	6,082	5,544
Texas	16,800	15,340	13,488	13,170	10,169	10,627	18	17	40,474	39,154
Mountain	9,209	9,327	8,748	8,870	7,408	7,315	15	13	25,380	25,524
Arizona	3,701	3,839	2,772	2,830	1,166	1,204	1	1	7,641	7,873
Colorado	1,696	1,658	1,720	1,831	1,450	1,405	9	7	4,875	4,902
Idaho	557	523	515	515	783	825	0	0	1,856	1,863
Montana	336	333	401	397	429	431	0	0	1,166	1,161
Nevada	1,288	1,387	1,174	1,080	1,087	1,072	1	1	3,550	3,540
New Mexico	643	580	859	817	810	722	0	0	2,312	2,119
Utah	814	844	1,014	1,092	810	810	4	4	2,642	2,751
Wyoming	174	163	292	307	872	845	0	0	1,338	1,315
Pacific Contiguous	11,917	10,344	13,395	12,591	7,416	7,623	74	63	32,802	30,621
California	8,450	6,997	9,727	8,904	4,469	4,362	63	61	22,709	20,323
Oregon	1,270	1,197	1,338	1,335	983	1,184	2	2	3,594	3,718
Washington	2,197	2,150	2,329	2,352	1,965	2,077	8	1	6,499	6,580
Pacific Noncontiguous	393	384	483	468	430	424	0	0	1,306	1,276
Alaska	137	140	210	209	105	117	0	0	452	465
Hawaii	256	244	272	259	326	307	0	0	854	810
U.S. Total	131,038	128,910	121,379	122,034	81,940	85,758	682	640	335,038	337,342

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 2018 are final. Values for 2019 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 September 2019 and 2018 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	35,243	36,859	38,747	40,248	11,622	12,842	410	420	86,022	90,368
Connecticut	9,539	10,044	9,170	9,418	2,231	2,420	134	139	21,073	22,021
Maine	3,639	3,676	3,200	3,346	2,033	2,300	0	0	8,872	9,322
Massachusetts	14,768	15,593	18,893	19,782	4,367	5,028	256	261	38,284	40,663
New Hampshire	3,427	3,534	3,246	3,365	1,441	1,484	0	0	8,113	8,383
Rhode Island	2,313	2,420	2,760	2,813	526	563	20	20	5,619	5,817
Vermont	1,557	1,591	1,478	1,524	1,025	1,047	0	0	4,060	4,162
Middle Atlantic	103,293	106,504	116,729	120,897	55,017	56,201	2,901	3,003	277,940	286,606
New Jersey	22,683	23,379	28,755	29,586	5,009	5,496	231	236	56,679	58,696
New York	38,824	40,192	56,879	58,379	12,596	13,405	2,171	2,242	110,471	114,218
Pennsylvania	41,786	42,933	31,094	32,932	37,411	37,301	498	525	110,790	113,691
East North Central	142,486	149,319	138,056	140,992	137,877	147,901	497	463	418,915	438,675
Illinois	34,981	36,803	37,630	38,509	31,557	33,375	447	414	104,614	109,100
Indiana	25,137	26,586	18,169	18,542	31,129	34,222	15	16	74,450	79,366
Michigan	25,494	27,087	29,044	29,696	21,863	23,318	5	5	76,406	80,106
Ohio	40,223	41,782	35,417	35,920	35,349	38,500	28	28	111,017	116,231
Wisconsin	16,651	17,061	17,797	18,326	17,978	18,486	1	0	52,427	53,873
West North Central	80,515	84,573	77,689	79,469	66,512	70,717	37	37	224,753	234,796
Iowa	10,898	11,432	9,202	9,371	17,634	17,914	0	0	37,734	38,716
Kansas	10,697	11,209	11,958	12,413	8,285	8,819	0	0	30,941	32,441
Minnesota	16,512	17,386	17,052	17,814	15,401	16,896	19	19	48,983	52,115
Missouri	27,217	28,989	23,526	23,867	8,564	10,083	18	18	59,325	62,956
Nebraska	7,836	8,009	7,209	7,253	7,728	8,367	0	0	22,773	23,628
North Dakota	3,644	3,760	4,967	5,051	6,823	6,413	0	0	15,435	15,223
South Dakota	3,710	3,789	3,775	3,702	2,077	2,227	0	0	9,562	9,717
South Atlantic	284,273	287,398	241,646	241,734	103,987	108,306	1,085	986	630,991	638,424
Delaware	3,879	3,957	3,397	3,303	1,385	1,768	0	0	8,662	9,027
District of Columbia	2,001	1,997	6,059	6,247	145	146	290	245	8,495	8,635
Florida	96,516	95,855	73,000	72,955	12,302	12,977	65	62	181,882	181,850
Georgia	46,207	46,213	36,287	36,267	23,720	24,730	125	129	106,339	107,339
Maryland	21,292	21,662	22,048	22,492	2,771	2,898	450	391	46,562	47,443
North Carolina	46,025	47,633	37,740	37,848	20,147	20,561	14	9	103,927	106,051
South Carolina	24,288	24,634	16,787	17,090	20,264	21,292	0	0	61,339	63,016
Virginia	35,716	36,674	40,580	39,634	12,424	13,375	141	151	88,861	89,834
West Virginia	8,349	8,773	5,747	5,897	10,829	10,559	0	0	24,925	25,230
East South Central	93,386	96,449	70,488	72,627	71,785	75,539	0	0	235,659	244,614
Alabama	25,268	25,561	17,384	18,039	24,694	25,515	0	0	67,345	69,115
Kentucky	20,591	21,391	14,915	15,224	20,615	21,466	0	0	56,121	58,082
Mississippi	14,688	15,008	10,504	11,144	12,410	12,406	0	0	37,602	38,558
Tennessee	32,840	34,488	27,685	28,219	14,066	16,152	0	0	74,591	78,859
West South Central	176,361	183,149	149,034	154,201	142,410	148,940	149	150	467,955	486,439
Arkansas	14,435	15,031	9,112	9,420	13,030	13,655	0	0	36,577	38,105
Louisiana	24,250	24,936	18,740	18,785	26,088	28,261	9	10	69,087	71,992
Oklahoma	18,808	18,947	15,135	16,267	15,134	14,355	0	0	49,077	49,569
Texas	118,869	124,235	106,048	109,729	88,158	92,670	139	140	313,214	326,774
Mountain	78,102	78,692	74,829	75,774	63,889	63,383	139	120	216,959	217,968
Arizona	28,023	28,168	22,723	23,080	10,271	10,534	8	6	61,025	61,789
Colorado	14,756	14,769	15,545	15,944	12,163	12,069	86	69	42,550	42,852
Idaho	6,309	6,163	4,787	4,822	7,131	7,263	0	0	18,227	18,248
Montana	3,883	3,875	3,720	3,711	3,641	3,462	0	0	11,243	11,049
Nevada	10,377	10,946	9,436	9,355	9,436	9,114	6	6	29,255	29,422
New Mexico	5,328	5,255	7,005	6,908	6,594	6,112	0	0	18,927	18,275
Utah	7,335	7,495	8,872	9,125	6,958	7,089	39	38	23,203	23,747
Wyoming	2,092	2,020	2,741	2,828	7,695	7,739	0	0	12,527	12,586
Pacific Contiguous	107,313	108,661	118,872	122,448	62,819	67,126	668	584	289,672	298,819
California	66,882	68,827	84,742	87,923	35,459	37,615	575	559	187,657	194,923
Oregon	14,062	13,916	12,333	12,356	9,088	10,534	20	19	35,503	36,826
Washington	26,369	25,918	21,798	22,170	18,272	18,978	72	6	66,511	67,071
Pacific Noncontiguous	3,453	3,474	4,225	4,254	3,599	3,688	0	0	11,277	11,416
Alaska	1,423	1,450	1,997	1,987	915	1,020	0	0	4,335	4,458
Hawaii	2,030	2,024	2,228	2,267	2,684	2,667	0	0	6,942	6,958
U.S. Total	1,104,423	1,135,076	1,030,316	1,052,645	719,516	754,642	5,885	5,763	2,860,141	2,948,126

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2018 are final. Values for 2019 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, September 2019 and 2018 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	737	872	670	766	155	188	3	4	1,565	1,830
Connecticut	183	231	162	179	33	39	2	2	380	451
Maine	65	67	42	45	15	23	0	0	122	135
Massachusetts	342	404	338	404	66	83	1	1	748	893
New Hampshire	66	77	57	61	21	22	0	0	143	160
Rhode Island	55	62	45	51	8	9	0	0	109	123
Vermont	25	30	26	26	12	12	0	0	63	68
Middle Atlantic	1,809	2,084	1,722	1,876	412	455	37	39	3,980	4,454
New Jersey	388	423	396	407	57	62	2	2	843	895
New York	816	992	1,039	1,135	81	96	31	32	1,968	2,255
Pennsylvania	606	669	287	334	274	296	3	5	1,170	1,304
East North Central	1,991	2,042	1,579	1,607	1,039	1,145	3	4	4,612	4,798
Illinois	481	488	371	393	225	239	3	3	1,081	1,123
Indiana	339	357	227	230	247	280	0	0	813	867
Michigan	407	427	378	361	180	180	0	0	965	968
Ohio	514	528	380	405	228	291	0	0	1,123	1,223
Wisconsin	250	242	222	217	158	156	0	0	630	616
West North Central	1,072	1,046	899	874	596	615	0	0	2,568	2,535
Iowa	146	137	111	100	163	150	0	0	421	388
Kansas	178	159	154	149	68	79	0	0	399	387
Minnesota	223	239	211	216	135	153	0	0	568	608
Missouri	351	342	255	243	71	82	0	0	676	667
Nebraska	95	92	79	74	74	72	0	0	248	238
North Dakota	36	35	49	50	67	58	0	0	152	144
South Dakota	43	43	41	40	19	20	0	0	103	104
South Atlantic	4,182	4,056	2,703	2,698	775	818	13	9	7,673	7,581
Delaware	54	56	37	35	11	16	0	0	102	107
District of Columbia	29	30	78	83	1	1	6	3	114	117
Florida	1,548	1,448	845	819	108	115	1	1	2,501	2,383
Georgia	703	709	446	442	179	180	1	1	1,330	1,333
Maryland	276	299	235	258	23	28	4	3	538	587
North Carolina	649	610	421	403	151	148	0	0	1,222	1,161
South Carolina	384	359	211	202	141	154	0	0	736	715
Virginia	445	454	373	398	91	104	1	1	910	957
West Virginia	93	91	57	58	71	71	0	0	221	220
East South Central	1,340	1,267	940	927	472	507	0	0	2,753	2,702
Alabama	426	390	253	248	175	175	0	0	855	812
Kentucky	251	243	179	175	124	141	0	0	554	559
Mississippi	223	205	142	142	84	84	0	0	449	431
Tennessee	440	430	365	363	89	107	0	0	895	900
West South Central	2,772	2,455	1,611	1,500	937	903	1	1	5,321	4,859
Arkansas	191	179	104	88	96	90	0	0	391	357
Louisiana	330	307	208	199	146	171	0	0	684	677
Oklahoma	261	221	157	154	88	90	0	0	507	466
Texas	1,990	1,748	1,141	1,058	607	552	1	1	3,740	3,359
Mountain	1,125	1,138	867	869	488	491	1	1	2,481	2,499
Arizona	461	493	291	310	74	83	0	0	826	886
Colorado	219	208	190	189	105	106	1	1	515	504
Idaho	55	54	39	40	48	50	0	0	142	144
Montana	41	38	43	40	21	21	0	0	104	100
Nevada	157	162	101	81	87	82	0	0	344	326
New Mexico	83	75	84	83	43	43	0	0	211	201
Utah	89	88	90	95	51	48	0	0	231	231
Wyoming	21	20	29	30	58	58	0	0	109	107
Pacific Contiguous	2,111	1,704	2,205	1,853	837	823	7	6	5,160	4,385
California	1,751	1,351	1,879	1,554	682	628	6	5	4,318	3,538
Oregon	143	136	117	92	61	97	0	0	321	325
Washington	217	217	208	207	94	99	1	0	520	523
Pacific Noncontiguous	113	110	122	117	100	99	0	0	335	326
Alaska	33	32	43	39	18	18	0	0	94	89
Hawaii	80	79	79	78	82	80	0	0	241	237
U.S. Total	17,252	16,775	13,317	13,085	5,811	6,045	67	64	36,447	35,969

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2018 are final. Values for 2019 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.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through September 2019 and 2018 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	7,482	7,595	6,324	6,613	1,510	1,695	39	37	15,354	15,940
Connecticut	2,111	2,128	1,564	1,567	307	333	19	17	4,001	4,045
Maine	650	620	411	419	192	215	0	0	1,253	1,254
Massachusetts	3,265	3,383	3,135	3,406	629	750	16	17	7,046	7,555
New Hampshire	688	692	519	530	189	199	0	0	1,395	1,421
Rhode Island	502	488	459	460	83	85	4	3	1,048	1,036
Vermont	265	285	235	232	111	112	0	0	611	629
Middle Atlantic	16,326	17,066	14,328	15,152	3,624	3,935	327	335	34,606	36,488
New Jersey	3,632	3,621	3,586	3,642	523	558	20	22	7,761	7,843
New York	6,969	7,478	8,033	8,565	705	817	270	273	15,978	17,133
Pennsylvania	5,725	5,967	2,710	2,946	2,396	2,560	36	40	10,867	11,513
East North Central	18,959	19,778	14,038	14,379	9,564	10,480	36	32	42,596	44,669
Illinois	4,458	4,660	3,367	3,510	2,073	2,257	31	28	9,930	10,455
Indiana	3,099	3,249	1,959	1,963	2,283	2,497	2	2	7,343	7,710
Michigan	4,026	4,214	3,309	3,315	1,593	1,662	1	1	8,929	9,192
Ohio	4,938	5,259	3,431	3,628	2,218	2,703	2	2	10,589	11,592
Wisconsin	2,437	2,396	1,971	1,963	1,397	1,361	0	0	5,806	5,721
West North Central	9,713	10,305	7,635	7,906	4,996	5,245	3	3	22,347	23,459
Iowa	1,437	1,427	969	933	1,241	1,212	0	0	3,647	3,572
Kansas	1,357	1,509	1,224	1,333	603	673	0	0	3,184	3,516
Minnesota	2,218	2,297	1,821	1,865	1,216	1,277	2	2	5,257	5,441
Missouri	3,024	3,374	2,155	2,310	589	743	1	2	5,769	6,429
Nebraska	859	866	654	646	605	650	0	0	2,117	2,163
North Dakota	386	390	454	462	579	514	0	0	1,420	1,366
South Dakota	431	441	358	356	162	174	0	0	952	972
South Atlantic	34,101	33,784	22,659	22,479	6,672	7,098	87	77	63,519	63,438
Delaware	487	491	327	314	104	140	0	0	919	945
District of Columbia	259	252	729	738	12	12	28	23	1,027	1,026
Florida	11,517	11,031	6,930	6,683	949	994	5	5	19,401	18,713
Georgia	5,429	5,448	3,547	3,580	1,429	1,505	7	7	10,412	10,541
Maryland	2,793	2,874	2,208	2,336	215	240	33	29	5,250	5,479
North Carolina	5,332	5,278	3,337	3,246	1,257	1,321	1	1	9,927	9,845
South Carolina	3,066	3,082	1,729	1,733	1,209	1,285	0	0	6,004	6,099
Virginia	4,292	4,337	3,338	3,301	851	917	12	12	8,492	8,567
West Virginia	927	990	514	547	645	685	0	0	2,086	2,222
East South Central	10,624	10,726	7,530	7,621	4,171	4,413	0	0	22,325	22,761
Alabama	3,216	3,128	2,014	2,027	1,505	1,541	0	0	6,735	6,696
Kentucky	2,187	2,256	1,480	1,476	1,112	1,217	0	0	4,779	4,949
Mississippi	1,664	1,666	1,102	1,157	738	740	0	0	3,503	3,563
Tennessee	3,558	3,676	2,935	2,960	816	916	0	0	7,308	7,552
West South Central	19,683	19,729	12,147	12,755	7,851	8,136	10	13	39,692	40,632
Arkansas	1,427	1,494	793	743	787	784	0	0	3,006	3,021
Louisiana	2,313	2,409	1,644	1,674	1,358	1,519	1	1	5,316	5,603
Oklahoma	1,916	1,968	1,192	1,327	759	772	0	0	3,867	4,067
Texas	14,027	13,858	8,519	9,010	4,948	5,060	9	12	27,503	27,940
Mountain	9,373	9,442	7,239	7,313	4,093	4,164	13	11	20,719	20,930
Arizona	3,536	3,604	2,397	2,493	661	703	1	1	6,595	6,800
Colorado	1,830	1,794	1,608	1,595	891	904	8	6	4,337	4,299
Idaho	631	633	371	387	449	485	0	0	1,450	1,505
Montana	441	426	387	375	197	174	0	0	1,026	975
Nevada	1,243	1,294	759	729	599	590	1	1	2,601	2,613
New Mexico	677	671	698	697	360	360	0	0	1,735	1,728
Utah	780	789	753	764	422	425	4	4	1,959	1,982
Wyoming	236	231	266	273	514	524	0	0	1,017	1,028
Pacific Contiguous	17,196	17,189	17,333	17,447	6,205	6,473	59	50	40,793	41,159
California	13,110	13,111	14,330	14,420	4,747	4,968	51	48	32,237	32,546
Oregon	1,544	1,531	1,095	1,097	570	616	2	2	3,211	3,246
Washington	2,542	2,548	1,908	1,930	888	888	7	1	5,345	5,367
Pacific Noncontiguous	984	968	1,065	1,033	856	864	0	0	2,905	2,865
Alaska	325	318	400	365	157	179	0	0	882	861
Hawaii	659	650	665	668	699	686	0	0	2,023	2,004
U.S. Total	144,441	146,582	110,298	112,696	49,543	52,503	574	559	304,856	312,340

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Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, September 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	21.17	21.23	16.04	16.89	12.78	13.13	7.74	8.41	17.56	18.08
Connecticut	21.54	22.04	16.09	17.62	13.34	14.00	11.48	12.28	17.92	19.12
Maine	18.11	16.87	12.34	12.35	8.92	8.95	--	--	14.09	13.26
Massachusetts	22.02	22.12	16.69	17.60	14.13	14.91	4.78	5.36	18.35	18.97
New Hampshire	20.28	19.90	16.01	15.93	12.71	13.14	--	--	17.00	17.07
Rhode Island	22.65	22.32	15.52	16.83	14.80	15.20	18.03	17.13	18.39	19.08
Vermont	17.05	18.00	16.25	15.16	10.73	10.70	--	--	15.07	15.05
Middle Atlantic	16.18	16.36	13.08	13.23	6.45	6.85	11.73	11.64	12.82	13.14
New Jersey	15.48	15.47	12.49	12.41	10.13	10.26	9.13	9.05	13.46	13.46
New York	18.72	19.28	15.70	16.05	5.72	6.03	12.98	12.95	15.57	16.04
Pennsylvania	14.02	13.77	8.50	8.73	6.21	6.68	6.84	7.62	9.63	9.89
East North Central	13.16	12.96	10.07	10.18	6.77	7.02	7.13	7.30	9.99	10.01
Illinois	12.47	12.43	8.79	9.12	6.29	6.59	6.96	7.14	9.23	9.44
Indiana	12.22	12.63	10.65	10.85	7.20	7.34	10.84	10.38	9.75	9.90
Michigan	16.37	15.31	11.55	10.86	7.36	7.03	11.11	10.03	11.76	11.16
Ohio	11.84	11.63	9.29	10.07	5.91	6.88	6.67	8.00	9.13	9.57
Wisconsin	15.01	14.48	11.37	10.82	7.87	7.43	13.96	13.37	11.19	10.65
West North Central	12.50	12.52	10.11	10.03	7.83	7.70	10.15	10.97	10.24	10.12
Iowa	13.86	12.83	10.88	10.14	8.05	7.44	--	--	10.25	9.51
Kansas	12.77	13.09	10.36	10.50	7.23	7.89	--	--	10.47	10.65
Minnesota	14.02	14.34	11.25	11.28	7.82	8.00	9.63	10.73	10.96	11.07
Missouri	11.15	11.27	9.19	9.12	7.05	7.15	10.66	11.21	9.77	9.74
Nebraska	12.33	12.19	9.52	9.34	8.18	7.79	--	--	9.91	9.63
North Dakota	12.46	12.09	9.83	9.71	8.65	8.06	--	--	9.73	9.39
South Dakota	12.90	12.81	9.91	9.99	7.69	7.98	--	--	10.35	10.43
South Atlantic	12.07	11.85	9.35	9.16	6.59	6.69	8.07	8.08	10.16	9.97
Delaware	12.83	12.29	9.26	9.37	7.23	8.13	--	--	10.48	10.44
District of Columbia	12.78	12.56	12.04	11.78	7.87	8.40	8.86	9.98	11.93	11.88
Florida	12.11	11.47	9.47	8.97	7.80	7.60	8.44	8.29	10.83	10.24
Georgia	11.65	12.18	9.93	9.86	6.71	6.35	7.79	6.04	10.06	10.13
Maryland	12.83	13.28	9.45	10.22	7.54	7.95	7.23	7.51	10.76	11.38
North Carolina	11.80	11.39	9.02	8.47	6.61	6.89	7.97	7.79	9.80	9.47
South Carolina	12.87	12.45	10.65	9.79	6.06	6.14	--	--	10.09	9.59
Virginia	11.90	12.01	7.98	8.32	6.28	6.84	8.19	8.14	9.21	9.48
West Virginia	11.67	11.26	8.97	9.03	5.93	6.29	--	--	8.40	8.53
East South Central	11.22	11.18	10.54	10.42	5.97	5.92	--	--	9.57	9.38
Alabama	12.71	12.38	11.46	11.18	6.55	6.25	--	--	10.37	9.95
Kentucky	10.58	10.87	9.98	9.87	5.43	5.67	--	--	8.59	8.60
Mississippi	10.97	10.72	10.18	9.94	5.98	5.98	--	--	9.30	9.08
Tennessee	10.52	10.63	10.39	10.41	5.73	5.72	--	--	9.67	9.57
West South Central	11.29	10.98	8.47	8.09	5.70	5.24	6.36	8.04	8.86	8.36
Arkansas	10.05	10.07	8.57	7.50	6.25	5.62	13.22	11.39	8.41	7.84
Louisiana	9.68	9.54	8.59	8.41	4.82	5.19	9.02	8.25	7.72	7.62
Oklahoma	10.64	10.94	8.28	8.46	5.11	5.31	--	--	8.33	8.40
Texas	11.85	11.39	8.46	8.03	5.97	5.19	6.21	8.02	9.24	8.58
Mountain	12.22	12.20	9.91	9.79	6.59	6.71	9.65	9.84	9.78	9.79
Arizona	12.44	12.83	10.50	10.96	6.39	6.87	10.35	10.57	10.81	11.25
Colorado	12.91	12.53	11.03	10.32	7.24	7.57	9.09	9.40	10.56	10.28
Idaho	9.88	10.26	7.57	7.75	6.16	6.11	--	--	7.67	7.73
Montana	12.07	11.55	10.62	10.17	4.87	4.84	--	--	8.92	8.59
Nevada	12.16	11.70	8.61	7.54	7.98	7.68	9.55	9.67	9.70	9.21
New Mexico	12.95	12.98	9.78	10.19	5.36	5.93	--	--	9.11	9.50
Utah	10.93	10.45	8.89	8.66	6.30	5.91	10.66	10.49	8.73	8.40
Wyoming	12.09	12.17	9.99	9.71	6.69	6.81	--	--	8.11	8.15
Pacific Contiguous	17.71	16.47	16.46	14.71	11.28	10.80	9.55	8.95	15.73	14.32
California	20.72	19.31	19.32	17.45	15.26	14.40	9.55	8.94	19.02	17.41
Oregon	11.27	11.33	8.77	6.89	6.17	8.17	9.18	9.12	8.94	8.73
Washington	9.86	10.11	8.95	8.78	4.79	4.75	9.66	9.25	8.00	7.94
Pacific Noncontiguous	28.64	28.75	25.21	24.96	23.36	23.26	--	--	25.63	25.54
Alaska	23.89	22.59	20.44	18.71	17.59	15.61	--	--	20.83	19.10
Hawaii	31.17	32.28	28.89	30.01	25.21	26.16	--	--	28.17	29.23
U.S. Total	13.17	13.01	10.97	10.72	7.09	7.05	9.83	10.05	10.88	10.66

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 2018 are final. Values for 2019 are preliminary estimates based on a cutoff model sample.
See Technical Notes for a discussion of the sample design for the Form EIA-826.
Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.
Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through September 2019 and 2018 (Cents per Kilowatthour)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD	September 2019 YTD	September 2018 YTD
New England	21.23	20.61	16.32	16.43	12.99	13.20	9.48	8.91	17.85	17.64
Connecticut	22.13	21.19	17.06	16.63	13.75	13.77	14.15	12.37	18.99	18.37
Maine	17.87	16.85	12.85	12.53	9.44	9.36	--	--	14.13	13.45
Massachusetts	22.11	21.69	16.60	17.22	14.41	14.92	6.33	6.43	18.40	18.58
New Hampshire	20.07	19.57	15.98	15.76	13.10	13.41	--	--	17.20	16.95
Rhode Island	21.72	20.15	16.63	16.34	15.69	15.14	18.61	17.03	18.64	17.81
Vermont	17.02	17.94	15.92	15.19	10.79	10.66	--	--	15.05	15.10
Middle Atlantic	15.81	16.02	12.27	12.53	6.59	7.00	11.27	11.15	12.45	12.73
New Jersey	16.01	15.49	12.47	12.31	10.45	10.16	8.73	9.15	13.69	13.36
New York	17.95	18.61	14.12	14.67	5.60	6.10	12.45	12.17	14.46	15.00
Pennsylvania	13.70	13.90	8.71	8.94	6.40	6.86	7.27	7.69	9.81	10.13
East North Central	13.31	13.25	10.17	10.20	6.94	7.09	7.22	6.87	10.17	10.18
Illinois	12.75	12.66	8.95	9.12	6.57	6.76	7.04	6.65	9.49	9.58
Indiana	12.33	12.22	10.78	10.59	7.33	7.30	10.93	10.39	9.86	9.71
Michigan	15.79	15.56	11.39	11.16	7.28	7.13	10.42	10.85	11.69	11.47
Ohio	12.28	12.59	9.69	10.10	6.28	7.02	7.20	7.31	9.54	9.97
Wisconsin	14.63	14.04	11.08	10.71	7.77	7.36	13.91	13.85	11.07	10.62
West North Central	12.06	12.18	9.83	9.95	7.51	7.42	9.05	9.38	9.94	9.99
Iowa	13.18	12.49	10.53	9.95	7.04	6.77	--	--	9.66	9.23
Kansas	12.69	13.47	10.23	10.74	7.28	7.63	--	--	10.29	10.84
Minnesota	13.43	13.21	10.68	10.47	7.90	7.56	9.76	9.71	10.73	10.44
Missouri	11.11	11.64	9.16	9.68	6.87	7.37	8.30	9.03	9.73	10.21
Nebraska	10.96	10.81	9.07	8.91	7.83	7.77	--	--	9.30	9.15
North Dakota	10.60	10.37	9.14	9.15	8.49	8.01	--	--	9.20	8.97
South Dakota	11.62	11.64	9.49	9.63	7.82	7.83	--	--	9.95	10.00
South Atlantic	12.00	11.76	9.38	9.30	6.42	6.55	8.03	7.83	10.07	9.94
Delaware	12.56	12.42	9.63	9.50	7.53	7.93	--	--	10.60	10.47
District of Columbia	12.92	12.64	12.03	11.81	8.21	8.28	9.70	9.36	12.10	11.88
Florida	11.93	11.51	9.49	9.16	7.71	7.66	8.26	8.23	10.67	10.29
Georgia	11.75	11.79	9.77	9.87	6.02	6.09	5.96	5.68	9.79	9.82
Maryland	13.12	13.27	10.02	10.39	7.77	8.27	7.42	7.36	11.28	11.55
North Carolina	11.59	11.08	8.84	8.58	6.24	6.42	8.15	8.00	9.55	9.28
South Carolina	12.62	12.51	10.30	10.14	5.97	6.03	--	--	9.79	9.68
Virginia	12.02	11.82	8.22	8.33	6.85	6.86	8.23	8.24	9.56	9.54
West Virginia	11.10	11.29	8.95	9.28	5.96	6.48	--	--	8.37	8.81
East South Central	11.38	11.12	10.68	10.49	5.81	5.84	--	--	9.47	9.30
Alabama	12.73	12.24	11.58	11.23	6.10	6.04	--	--	10.00	9.69
Kentucky	10.62	10.55	9.92	9.70	5.40	5.67	--	--	8.52	8.52
Mississippi	11.33	11.10	10.49	10.38	5.94	5.96	--	--	9.32	9.24
Tennessee	10.83	10.66	10.60	10.49	5.80	5.67	--	--	9.80	9.58
West South Central	11.16	10.77	8.15	8.27	5.51	5.46	6.62	8.36	8.48	8.35
Arkansas	9.89	9.94	8.70	7.89	6.04	5.75	12.23	11.40	8.22	7.93
Louisiana	9.54	9.66	8.77	8.91	5.21	5.38	9.19	9.64	7.69	7.78
Oklahoma	10.19	10.39	7.88	8.16	5.01	5.38	--	--	7.88	8.20
Texas	11.80	11.15	8.03	8.21	5.61	5.46	6.43	8.26	8.78	8.55
Mountain	12.00	12.00	9.67	9.65	6.41	6.57	9.45	9.52	9.55	9.60
Arizona	12.62	12.80	10.55	10.80	6.44	6.67	10.03	10.24	10.81	11.01
Colorado	12.40	12.15	10.35	10.00	7.33	7.49	8.94	8.95	10.19	10.03
Idaho	10.00	10.27	7.74	8.03	6.29	6.67	--	--	7.96	8.25
Montana	11.36	10.98	10.41	10.10	5.42	5.03	--	--	9.12	8.82
Nevada	11.98	11.82	8.04	7.79	6.34	6.48	8.49	8.49	8.89	8.88
New Mexico	12.70	12.78	9.97	10.08	5.46	5.88	--	--	9.16	9.45
Utah	10.63	10.53	8.48	8.37	6.07	6.00	10.61	10.61	8.44	8.35
Wyoming	11.29	11.43	9.72	9.67	6.68	6.77	--	--	8.11	8.17
Pacific Contiguous	16.02	15.82	14.58	14.25	9.88	9.64	8.90	8.54	14.08	13.77
California	19.60	19.05	16.91	16.40	13.39	13.21	8.83	8.51	17.18	16.70
Oregon	10.98	11.00	8.88	8.88	6.27	5.85	9.15	9.17	9.04	8.81
Washington	9.64	9.83	8.75	8.71	4.86	4.68	9.42	9.30	8.04	8.00
Pacific Noncontiguous	28.51	27.85	25.21	24.28	23.78	23.44	--	--	25.76	25.09
Alaska	22.84	21.89	20.03	18.35	17.15	17.50	--	--	20.35	19.31
Hawaii	32.47	32.12	29.85	29.47	26.04	25.71	--	--	29.14	28.80
U.S. Total	13.08	12.91	10.71	10.71	6.89	6.96	9.76	9.69	10.66	10.59

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 2018 are final. Values for 2019 are preliminary estimates based on a cutoff model sample.
See Technical Notes for a discussion of the sample design for the Form EIA-826.
Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.
Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.7. Number of Ultimate Customers Served by Sector: 2009 - September 2019

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	133,893,727	18,605,494	841,217	83	153,340,521
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	133,302,851	18,552,103	839,688	82	152,694,724
February	132,923,916	18,440,773	812,793	82	152,177,564
March	133,853,008	18,575,048	823,134	82	153,251,272
April	133,418,177	18,526,643	824,972	82	152,769,874
May	134,122,207	18,613,539	851,941	82	153,587,769
June	133,935,717	18,615,455	859,690	83	153,410,945
July	133,883,566	18,624,056	861,839	83	153,369,544
August	134,434,222	18,686,200	867,791	83	153,988,296
Sept	133,791,468	18,594,124	845,094	83	153,230,769
October	134,378,003	18,717,582	845,719	83	153,941,387
November	134,155,859	18,636,312	824,731	83	153,616,985
December	134,524,515	18,682,971	836,593	83	154,044,162
Year 2019					
January	134,971,924	18,598,495	896,988	82	154,467,489
February	133,461,435	18,495,762	878,804	82	152,836,083
March	135,217,598	18,592,872	884,084	82	154,694,636
April	134,970,942	18,596,511	893,159	82	154,460,694
May	135,484,712	18,667,363	914,115	81	155,066,271
June	135,132,927	18,591,701	919,732	81	154,644,441
July	135,510,803	18,690,105	949,264	81	155,150,253
August	135,591,206	18,677,879	944,662	81	155,213,828
Sept	135,224,385	18,645,517	936,680	81	154,806,663
Rolling 12 Months Ending in September					
2018	133,600,562	18,543,135	841,423	83	152,985,203
2019	134,885,359	18,632,756	893,711	82	154,411,908

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 2018 and prior years are final. Values for 2019 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: September 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	6,410,674	6,366,631	900,872	892,822	19,491	22,874	6	7	7,331,043	7,282,334
Connecticut	1,512,722	1,502,562	154,487	153,973	4,131	4,293	3	4	1,671,343	1,660,832
Maine	700,853	693,715	97,676	94,262	2,695	2,903	0	0	801,224	790,880
Massachusetts	2,804,174	2,783,457	420,463	418,706	7,629	10,528	2	2	3,232,268	3,212,693
New Hampshire	628,926	622,527	108,941	107,896	3,143	3,158	0	0	741,010	733,581
Rhode Island	446,069	448,438	61,002	60,815	1,753	1,787	1	1	508,825	511,041
Vermont	317,930	315,932	58,303	57,170	140	205	0	0	376,373	373,307
Middle Atlantic	16,260,627	16,163,722	2,371,520	2,351,610	33,163	30,349	19	20	18,665,329	18,545,701
New Jersey	3,609,873	3,575,031	526,358	524,795	11,775	11,874	6	6	4,148,012	4,111,706
New York	7,240,534	7,198,372	1,126,314	1,110,189	6,565	6,856	8	8	8,373,421	8,315,425
Pennsylvania	5,410,220	5,390,319	718,848	716,626	14,823	11,619	5	6	6,143,896	6,118,570
East North Central	20,397,611	20,176,411	2,526,918	2,501,481	47,656	54,091	10	9	22,972,195	22,731,992
Illinois	5,339,350	5,284,187	622,182	616,171	3,996	5,721	3	3	5,965,531	5,906,082
Indiana	2,888,375	2,866,467	359,521	355,740	16,092	17,778	1	1	3,263,989	3,239,986
Michigan	4,415,278	4,361,876	550,853	542,641	NM	6,013	2	2	4,971,713	4,910,532
Ohio	5,004,792	4,960,110	632,651	631,564	16,973	18,658	2	2	5,654,418	5,610,334
Wisconsin	2,749,816	2,703,771	361,711	355,365	NM	5,921	2	1	3,116,544	3,065,058
West North Central	9,640,820	9,504,052	1,479,449	1,458,771	117,073	126,973	3	3	11,237,345	11,089,799
Iowa	1,408,041	1,385,311	247,864	240,260	NM	7,978	0	0	1,662,843	1,633,549
Kansas	1,287,734	1,268,110	236,230	234,846	25,700	24,239	0	0	1,549,664	1,527,195
Minnesota	2,440,574	2,421,829	294,796	296,334	NM	9,569	1	1	2,743,876	2,727,733
Missouri	2,838,672	2,795,307	386,852	385,337	6,555	8,037	2	2	3,232,081	3,188,683
Nebraska	870,355	850,006	162,555	154,669	57,307	64,057	0	0	1,090,217	1,068,732
North Dakota	386,994	382,641	75,376	75,281	8,942	9,040	0	0	471,312	466,962
South Dakota	408,450	400,848	75,776	72,044	NM	4,053	0	0	487,352	476,945
South Atlantic	28,463,683	28,030,848	3,839,517	3,801,545	79,075	83,950	13	13	32,382,288	31,916,356
Delaware	436,983	433,851	55,490	55,222	568	833	0	0	493,041	489,906
District of Columbia	282,991	275,959	26,452	26,426	1	1	3	3	309,447	302,389
Florida	9,567,746	9,465,719	1,253,255	1,233,802	20,456	21,390	2	2	10,841,459	10,720,913
Georgia	4,469,596	4,368,410	589,080	580,923	19,913	23,147	1	1	5,078,590	4,972,481
Maryland	2,358,063	2,334,820	255,855	254,566	8,806	8,819	5	5	2,622,729	2,598,210
North Carolina	4,661,318	4,562,100	706,862	696,696	9,819	10,033	1	1	5,378,000	5,268,830
South Carolina	2,348,011	2,295,586	373,717	377,624	4,239	4,565	0	0	2,725,967	2,677,775
Virginia	3,483,154	3,437,276	433,493	431,728	3,829	3,699	1	1	3,920,477	3,872,704
West Virginia	855,821	857,127	145,313	144,558	11,444	11,463	0	0	1,012,578	1,013,148
East South Central	8,577,755	8,393,006	1,417,341	1,406,684	21,717	25,671	0	0	10,016,813	9,825,361
Alabama	2,284,080	2,233,191	371,353	371,374	8,230	7,346	0	0	2,663,663	2,611,911
Kentucky	2,020,240	1,981,655	308,875	305,813	5,421	6,784	0	0	2,334,536	2,294,252
Mississippi	1,336,022	1,292,219	239,737	236,946	7,215	10,533	0	0	1,582,974	1,539,698
Tennessee	2,937,413	2,885,941	497,376	492,551	851	1,008	0	0	3,435,640	3,379,500
West South Central	16,341,660	16,391,179	2,254,483	2,362,265	322,840	206,327	6	6	18,918,989	18,959,777
Arkansas	1,412,056	1,391,218	193,935	196,951	40,032	40,569	2	2	1,646,025	1,628,740
Louisiana	2,123,910	2,088,124	292,443	293,187	18,572	19,582	1	1	2,434,926	2,400,894
Oklahoma	1,809,091	1,768,093	287,261	283,388	19,591	18,692	0	0	2,115,943	2,070,173
Texas	10,996,603	11,143,744	1,480,844	1,588,739	244,645	127,484	3	3	12,722,095	12,859,970
Mountain	10,003,106	9,854,400	1,418,905	1,417,304	92,836	98,296	5	5	11,514,852	11,370,005
Arizona	2,846,750	2,809,462	330,346	322,647	NM	7,778	2	2	3,183,497	3,139,889
Colorado	2,372,371	2,333,572	369,258	376,668	NM	16,156	1	1	2,756,575	2,726,397
Idaho	764,687	746,758	112,615	111,179	28,997	28,652	0	0	906,299	886,589
Montana	519,759	510,280	112,725	108,904	NM	11,940	0	0	642,288	631,124
Nevada	1,208,604	1,197,065	167,337	165,407	NM	3,592	1	1	1,379,451	1,366,065
New Mexico	912,076	889,880	140,961	143,792	NM	9,402	0	0	1,061,767	1,043,074
Utah	1,102,080	1,094,835	126,208	130,374	10,503	9,765	1	1	1,238,792	1,234,975
Wyoming	276,779	272,548	59,455	58,333	9,949	11,011	0	0	346,183	341,892
Pacific Contiguous	18,398,371	18,187,297	2,321,582	2,287,794	200,572	194,332	19	20	20,920,544	20,669,443
California	13,525,788	13,374,598	1,680,457	1,667,525	144,611	141,152	12	12	15,350,868	15,183,287
Oregon	1,783,299	1,742,747	241,900	236,043	27,051	25,830	2	2	2,052,252	2,004,622
Washington	3,089,284	3,069,952	399,225	384,226	28,910	27,350	5	6	3,517,424	3,481,534
Pacific Noncontiguous	730,078	723,922	114,930	113,848	NM	NM	0	0	847,265	840,001
Alaska	291,717	287,822	55,008	54,235	NM	NM	0	0	348,163	343,469
Hawaii	438,361	436,100	59,922	59,613	819	819	0	0	499,102	496,532
U.S. Total	135,224,385	133,791,468	18,645,517	18,594,124	936,680	845,094	81	83	154,806,663	153,230,769

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 2018 are final. Values for 2019 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), August 2019 to September 2019

		As of End of August 2019	Activity During September 2019 as Reported to EIA		As of End of September 2019	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	98,925.3	567.5	0.0	99,492.8	567.5	5,104.4	9,579.6	929.1	12,562.0	0.0	85.0	929.1	12,477.0	100,421.9	111,969.8
..... 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	98,954.6	567.5	0.0	99,522.1	567.5	5,104.4	9,579.6	929.1	12,562.0	0.0	85.0	929.1	12,477.0	100,451.2	111,999.1
..... Solar Photovoltaic	Utility Scale Facilities	32,157.0	220.6	0.0	32,377.6	220.6	2,257.1	4,388.1	1,063.4	9,412.3	0.0	0.0	1,063.4	9,412.3	33,441.0	41,789.9
..... 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	33,914.9	220.6	0.0	34,135.5	220.6	2,257.1	4,388.1	1,063.4	9,412.3	0.0	0.0	1,063.4	9,412.3	35,198.9	43,547.8
..... Conventional Hydroelectric	Utility Scale Facilities	79,778.2	0.5	0.7	79,778.0	-0.2	-93.8	26.5	1.5	225.8	0.0	12.2	1.5	213.6	79,779.5	79,991.6
..... Wood/Wood Waste Biomass	Utility Scale Facilities	8,518.6	0.0	89.3	8,429.3	-89.3	-265.3	-319.4	116.0	130.5	0.0	0.0	116.0	130.5	8,545.3	8,559.8
..... Landfill Gas	Utility Scale Facilities	2,041.1	0.0	11.7	2,029.4	-11.7	-22.8	-26.3	1.4	5.0	0.0	64.9	1.4	-59.9	2,030.8	1,969.5
..... Municipal Solid Waste	Utility Scale Facilities	2,189.3	0.0	0.0	2,189.3	0.0	-44.8	-44.8	0.0	0.0	0.0	0.0	0.0	0.0	2,189.3	2,189.3
..... Other Waste Biomass	Utility Scale Facilities	737.7	1.7	0.0	739.4	1.7	-12.9	-13.3	0.0	48.2	0.0	6.5	0.0	41.7	739.4	781.1
..... Biomass Sources Subtotal	Utility Scale Facilities	13,486.7	1.7	101.0	13,387.4	-99.3	-345.8	-403.8	117.4	183.7	0.0	71.4	117.4	112.3	13,504.8	13,499.7
..... Geothermal	Utility Scale Facilities	2,454.9	0.0	0.0	2,454.9	0.0	10.6	62.7	0.0	0.0	0.0	0.0	0.0	0.0	2,454.9	2,454.9
... Renewable Sources Subtotal	**Utility Scale Facilities**	**228,589.3**	**790.3**	**101.7**	**229,277.9**	**688.6**	**6,932.5**	**13,653.1**	**2,111.4**	**22,383.8**	**0.0**	**168.6**	**2,111.4**	**22,215.2**	**231,389.3**	**251,493.1**
..... Natural Gas Fired Combined Cycle	Utility Scale Facilities	268,908.8	0.0	0.0	268,908.8	0.0	5,046.2	9,955.4	723.7	7,410.8	0.0	703.0	723.7	6,707.8	269,632.5	275,616.6
..... Natural Gas Fired Combustion Turbine	Utility Scale Facilities	128,759.7	77.5	40.0	128,797.2	37.5	1,161.4	1,650.9	65.8	3,011.8	34.0	446.0	31.8	2,565.8	128,829.0	131,363.0
..... Natural Gas Steam Turbine	Utility Scale Facilities	73,673.3	0.0	0.0	73,673.3	0.0	-168.3	-1,977.3	0.0	0.0	480.0	1,835.9	-480.0	-1,835.9	73,193.3	71,837.4
..... Natural Gas Internal Combustion Engine	Utility Scale Facilities	4,895.1	0.0	0.0	4,895.1	0.0	279.5	300.8	19.6	233.3	0.0	23.8	19.6	209.5	4,914.7	5,104.6
..... 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	175.0	0.0	0.0	175.0	0.0	3.7	6.2	0.0	51.9	0.0	0.0	0.0	51.9	175.0	226.9
..... Natural Gas Subtotal	Utility Scale Facilities	476,521.9	77.5	40.0	476,559.4	37.5	6,322.5	9,936.0	809.1	10,707.8	514.0	3,008.7	295.1	7,699.1	476,854.5	484,258.5
..... Conventional Steam Coal	Utility Scale Facilities	234,356.7	0.0	100.0	234,256.7	-100.0	-7,772.9	-10,100.7	0.0	48.0	0.0	9,434.9	0.0	-9,386.9	234,256.7	224,869.8
..... 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	235,112.7	0.0	100.0	235,012.7	-100.0	-7,772.9	-10,100.7	0.0	48.0	0.0	9,434.9	0.0	-9,386.9	235,012.7	225,625.8
..... Petroleum Coke	Utility Scale Facilities	1,532.2	0.0	67.0	1,465.2	-67.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,465.2	1,465.2
..... Petroleum Liquids	Utility Scale Facilities	30,589.0	19.8	0.0	30,608.8	19.8	-144.2	-1,844.3	0.0	5.9	0.0	58.2	0.0	-52.3	30,608.8	30,556.5
..... Other Gases	Utility Scale Facilities	2,548.9	0.0	0.0	2,548.9	0.0	5.0	5.0	0.0	5.0	0.0	0.0	0.0	5.0	2,548.9	2,553.9
... Fossil Fuels Subtotal	**Utility Scale Facilities**	**746,304.7**	**97.3**	**207.0**	**746,195.0**	**-109.7**	**-1,589.6**	**-2,004.0**	**809.1**	**10,766.7**	**514.0**	**12,501.8**	**295.1**	**-1,735.1**	**746,490.1**	**744,459.9**
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,909.2	0.0	0.0	22,909.2	0.0	79.0	79.0	0.0	191.6	0.0	0.0	0.0	191.6	22,909.2	23,100.8
..... 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	990.6	12.4	0.0	1,003.0	12.4	150.9	254.1	4.3	93.5	0.0	0.0	4.3	93.5	1,007.3	1,096.5
... Energy Storage Subtotal	**Utility Scale Facilities**	**23,946.8**	**12.4**	**0.0**	**23,959.2**	**12.4**	**229.9**	**333.1**	**4.3**	**285.1**	**0.0**	**0.0**	**4.3**	**285.1**	**23,963.5**	**24,244.3**
... Nuclear	**Utility Scale Facilities**	**98,908.9**	**0.0**	**802.8**	**98,106.1**	**-802.8**	**-1,326.8**	**-1,171.8**	**0.0**	**0.0**	**0.0**	**1,018.5**	**0.0**	**-1,018.5**	**98,106.1**	**97,087.6**
... All Other	**Utility Scale Facilities**	**1,495.5**	**0.0**	**0.0**	**1,495.5**	**0.0**	**47.9**	**47.8**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**1,495.5**	**1,495.5**
TOTAL	**UTILITY SCALE FACILITIES**	**1,099,245.2**	**900.0**	**1,111.5**	**1,099,033.7**	**-211.5**	**4,293.9**	**10,858.2**	**2,924.8**	**33,435.6**	**514.0**	**13,688.9**	**2,410.8**	**19,746.7**	**1,101,444.5**	**1,118,780.4**
..... Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	21,836.7			22,148.2	311.5	2,601.1	3,367.3								
..... Estimated Total Solar Photovoltaic	All Facilities	53,993.7			54,525.8	532.1	4,858.2	7,755.4								
... Estimated Total Solar	**All Facilities**	**55,751.6**			**56,283.7**	**532.1**	**4,858.2**	**7,755.4**								

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 - September 2019

Period	Utility Solar Photovoltaic	Estimated Small Scale Solar Photovoltaic	Estimated Total Solar Photovoltaic
Annual Totals			
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
2018	30,120.5	19,547.1	49,667.6
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	25,968.4	16,647.9	42,616.3
February	26,067.6	16,888.9	42,956.5
March	26,592.1	17,172.4	43,764.5
April	26,859.7	17,431.2	44,290.9
May	27,291.3	17,714.7	45,006.0
June	27,451.7	17,988.5	45,440.2
July	27,590.1	18,239.9	45,830.0
August	27,674.0	18,519.6	46,193.6
Sept	27,989.5	18,780.9	46,770.4
October	28,158.3	19,059.8	47,218.1
November	28,690.2	19,320.0	48,010.2
December	30,120.5	19,547.1	49,667.6
Year 2019			
January	30,815.5	19,773.0	50,588.5
February	31,016.3	20,010.3	51,026.6
March	31,234.4	20,327.0	51,561.4
April	31,323.5	20,605.7	51,929.2
May	31,385.7	20,915.1	52,300.8
June	31,698.8	21,181.3	52,880.1
July	31,929.4	21,534.6	53,464.0
August	32,157.0	21,836.7	53,993.7
Sept	32,377.6	22,148.2	54,525.8

Values for 2018 are final. Values for 2019 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 - September 2019

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
2018	11,720.4	6,271.4	1,555.4	19,547.1
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	9,817.0	5,460.2	1,370.7	16,647.9
February	9,977.5	5,530.9	1,380.4	16,888.9
March	10,144.5	5,629.9	1,398.0	17,172.4
April	10,301.4	5,712.2	1,417.5	17,431.2
May	10,476.8	5,801.6	1,436.2	17,714.7
June	10,643.5	5,891.0	1,454.0	17,988.5
July	10,810.7	5,967.0	1,462.2	18,239.9
August	10,991.8	6,055.4	1,472.4	18,519.6
Sept	11,157.7	6,132.3	1,491.0	18,780.9
October	11,354.3	6,204.2	1,501.4	19,059.8
November	11,529.1	6,261.2	1,529.7	19,320.0
December	11,720.4	6,271.4	1,555.4	19,547.1
Year 2019				
January	11,898.3	6,295.4	1,579.3	19,773.0
February	12,069.7	6,350.1	1,590.5	20,010.3
March	12,270.7	6,445.7	1,610.7	20,327.0
April	12,454.0	6,511.1	1,640.5	20,605.7
May	12,650.2	6,596.9	1,668.0	20,915.1
June	12,840.4	6,651.6	1,689.3	21,181.3
July	13,096.0	6,739.8	1,698.9	21,534.6
August	13,308.1	6,814.3	1,714.3	21,836.7
Sept	13,525.8	6,885.2	1,737.2	22,148.2

Values for 2018 are final. Values for 2019 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, September 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	5,901.5	5,767.0	24,190.7	23,154.6	1,797.4	1,797.4	52.2	28.7	3,324.5	4,003.5	48.0	48.0	35,314.3	34,799.2
Connecticut	412.6	390.6	7,870.6	7,290.6	29.4	29.4	1.6	1.6	2,073.1	2,073.1	26.0	26.0	10,413.3	9,811.3
Maine	2,292.2	2,346.5	2,478.8	2,574.8	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,809.2	4,959.5
Massachusetts	1,426.9	1,349.3	9,621.4	9,069.3	1,768.0	1,768.0	23.5	7.9	0.0	679.0	0.0	0.0	12,839.8	12,873.5
New Hampshire	928.1	928.1	2,289.9	2,289.9	0.0	0.0	0.0	0.0	1,251.4	1,251.4	0.0	0.0	4,469.4	4,469.4
Rhode Island	163.5	113.3	1,832.1	1,832.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,995.6	1,945.4
Vermont	678.2	639.2	97.9	97.9	0.0	0.0	10.9	3.0	0.0	0.0	0.0	0.0	787.0	740.1
Middle Atlantic	11,346.4	11,063.4	73,000.6	71,837.5	3,411.6	3,411.6	143.5	76.9	17,897.4	18,700.2	11.2	11.2	105,810.7	105,100.8
New Jersey	1,048.1	978.5	12,160.5	12,437.7	420.0	420.0	42.1	2.5	3,500.2	3,500.2	11.2	11.2	17,182.1	17,350.1
New York	7,438.0	7,232.0	26,967.1	26,949.6	1,408.6	1,408.6	53.0	26.0	5,403.0	5,403.0	0.0	0.0	41,269.7	41,019.2
Pennsylvania	2,860.3	2,852.9	33,873.0	32,450.2	1,583.0	1,583.0	48.4	48.4	8,994.2	9,797.0	0.0	0.0	47,358.9	46,731.5
East North Central	12,929.8	12,128.1	111,448.7	112,069.3	2,231.0	2,152.0	189.7	168.7	19,034.4	19,034.4	187.1	188.1	146,020.7	145,740.6
Illinois	4,967.2	4,570.3	29,069.3	29,055.3	0.0	0.0	132.7	112.7	11,582.4	11,582.4	78.0	78.0	45,829.6	45,398.7
Indiana	2,662.5	2,437.3	23,932.6	23,928.4	0.0	0.0	23.0	22.0	0.0	0.0	88.0	89.0	26,706.1	26,476.7
Michigan	2,993.1	2,830.6	20,215.1	20,743.2	2,231.0	2,152.0	1.0	1.0	4,122.2	4,122.2	0.0	0.0	29,562.4	29,849.0
Ohio	1,069.5	1,051.8	25,170.9	25,070.9	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	28,407.4	28,289.7
Wisconsin	1,237.5	1,238.1	13,060.8	13,271.5	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,515.2	15,726.5
West North Central	30,557.2	26,940.3	59,295.1	60,836.5	657.0	657.0	20.1	3.2	5,443.4	5,443.4	22.8	22.8	95,995.6	93,903.2
Iowa	8,973.1	7,316.9	9,808.4	9,807.9	0.0	0.0	1.1	0.0	601.4	601.4	0.0	0.0	19,384.0	17,726.2
Kansas	6,159.6	5,135.9	9,028.4	9,811.4	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	16,413.8	16,173.1
Minnesota	5,296.9	5,068.9	10,269.5	10,299.1	0.0	0.0	16.0	1.0	1,657.0	1,657.0	16.7	16.7	17,256.1	17,042.7
Missouri	1,579.0	1,581.4	17,661.9	18,391.2	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,090.1	21,821.8
Nebraska	2,330.2	1,806.8	6,202.0	6,202.0	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	9,302.2	8,778.8
North Dakota	3,741.6	3,593.6	4,633.6	4,633.6	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	8,380.5	8,232.5
South Dakota	2,476.8	2,436.8	1,691.3	1,691.3	0.0	0.0	0.8	0.0	0.0	0.0	0.0	0.0	4,168.9	4,128.1
South Atlantic	20,825.6	19,413.6	161,083.0	161,818.7	7,905.2	7,905.2	76.5	72.5	24,706.6	24,706.6	408.7	408.7	215,005.6	214,325.3
Delaware	48.0	47.5	3,330.4	3,330.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,378.4	3,377.9
District of Columbia	18.9	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	27.9	32.0
Florida	3,208.3	2,555.0	52,911.8	52,436.5	0.0	0.0	14.0	14.0	3,626.0	3,626.0	348.7	348.7	60,108.8	58,980.2
Georgia	4,036.2	4,010.5	26,068.1	27,050.6	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	0.0	0.0	36,028.5	36,985.3
Maryland	1,213.5	1,183.4	11,667.5	11,840.8	0.0	0.0	7.0	7.0	1,725.8	1,725.8	6.0	6.0	14,619.8	14,763.0
North Carolina	6,871.5	6,291.0	22,127.1	22,120.5	86.0	86.0	1.0	1.0	5,149.6	5,149.6	54.0	54.0	34,289.2	33,702.1
South Carolina	2,336.1	2,140.2	12,171.3	12,164.3	2,716.0	2,716.0	4.0	0.0	6,576.2	6,576.2	0.0	0.0	23,803.6	23,596.7
Virginia	2,066.0	2,135.9	19,019.9	19,092.5	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,894.9	28,037.4
West Virginia	1,027.1	1,027.1	13,777.9	13,774.1	0.0	0.0	49.5	49.5	0.0	0.0	0.0	0.0	14,854.5	14,850.7
East South Central	8,822.6	8,727.4	62,692.3	64,952.7	1,616.3	1,616.3	1.0	1.0	11,449.1	11,139.1	1.4	1.4	84,582.7	86,437.9
Alabama	4,090.8	4,071.7	19,552.0	20,660.4	0.0	0.0	1.0	1.0	5,525.4	5,215.4	0.0	0.0	29,169.2	29,948.5
Kentucky	1,246.4	1,245.4	18,290.3	18,874.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19,536.7	20,119.7
Mississippi	463.0	463.0	12,659.7	13,227.7	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	14,525.1	15,093.1
Tennessee	3,022.4	2,947.3	12,190.3	12,190.3	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,351.7	21,276.6
West South Central	41,335.6	37,055.7	140,283.8	138,995.0	286.0	286.0	131.7	99.8	8,910.7	8,910.7	560.4	512.5	191,508.2	185,859.7
Arkansas	1,707.1	1,696.2	11,219.7	11,219.7	28.0	28.0	12.0	0.0	1,817.8	1,817.8	0.0	0.0	14,784.6	14,761.7
Louisiana	615.5	683.2	21,028.4	20,067.9	0.0	0.0	0.5	0.5	2,132.9	2,132.9	336.4	288.5	24,113.7	23,173.0
Oklahoma	9,041.0	8,661.7	18,111.5	18,102.0	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,410.5	27,021.7
Texas	29,972.0	26,014.6	89,924.2	89,605.4	0.0	0.0	119.2	99.3	4,960.0	4,960.0	224.0	224.0	125,199.4	120,903.3
Mountain	27,780.7	26,362.4	62,446.2	62,242.1	778.8	778.8	54.8	35.6	3,937.0	3,937.0	123.0	122.1	95,120.5	93,478.0
Arizona	5,132.0	5,091.1	19,698.8	19,395.3	216.3	216.3	42.0	32.0	3,937.0	3,937.0	0.0	0.0	29,026.1	28,671.7
Colorado	4,965.7	4,288.6	10,963.0	11,063.0	562.5	562.5	9.2	1.0	0.0	0.0	9.1	9.1	16,509.5	15,924.2
Idaho	4,071.9	4,068.5	1,127.1	1,127.1	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,213.8	5,210.4
Montana	3,574.6	3,491.2	2,744.9	2,744.9	0.0	0.0	0.0	0.0	0.0	0.0	40.0	40.0	6,359.5	6,276.1
Nevada	3,775.4	3,620.3	7,821.6	7,821.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,603.5	11,448.4
New Mexico	2,724.2	2,407.8	5,956.3	5,955.7	0.0	0.0	3.6	2.6	0.0	0.0	0.0	0.0	8,684.1	8,366.1
Utah	1,602.5	1,600.5	7,360.2	7,360.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2	40.2	9,002.9	9,000.9
Wyoming	1,934.4	1,794.4	6,774.3	6,774.3	0.0	0.0	0.0	0.0	0.0	0.0	12.4	11.5	8,721.1	8,580.2
Pacific Contiguous	68,507.7	66,986.1	47,529.7	48,074.2	4,225.9	4,225.9	272.3	222.3	3,403.0	3,403.0	106.3	106.3	124,044.9	123,017.8
California	31,582.9	30,123.3	38,461.8	39,006.3	3,911.9	3,911.9	261.1	211.1	2,240.0	2,240.0	106.3	106.3	76,564.0	75,598.9
Oregon	12,253.8	12,245.7	4,326.1	4,326.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,584.9	16,576.8
Washington	24,671.0	24,617.1	4,741.8	4,741.8	314.0	314.0	6.2	6.2	1,163.0	1,163.0	0.0	0.0	30,896.0	30,842.1
Pacific Noncontiguous	1,270.8	1,180.8	4,224.9	4,218.4	0.0	0.0	108.2	87.2	0.0	0.0	26.6	26.6	5,630.5	5,513.0
Alaska	538.2	538.2	2,166.6	2,160.1	0.0	0.0	47.2	46.2	0.0	0.0	0.0	0.0	2,752.0	2,744.5
Hawaii	732.6	642.6	2,058.3	2,058.3	0.0	0.0	61.0	41.0	0.0	0.0	26.6	26.6	2,878.5	2,768.5
U.S. Total	229,277.9	215,624.8	746,195.0	748,199.0	22,909.2	22,830.2	1,050.0	795.9	98,106.1	99,277.9	1,495.5	1,447.7	1,099,033.7	1,088,175.5

NM = Not meaningful due to large relative standard error.
Values for 2018 are final. Values for 2019 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, September 2019 and 2018 (Megawatts)

Census Division and State	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	1,424.8	1,403.8	1,034.5	866.0	0.0	0.0	1,961.6	1,959.5	1,480.6	1,537.7	0.0	0.0	5,901.5	5,767.0	2,450.0	2,216.5	3,484.5	3,082.5	3,484.5	3,082.5
Connecticut	1.0	1.0	86.8	64.8	0.0	0.0	122.2	122.2	202.6	202.6	0.0	0.0	412.6	390.6	485.5	400.8	572.3	465.6	572.3	465.6
Maine	921.6	921.6	5.6	5.6	0.0	0.0	735.2	732.4	629.8	686.9	0.0	0.0	2,292.2	2,346.5	55.6	41.2	61.2	46.8	61.2	46.8
Massachusetts	96.1	96.1	779.2	700.9	0.0	0.0	266.3	267.0	285.3	285.3	0.0	0.0	1,426.9	1,349.3	1,565.7	1,529.2	2,344.9	2,230.1	2,344.9	2,230.1
New Hampshire	183.1	183.1	0.0	0.0	0.0	0.0	504.0	504.0	241.0	241.0	0.0	0.0	928.1	928.1	95.4	81.3	95.4	81.3	95.4	81.3
Rhode Island	72.8	51.8	47.9	18.7	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	163.5	113.3	132.5	65.1	180.4	83.8	180.4	83.8
Vermont	150.2	150.2	115.0	76.0	0.0	0.0	331.2	331.2	81.8	81.8	0.0	0.0	678.2	639.2	115.3	98.9	230.3	174.9	230.3	174.9
Middle Atlantic	3,363.3	3,283.4	1,255.0	1,028.4	0.0	0.0	5,473.2	5,473.2	1,254.9	1,278.4	0.0	0.0	11,346.4	11,063.4	3,383.0	2,907.1	4,638.0	3,935.5	4,638.0	3,935.5
New Jersey	7.6	7.6	817.5	731.3	0.0	0.0	12.3	12.3	210.7	227.3	0.0	0.0	1,048.1	978.5	1,610.7	1,413.1	2,428.2	2,144.4	2,428.2	2,144.4
New York	1,985.7	1,905.8	370.1	240.8	0.0	0.0	4,561.3	4,561.3	520.9	524.1	0.0	0.0	7,438.0	7,232.0	1,412.2	1,181.0	1,782.3	1,421.8	1,782.3	1,421.8
Pennsylvania	1,370.0	1,370.0	67.4	56.3	0.0	0.0	899.6	899.6	523.3	527.0	0.0	0.0	2,860.3	2,852.9	360.1	313.0	427.5	369.3	427.5	369.3
East North Central	10,332.1	9,574.2	502.1	441.1	0.0	0.0	859.9	859.9	1,235.7	1,252.9	0.0	0.0	12,929.8	12,128.1	561.8	370.9	1,063.9	812.0	1,063.9	812.0
Illinois	4,803.7	4,406.8	40.6	40.6	0.0	0.0	34.1	34.1	88.8	88.8	0.0	0.0	4,967.2	4,570.3	158.7	67.4	199.3	108.0	199.3	108.0
Indiana	2,309.8	2,109.4	221.5	196.7	0.0	0.0	60.4	60.4	70.8	70.8	0.0	0.0	2,662.5	2,437.3	92.1	70.4	313.6	267.1	313.6	267.1
Michigan	2,061.8	1,900.5	100.2	98.2	0.0	0.0	269.9	269.9	561.2	562.0	0.0	0.0	2,993.1	2,830.6	85.7	62.1	185.9	160.3	185.9	160.3
Ohio	718.4	718.4	99.4	81.7	0.0	0.0	101.9	101.9	149.8	149.8	0.0	0.0	1,069.5	1,051.8	150.2	113.0	249.6	194.7	249.6	194.7
Wisconsin	438.4	439.1	40.4	23.9	0.0	0.0	393.6	393.6	365.1	381.5	0.0	0.0	1,237.5	1,238.1	75.1	58.0	115.5	81.9	115.5	81.9
West North Central	25,847.9	22,320.9	951.2	769.1	0.0	0.0	3,293.7	3,293.7	464.4	556.6	0.0	0.0	30,557.2	26,940.3	414.0	314.7	1,365.2	1,083.8	1,365.2	1,083.8
Iowa	8,791.8	7,140.2	13.5	8.9	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,973.1	7,316.9	109.7	86.8	123.2	95.7	123.2	95.7
Kansas	6,133.4	5,115.7	10.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	6,159.6	5,135.9	23.7	17.6	33.9	21.8	33.9	21.8
Minnesota	3,850.5	3,703.9	846.1	674.9	0.0	0.0	205.9	205.9	394.4	484.2	0.0	0.0	5,296.9	5,068.9	74.1	56.1	920.2	731.0	920.2	731.0
Missouri	954.3	954.3	62.1	62.1	0.0	0.0	548.5	548.5	14.1	16.5	0.0	0.0	1,579.0	1,581.4	195.6	146.4	257.7	208.5	257.7	208.5
Nebraska	2,018.3	1,495.2	18.3	18.0	0.0	0.0	277.9	277.9	15.7	15.7	0.0	0.0	2,330.2	1,806.8	9.6	7.0	27.9	25.0	27.9	25.0
North Dakota	3,221.8	3,073.8	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,741.6	3,593.6	0.5	0.2	0.5	0.2	0.5	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	0.8	0.6	1.8	1.6	1.8	1.6
South Atlantic	1,086.3	1,086.3	8,322.7	6,766.7	0.0	0.0	7,226.4	7,229.2	4,190.2	4,331.4	0.0	0.0	20,825.6	19,413.6	2,009.9	1,622.1	10,332.6	8,388.8	10,332.6	8,388.8
Delaware	2.0	2.0	33.8	33.3	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	48.0	47.5	83.3	76.8	117.1	110.1	117.1	110.1
District of Columbia	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	12.0	23.0	0.0	0.0	18.9	23.0	56.7	47.8	63.6	47.8	63.6	47.8
Florida	0.0	0.0	1,973.0	1,272.6	0.0	0.0	54.5	54.5	1,180.8	1,227.9	0.0	0.0	3,208.3	2,555.0	426.9	264.2	2,399.9	1,536.8	2,399.9	1,536.8
Georgia	0.0	0.0	1,039.6	1,013.9	0.0	0.0	2,047.2	2,047.2	949.4	949.4	0.0	0.0	4,036.2	4,010.5	NM	158.6	NM	1,172.5	NM	1,172.5
Maryland	190.0	190.0	292.6	263.4	0.0	0.0	590.0	590.0	140.9	140.0	0.0	0.0	1,213.5	1,183.4	770.2	695.3	1,062.8	958.7	1,062.8	958.7
North Carolina	208.0	208.0	4,097.3	3,521.0	0.0	0.0	2,004.0	2,002.0	562.2	560.0	0.0	0.0	6,871.5	6,291.0	170.8	132.1	4,268.1	3,653.1	4,268.1	3,653.1
South Carolina	0.0	0.0	485.7	285.0	0.0	0.0	1,323.9	1,328.7	526.5	526.5	0.0	0.0	2,336.1	2,140.2	224.5	186.8	710.2	471.8	710.2	471.8
Virginia	0.0	0.0	393.8	377.5	0.0	0.0	866.0	866.0	806.2	892.4	0.0	0.0	2,066.0	2,135.9	88.5	53.7	482.3	431.2	482.3	431.2
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	8.6	6.6	8.6	6.6	8.6	6.6
East South Central	29.1	29.1	561.5	471.7	0.0	0.0	7,055.3	7,055.5	1,176.7	1,171.1	0.0	0.0	8,822.6	8,727.4	101.8	91.7	663.3	563.4	663.3	563.4
Alabama	0.0	0.0	194.1	179.4	0.0	0.0	3,291.8	3,292.0	604.9	600.3	0.0	0.0	4,090.8	4,071.7	NM	NM	NM	NM	NM	NM
Kentucky	0.0	0.0	26.3	26.3	0.0	0.0	1,146.9	1,146.9	73.2	72.2	0.0	0.0	1,246.4	1,245.4	26.3	21.8	52.6	48.1	52.6	48.1
Mississippi	0.0	0.0	160.6	160.6	0.0	0.0	0.0	0.0	302.4	302.4	0.0	0.0	463.0	463.0	8.4	6.6	169.0	167.2	169.0	167.2
Tennessee	29.1	29.1	180.5	105.4	0.0	0.0	2,616.6	2,616.6	196.2	196.2	0.0	0.0	3,022.4	2,947.3	58.4	56.4	238.9	161.8	238.9	161.8
West South Central	34,988.6	30,998.2	2,122.0	1,758.4	0.0	0.0	2,991.4	2,989.4	1,233.6	1,309.7	0.0	0.0	41,335.6	37,055.7	792.9	596.9	2,914.9	2,355.3	2,914.9	2,355.3
Arkansas	0.0	0.0	110.0	100.0	0.0	0.0	1,265.8	1,265.8	331.3	330.4	0.0	0.0	1,707.1	1,696.2	22.5	14.1	132.5	114.1	132.5	114.1
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	422.4	490.1	0.0	0.0	615.5	683.2	143.4	137.2	144.5	138.3	144.5	138.3
Oklahoma	8,070.7	7,693.4	30.5	30.5	0.0	0.0	863.6	861.6	76.2	76.2	0.0	0.0	9,041.0	8,661.7	11.5	6.8	42.0	37.3	42.0	37.3
Texas	26,917.9	23,304.8	1,980.4	1,626.8	0.0	0.0	670.0	670.0	403.7	413.0	0.0	0.0	29,972.0	26,014.6	615.5	438.9	2,595.9	2,065.7	2,595.9	2,065.7
Mountain	9,834.3	8,834.9	5,995.1	5,635.8	473.9	473.9	10,653.4	10,650.0	175.7	174.3	648.3	593.5	27,780.7	26,362.4	2,623.4	2,255.9	8,618.5	7,891.7	9,092.4	8,365.6
Arizona	267.3	267.3	1,817.7	1,776.8	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,132.0	5,091.1	1,378.6	1,231.2	3,196.3	3,008.0	3,491.7	3,303.4
Colorado	3,703.7	3,103.7	546.9	469.8	0.0	0.0	686.4	686.4	28.7	28.7	0.0	0.0	4,965.7	4,288.6	378.6	348.6	925.5	818.4	925.5	818.4
Idaho	970.4	970.4	242.0	240.0	0.0	0.0	2,764.2	2,764.2	85.3	83.9	10.0	10.0	4,071.9	4,068.5	38.4	22.7	280.4	262.7	280.4	262.7
Montana	783.5	703.5	17.0	17.0	0.0	0.0	2,771.1	2,767.7	3.0	3.0	0.0	0.0	3,574.6	3,491.2	16.8	13.2	33.8	30.2	33.8	30.2
Nevada	150.0	150.0	1,829.0	1,721.7	178.5	178.5	1,051.4	1,051.4	9.8	9.8	556.7	508.9	3,775.4	3,620.3	383.2	280.5	2,212.2	2,002.2	2,390.7	2,180.7
New Mexico	2,035.9	1,764.5	591.4	553.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,724.2	2,407.8	160.4	129.4	751.8	682.8	751.8	682.8
Utah	388.2	388.2	859.1	857.1	0.0	0.0	269.4	269.4	12.8	12.8	73.0	73.0	1,602.5	1,600.5	261.6	226.2	1,120.7	1,083.3	1,120.7	1,083.3
Wyoming	1,535.3	1,487.3	92.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,934.4	1,794.4	5.9	4.1	97.9	4.1	97.9	4.1
Pacific Contiguous	12,349.5	12,145.5	11,448.8	10,151.1	1,284.0	1,284.0	39,760.1	39,744.6	1,901.7	1,905.2	1,763.6	1,755.7	68,507.7	66,986.1	9,148.9	7,803.2	20,597.7	17,954.3	21,881.7	19,238.3
California	6,057.5	5,862.2	11,108.8	9,850.5	1,284.0	1,284.0	10,185.9	10,184.3	1,202.6	1,206.1	1,744.1	1,736.2	31,582.9	30,123.3	8,792.8	7,531.0	19,901.6	17,381.5	21,185.6	18,665.5
Oregon	3,218.9	3,210.2	320.3	300.1	0.0	0.0	8,380.4	8,401.2	314.7	314.7	19.5	19.5	12,253.8	12,245.7	191.2	150.6	511.5	450.7	511.5	450.7
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,193.8	21,159.1	384.4	384.4	0.0	0.0	24,671.0	24,617.1	164.9	121.6	184.6	122.1	184.6	122.1
Pacific Noncontiguous	266.2	266.2	184.7	101.2	0.0	0.0	503.0	496.5	273.9	273.9	43.0	43.0	1,270.8	1,180.8	662.5	602.0	847.2	703.2	847.2	703.2
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	4.8	3.0	4.8	3.0	4.8	3.0
Hawaii	205.6	205.6	184.7	101.2	0.0	0.0	32.4	25.9	266.9	266.9	43.0	43.0	732.6	642.6	657.8	599.1	842.5	700.3	842.5	700.3
U.S. Total	99,522.1	89,942.5	32,377.6	27,989.5	1,757.9	1,757.9	79,778.0	79,751.5	13,387.4	13,791.2	2,454.9	2,392.2	229,277.9	215,624.8	22,148.2	18,780.9	54,525.8	46,770.4	56,283.7	48,528.3

NM = Not meaningful due to large relative standard error.
Values for 2018 are final. Values for 2019 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, September 2019 and 2018 (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	
	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018	September 2019	September 2018
New England	14,304.3	13,709.5	1,581.4	1,056.6	1,116.3	1,208.6	917.3	917.3	0.0	0.0	6,271.4	6,262.6	0.0	0.0	24,190.7	23,154.6
Connecticut	4,019.0	3,442.7	563.0	563.0	878.7	875.0	383.4	383.4	0.0	0.0	2,026.5	2,026.5	0.0	0.0	7,870.6	7,290.6
Maine	1,284.3	1,284.3	144.3	144.3	12.5	108.5	0.0	0.0	0.0	0.0	1,037.7	1,037.7	0.0	0.0	2,478.8	2,574.8
Massachusetts	5,955.8	5,937.3	857.9	333.1	199.7	199.7	0.0	0.0	0.0	0.0	2,608.0	2,599.2	0.0	0.0	9,621.4	9,069.3
New Hampshire	1,258.0	1,258.0	3.8	3.8	0.0	0.0	533.9	533.9	0.0	0.0	494.2	494.2	0.0	0.0	2,289.9	2,289.9
Rhode Island	1,787.2	1,787.2	12.4	12.4	25.4	25.4	0.0	0.0	0.0	0.0	7.1	7.1	0.0	0.0	1,832.1	1,832.1
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	33,222.4	29,957.4	7,861.6	7,909.1	14,461.5	14,501.9	11,959.7	13,827.7	11.6	11.6	5,353.1	5,499.1	130.7	130.7	73,000.6	71,837.5
New Jersey	8,544.7	8,529.9	2,826.3	2,826.3	46.9	46.9	463.0	609.0	11.6	11.6	239.0	385.0	29.0	29.0	12,160.5	12,437.7
New York	8,938.6	8,922.6	3,173.0	3,173.0	9,665.2	9,663.7	1,631.5	1,631.5	0.0	0.0	3,558.8	3,558.8	0.0	0.0	26,967.1	26,949.6
Pennsylvania	15,739.1	12,504.9	1,862.3	1,909.8	4,749.4	4,791.3	9,865.2	11,587.2	0.0	0.0	1,555.3	1,555.3	101.7	101.7	33,873.0	32,450.2
East North Central	21,674.3	20,811.3	26,659.8	26,771.4	5,742.8	5,563.6	53,575.9	55,117.9	247.6	247.6	2,455.4	2,464.6	1,092.9	1,092.9	111,448.7	112,069.3
Illinois	3,580.2	3,580.2	10,519.8	10,504.8	1,629.8	1,633.6	12,626.0	12,626.0	0.0	0.0	677.0	674.2	36.5	36.5	29,069.3	29,055.3
Indiana	3,849.0	3,836.0	3,344.6	3,353.4	730.0	730.0	15,291.4	15,291.4	0.0	0.0	98.3	98.3	619.3	619.3	23,932.6	23,928.4
Michigan	4,413.6	4,413.6	3,874.0	3,991.0	2,558.5	2,375.5	8,608.3	9,190.4	47.2	47.2	463.5	475.5	250.0	250.0	20,215.1	20,743.2
Ohio	7,020.4	6,170.4	5,559.2	5,559.2	185.1	185.1	11,496.0	12,246.0	142.0	142.0	581.1	581.1	187.1	187.1	25,170.9	25,070.9
Wisconsin	2,811.1	2,811.1	3,362.2	3,363.0	639.4	639.4	5,554.2	5,764.1	58.4	58.4	635.5	635.5	0.0	0.0	13,060.8	13,271.5
West North Central	6,814.9	6,640.9	11,685.3	11,737.3	3,807.2	4,526.5	33,054.1	33,995.0	39.5	39.5	3,885.7	3,888.9	8.4	8.4	59,295.1	60,836.5
Iowa	1,779.8	1,779.8	1,260.4	1,260.4	540.5	540.5	5,371.7	5,371.7	39.5	39.5	816.5	816.0	0.0	0.0	9,808.4	9,807.9
Kansas	266.0	266.0	2,156.8	2,156.8	1,367.9	2,087.9	4,670.2	4,736.2	0.0	0.0	567.5	564.5	0.0	0.0	9,028.4	9,811.4
Minnesota	2,346.0	2,172.0	2,615.9	2,667.9	381.6	380.9	4,157.9	4,292.6	0.0	0.0	768.1	785.7	0.0	0.0	10,269.5	10,299.1
Missouri	1,794.9	1,794.9	3,400.6	3,400.6	871.1	871.1	10,470.9	11,211.1	0.0	0.0	1,124.4	1,113.5	0.0	0.0	17,661.9	18,391.2
Nebraska	338.2	338.2	1,149.0	1,149.0	525.8	525.8	3,867.0	3,867.0	0.0	0.0	322.0	322.0	0.0	0.0	6,202.0	6,202.0
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	63.2	8.4	8.4	4,633.6	4,633.6
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.0	224.0	0.0	0.0	1,691.3	1,691.3
South Atlantic	61,072.8	56,848.2	31,920.6	31,917.9	6,824.2	7,391.6	52,053.2	54,760.3	142.8	142.8	8,934.4	10,622.9	135.0	135.0	161,083.0	161,818.7
Delaware	1,511.0	1,511.0	317.2	317.2	843.1	843.1	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,330.4	3,330.4
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	31,504.3	28,597.7	7,752.7	7,769.2	2,493.2	2,476.6	7,804.0	8,570.0	59.0	59.0	3,298.6	4,964.0	0.0	0.0	52,911.8	52,436.5
Georgia	7,989.0	7,989.0	7,791.0	7,791.0	842.9	842.9	8,416.0	9,398.5	83.8	83.8	945.4	945.4	0.0	0.0	26,068.1	27,050.6
Maryland	2,849.1	2,849.1	1,899.9	1,893.6	1,397.2	1,494.2	4,267.0	4,327.0	0.0	0.0	1,254.3	1,276.9	0.0	0.0	11,667.5	11,840.8
North Carolina	5,068.0	5,068.0	6,050.7	6,045.1	1.0	0.0	10,504.8	10,504.8	0.0	0.0	502.6	502.6	0.0	0.0	22,127.1	22,120.5
South Carolina	3,185.0	3,185.0	2,761.4	2,757.9	546.0	546.0	5,212.0	5,212.0	0.0	0.0	466.9	463.4	0.0	0.0	12,171.3	12,164.3
Virginia	8,966.4	7,648.4	4,245.3	4,245.3	585.3	1,073.3	2,881.4	3,780.0	0.0	0.0	2,341.5	2,345.5	0.0	0.0	19,019.9	19,092.5
West Virginia	0.0	0.0	1,093.4	1,089.6	115.5	115.5	12,558.0	12,558.0	0.0	0.0	11.0	11.0	0.0	0.0	13,777.9	13,774.1
East South Central	21,746.2	21,746.2	12,669.7	12,626.1	4,305.8	4,592.8	23,844.1	25,850.8	0.0	0.0	106.7	117.0	19.8	19.8	62,692.3	64,952.7
Alabama	9,699.0	9,699.0	2,575.8	2,532.2	1,938.8	2,028.1	5,276.0	6,338.7	0.0	0.0	42.6	42.6	19.8	19.8	19,552.0	20,660.4
Kentucky	1,763.0	1,763.0	4,976.6	4,976.6	260.0	260.0	11,278.8	11,862.8	0.0	0.0	11.9	11.9	0.0	0.0	18,290.3	18,874.3
Mississippi	7,829.1	7,829.1	1,336.8	1,336.8	2,040.8	2,238.5	1,444.0	1,804.0	0.0	0.0	9.0	19.3	0.0	0.0	12,659.7	13,227.7
Tennessee	2,455.1	2,455.1	3,780.5	3,780.5	66.2	66.2	5,845.3	5,845.3	0.0	0.0	43.2	43.2	0.0	0.0	12,190.3	12,190.3
West South Central	61,231.1	60,232.0	14,616.7	14,313.5	31,846.8	30,929.3	30,628.1	31,564.1	954.7	954.7	175.6	175.6	830.8	825.8	140,283.8	138,995.0
Arkansas	4,603.4	4,603.4	702.8	702.8	796.0	796.0	5,105.3	5,105.3	0.0	0.0	12.2	12.2	0.0	0.0	11,219.7	11,219.7
Louisiana	8,430.6	7,474.6	2,365.1	2,360.6	6,057.6	6,057.6	2,833.7	2,833.7	890.9	890.9	43.1	43.1	407.4	407.4	21,028.4	20,067.9
Oklahoma	7,263.6	7,263.6	1,686.9	1,686.9	5,764.1	4,773.6	3,322.5	4,303.5	0.0	0.0	74.4	74.4	0.0	0.0	18,111.5	18,102.0
Texas	40,933.5	40,890.4	9,861.9	9,563.2	19,229.1	19,302.1	19,366.6	19,321.6	63.8	63.8	45.9	45.9	423.4	418.4	89,924.2	89,605.4
Mountain	22,510.8	22,510.8	9,149.1	8,625.6	3,615.4	3,832.4	26,665.5	26,765.5	52.0	52.0	349.9	352.3	103.5	103.5	62,446.2	62,242.1
Arizona	9,879.6	9,879.6	2,891.1	2,367.6	1,258.6	1,478.6	5,579.0	5,579.0	0.0	0.0	90.5	90.5	0.0	0.0	19,698.8	19,395.3
Colorado	3,249.5	3,249.5	2,568.1	2,568.1	639.0	639.0	4,340.0	4,440.0	0.0	0.0	166.4	166.4	0.0	0.0	10,963.0	11,063.0
Idaho	547.7	547.7	552.0	552.0	13.5	13.5	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,127.1	1,127.1
Montana	0.0	0.0	321.6	321.6	72.2	72.2	2,297.6	2,297.6	52.0	52.0	0.0	0.0	1.5	1.5	2,744.9	2,744.9
Nevada	5,445.0	5,445.0	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	7,821.6
New Mexico	1,465.0	1,465.0	956.9	956.9	846.4	843.4	2,640.0	2,640.0	0.0	0.0	48.0	50.4	0.0	0.0	5,956.3	5,955.7
Utah	1,830.0	1,830.0	520.2	520.2	328.2	328.2	4,654.0	4,654.0	0.0	0.0	27.8	27.8	0.0	0.0	7,360.2	7,360.2
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	102.0	102.0	6,774.3	6,774.3
Pacific Contiguous	25,852.8	26,017.9	12,026.7	11,562.5	6,958.4	7,802.0	1,982.0	1,982.0	17.0	17.0	471.4	471.4	221.4	221.4	47,529.7	48,074.2
California	19,834.3	19,999.4	11,173.5	10,709.3	6,702.4	7,546.0	57.0	57.0	17.0	17.0	456.2	456.2	221.4	221.4	38,461.8	39,006.3
Oregon	3,382.9	3,382.9	133.8	133.8	224.4	224.4	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	4,326.1	4,326.1
Washington	2,635.6	2,635.6	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	4,741.8	4,741.8
Pacific Noncontiguous	479.2	479.2	626.3	626.3	175.0	175.0	332.8	332.8	0.0	0.0	2,605.2	2,598.7	6.4	6.4	4,224.9	4,218.4
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	733.3	726.8	0.0	0.0	2,166.6	2,160.1
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	268,908.8	258,953.4	128,797.2	127,146.3	78,853.4	80,523.7	235,012.7	245,113.4	1,465.2	1,465.2	30,608.8	32,453.1	2,548.9	2,543.9	746,195.0	748,199.0

NM = Not meaningful due to large relative standard error.
Values for 2018 are final. Values for 2019 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, 2019

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	1	60571	AEP Onsite Partners	IPP	Trout Creek Solar	CO	62260	44901	2.0	Solar Photovoltaic	SUN	PV
2019	1	61482	AES ES GILBERT, LLC	IPP	AES ES GILBERT	AZ	61861	SRP	10.0	Batteries	MWH	BA
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	201	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	202	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	203	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	204	1.0	Solar Photovoltaic	SUN	PV
2019	1	60281	Altus Power America Management, LLC	IPP	Corcoran CSG	MN	61971	205	1.0	Solar Photovoltaic	SUN	PV
2019	1	61563	Blue Summit II Wind, LLC	IPP	Blue Summit II Wind, LLC	TX	61970	BSII	99.4	Onshore Wind Turbine	WND	WT
2019	1	61260	Capricornus Community Solar Garden, LLC	IPP	Capricornus Community Solar Garden	MN	61651	CAPR	1.0	Solar Photovoltaic	SUN	PV
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC1	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC2	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC3	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC4	18.5	Natural Gas Internal Combustion Engine	NG	IC
2019	1	18947	City of Tipton - (IA)	Electric Utility	Tipton	IA	8106	7	2.0	Petroleum Liquids	DFO	IC
2019	1	56769	Consolidated Edison Development Inc.	IPP	Blackwell Solar Park	CA	59524	FRBSP	20.0	Solar Photovoltaic	SUN	PV
2019	1	61338	Crux Community Solar Gardens, LLC	IPP	Crux Community Solar	MN	61712	CRUX	1.0	Solar Photovoltaic	SUN	PV
2019	1	62817	DG Georgia Solar II, LLC	IPP	Kimberly-Clark Solar	GA	62960	KC	2.3	Solar Photovoltaic	SUN	PV
2019	1	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
2019	1	6452	Florida Power & Light Co	Electric Utility	Interstate Solar Energy Center	FL	61768	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Miami Dade Solar Energy Center	FL	61766	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Pioneer Trail Solar Energy Center	FL	61767	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	6452	Florida Power & Light Co	Electric Utility	Sunshine Gateway Solar Energy Center	FL	61763	1	74.5	Solar Photovoltaic	SUN	PV
2019	1	62762	GSPP Boxborough Littleton, LLC	IPP	GSPP Boxborough Littleton (MA)	MA	62890	BOXBR	4.0	Solar Photovoltaic	SUN	PV
2019	1	7019	Gay & Robinson Inc	Industrial	Gay Robinson	HI	50333	HYD3	6.5	Conventional Hydroelectric	WAT	HY
2019	1	62719	Green Street Power Partners	IPP	GSPP Devens, LLC	MA	62824	DEVEN	2.2	Solar Photovoltaic	SUN	PV
2019	1	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXII LLC (CSG)	CO	62252	53965	1.5	Solar Photovoltaic	SUN	PV
2019	1	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXIII LLC (CSG)	CO	62256	53966	1.5	Solar Photovoltaic	SUN	PV
2019	1	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXIV LLC (CSG)	CO	62253	53967	1.5	Solar Photovoltaic	SUN	PV
2019	1	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXVI LLC	CO	62254	53970	1.5	Solar Photovoltaic	SUN	PV
2019	1	61365	Hilltopper Wind Project, LLC	IPP	Hilltopper Wind Project	IL	61735	WT1	185.0	Onshore Wind Turbine	WND	WT
2019	1	61907	JBAB Solar I, LLC.	IPP	JBAB - Washington DC	DC	62374	PV1	5.9	Solar Photovoltaic	SUN	PV
2019	1	61289	Kaus Community Solar Garden, LLC	IPP	Kaus Community Solar	MN	61716	KAUS	1.0	Solar Photovoltaic	SUN	PV
2019	1	61487	Montevideo Solar LLC	IPP	Montevideo Solar LLC, CSG	MN	61870	MONTE	5.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Greenfield Solar PV	MA	62063	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Hinsdale Solar PV	MA	62064	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Southwick Solar PV	MA	62082	REC34	5.0	Solar Photovoltaic	SUN	PV
2019	1	54913	NSTAR Electric Company	Electric Utility	Springfield Solar PV	MA	62072	LG395	4.0	Solar Photovoltaic	SUN	PV
2019	1	62072	Newfield Solar LLC	IPP	Newfield Community Solar LLC	NY	62582	5216	6.0	Solar Photovoltaic	SUN	PV
2019	1	61552	Pelzer Solar I, LLC	IPP	Pelzer Solar I	SC	61945	19	1.0	Solar Photovoltaic	SUN	PV
2019	1	61494	Radian Generation	IPP	NorWest Energy 4, LLC	OR	62268	NWE4	5.6	Solar Photovoltaic	SUN	PV
2019	1	61414	Rattlesnake Creek Wind Project, LLC	IPP	Rattlesnake Creek Wind Project	NE	59292	RCWP	318.1	Onshore Wind Turbine	WND	WT
2019	1	61587	Sagittarius Community Solar Gardens LLC	IPP	Sagittarius Community Solar Gardens LLC	MN	61994	CRUX	0.7	Solar Photovoltaic	SUN	PV
2019	1	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0	Batteries	MWH	BA
2019	1	60531	Standard Solar	IPP	Fort Indiantown Gap	PA	62408	X0028	3.0	Solar Photovoltaic	SUN	PV
2019	1	18454	Tampa Electric Co	Electric Utility	Bonnie Mine Solar	FL	61655	PV1	35.0	Solar Photovoltaic	SUN	PV
2019	1	18454	Tampa Electric Co	Electric Utility	Grange Hall Solar	FL	61656	PV1	61.0	Solar Photovoltaic	SUN	PV
2019	1	18454	Tampa Electric Co	Electric Utility	Lithia Solar	FL	61663	GEN1	74.5	Solar Photovoltaic	SUN	PV
2019	1	61625	USS Brockway Solar LLC	IPP	USS Brockway Solar CSG	MN	62049	USSBR	1.0	Solar Photovoltaic	SUN	PV
2019	1	61627	USS JJ Solar LLC	IPP	USS JJ Solar CSG	MN	62047	USSJJ	1.0	Solar Photovoltaic	SUN	PV
2019	1	61629	USS Norelius Solar LLC	IPP	USS Norelius Solar CSG	MN	62045	USSNO	1.0	Solar Photovoltaic	SUN	PV
2019	1	61631	USS Solar Rapids LLC	IPP	USS Solar Rapids CSG	MN	62042	USSSR	1.0	Solar Photovoltaic	SUN	PV
2019	1	61666	WED GW Solar, LLC CSG	IPP	WED GW Solar, LLC	RI	62118	GWSOL	3.0	Solar Photovoltaic	SUN	PV
2019	1	61648	WED Green Hill, LLC	IPP	WED Green Hill, LLC	RI	62106	GHILL	3.0	Onshore Wind Turbine	WND	WT
2019	1	61649	WED Plainfield II, LLC	IPP	WED Plainfield II, LLC	RI	62107	PLAI2	3.0	Onshore Wind Turbine	WND	WT
2019	1	61650	WED Plainfield III, LLC	IPP	WED Plainfield III, LLC	RI	62108	PLAI3	3.0	Onshore Wind Turbine	WND	WT
2019	1	61651	WED Plainfield, LLC	IPP	WED Plainfield, LLC	RI	62109	PLAI1	3.0	Onshore Wind Turbine	WND	WT
2019	1	61652	WED Shun I, LLC	IPP	WED Shun I, LLC	RI	62110	SHUN1	3.0	Onshore Wind Turbine	WND	WT
2019	1	61653	WED Shun II, LLC	IPP	WED Shun II, LLC	RI	62111	SHUN2	3.0	Onshore Wind Turbine	WND	WT
2019	1	61654	WED Shun III, LLC	IPP	WED Shun III, LLC	RI	62112	SHUN3	3.0	Onshore Wind Turbine	WND	WT
2019	1	62715	Westbound Solar LLC	IPP	Muscogee Public Works	GA	62881	MUSPW	1.5	Solar Photovoltaic	SUN	PV
2019	1	61559	Whitt Solar, LLC	IPP	Whitt Solar	SC	61952	20	2.0	Solar Photovoltaic	SUN	PV
2019	1	61672	Willow Spring Solar LLC	IPP	Willow Spring Solar, LLC	CA	60324	GEN01	100.0	Solar Photovoltaic	SUN	PV
2019	2	62105	Achilles Farm, LLC	IPP	Achilles Solar	NC	62621	ACHIL	4.1	Solar Photovoltaic	SUN	PV
2019	2	61259	Altair Community Solar Garden, LLC	IPP	Altair Community Solar Garden	MN	61645	ALTA	1.0	Solar Photovoltaic	SUN	PV
2019	2	62104	Arborgate Farm, LLC	IPP	Arborgate Solar	NC	62623	ARBOR	4.5	Solar Photovoltaic	SUN	PV
2019	2	61546	Bloom Solar, LLC	IPP	Bloom Solar	SC	61940	6	2.0	Solar Photovoltaic	SUN	PV
2019	2	61230	CD Arevon USA, Inc.	IPP	CA Flats Solar 150, LLC	CA	60034	GEN01	150.0	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	2	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	11	2.8	Petroleum Liquids	DFO	IC
2019	2	62098	Cookstown Solar Farm, LLC	IPP	Cookstown	NC	62600	COOKS	4.5	Solar Photovoltaic	SUN	PV
2019	2	61060	Cypress Creek Renewables	IPP	SCE&G Curie CSG	SC	61432	SCCU1	2.0	Solar Photovoltaic	SUN	PV
2019	2	62710	DG LF Solar, LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV
2019	2	62710	DG LF Solar, LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV
2019	2	61610	Delaware River Solar, LLC	IPP	Turner Rd Community Solar Project	NY	62160	300	2.0	Solar Photovoltaic	SUN	PV
2019	2	57170	EDF Renewable Asset Holdings, Inc.	IPP	Stoneray Power Partners, LLC	MN	62269	STNRY	100.0	Onshore Wind Turbine	WND	WT
2019	2	61688	ENGIE Generation North America LLC	IPP	Goose Lake MN DPC-GM	MN	62148	PV1	1.5	Solar Photovoltaic	SUN	PV
2019	2	62004	Flowers Solar LLC	IPP	Flowers Solar LLC	NC	62487	FLOW	4.3	Solar Photovoltaic	SUN	PV
2019	2	62719	Green Street Power Partners	IPP	GSPP Raynham TMLP, LLC CSG	MA	62826	RAYN	2.3	Solar Photovoltaic	SUN	PV
2019	2	62719	Green Street Power Partners	IPP	GSPP Terrawatt Westfield LLC CSG	MA	62825	WESTF	3.6	Solar Photovoltaic	SUN	PV
2019	2	62147	Lafayette Horizon Solar CSG LLC	IPP	Lafayette Horizon Solar CSG LLC	CO	62667	LFHSL	1.6	Solar Photovoltaic	SUN	PV
2019	2	11479	Madison Gas & Electric Co	Electric Utility	Saratoga Wind Farm	IA	61070	SWE	66.0	Onshore Wind Turbine	WND	WT
2019	2	62651	Montauk Energy Storage Center, LLC	IPP	Montauk Energy Storage Center	NY	62734	BME	5.0	Batteries	MWH	BA
2019	2	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	CTG1	5.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	2	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	STG	1.0	Natural Gas Steam Turbine	NG	ST
2019	2	61740	NJ Solar 1, LLC	IPP	Hunterdon Health System Solar Project	NJ	62225	PV1	1.5	Solar Photovoltaic	SUN	PV
2019	2	54913	NSTAR Electric Company	Electric Utility	Savoy Solar PV	MA	62065	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	2	54913	NSTAR Electric Company	Electric Utility	Southampton Solar PV	MA	62066	LG400	2.0	Solar Photovoltaic	SUN	PV
2019	2	62070	Plainfield Solar LLC	IPP	Plainfield Community Solar LLC	MA	62579	2999	2.0	Solar Photovoltaic	SUN	PV
2019	2	61507	Plumsted 537 LLC	IPP	Plumsted 537 LLC	NJ	61892	PLMST	19.8	Batteries	MWH	BA
2019	2	60163	Soltage LLC	Industrial	Redwing Solar	SC	61946	11	2.0	Solar Photovoltaic	SUN	PV
2019	2	60403	TRS Fuel Cell, LLC	Electric CHP	TRS Fuel Cell	CT	60683	MMH1	3.7	Other Natural Gas	NG	FC
2019	2	61562	Torrecillas Wind Energy, LLC	IPP	Torrecillas Wind Energy, LLC	TX	61969	TWE	300.0	Onshore Wind Turbine	WND	WT
2019	2	61557	Vincent Solar, LLC	IPP	Vincent Solar	SC	61950	14	2.0	Solar Photovoltaic	SUN	PV
2019	2	62114	Wadesboro Farm 4, LLC	IPP	Wadesboro 4	NC	62627	WADE4	1.9	Solar Photovoltaic	SUN	PV
2019	3	61326	Aquila Community Solar Gardens, LLC	IPP	Aquila Community Solar	MN	61704	AQUI	1.0	Solar Photovoltaic	SUN	PV
2019	3	62101	Badger Farm, LLC	IPP	Badger	NC	62603	BADGE	4.5	Solar Photovoltaic	SUN	PV
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3	Natural Gas Fired Combined Cycle	NG	CT
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3	Natural Gas Fired Combined Cycle	NG	CT
2019	3	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	STG2	395.1	Natural Gas Fired Combined Cycle	NG	CA
2019	3	61329	Canopus Community Solar Garden, LLC	IPP	Canopus Community Solar	MN	61707	CANO	1.0	Solar Photovoltaic	SUN	PV
2019	3	61337	Cassiopeia Community Solar Garden, LLC	IPP	Cassiopeia Community Solar	MN	61711	CASS	1.0	Solar Photovoltaic	SUN	PV
2019	3	62099	Changeup Solar, LLC	IPP	Changeup	NC	62601	CHANG	1.5	Solar Photovoltaic	SUN	PV
2019	3	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYN	5.0	Solar Photovoltaic	SUN	PV
2019	3	61187	DG Minnesota CSG, LLC	IPP	Held Solar Project	MN	62267	HELD	5.0	Solar Photovoltaic	SUN	PV
2019	3	5109	DTE Electric Company	Electric Utility	Pine River Wind Park	MI	61106	1	161.3	Onshore Wind Turbine	WND	WT
2019	3	61610	Delaware River Solar, LLC	IPP	Sacket Lake Rd #2 Community Solar Farm	NY	62159	20	1.7	Solar Photovoltaic	SUN	PV
2019	3	56201	Engie North America	IPP	Live Oak Wind Project	TX	61782	WTGS	199.5	Onshore Wind Turbine	WND	WT
2019	3	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT
2019	3	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1A	376.6	Natural Gas Fired Combined Cycle	NG	CT
2019	3	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1B	376.6	Natural Gas Fired Combined Cycle	NG	CT
2019	3	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1C	376.6	Natural Gas Fired Combined Cycle	NG	CT
2019	3	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1ST	593.3	Natural Gas Fired Combined Cycle	NG	CA
2019	3	61518	Frontenac Holdco LLC	IPP	Frontenac Holdco LLC, CSG	MN	61919	FRONT	5.0	Solar Photovoltaic	SUN	PV
2019	3	61549	Goldenrod Solar, LLC	IPP	Goldenrod Solar	SC	61943	9	2.0	Solar Photovoltaic	SUN	PV
2019	3	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXXII (CSG)	CO	62251	53975	1.5	Solar Photovoltaic	SUN	PV
2019	3	57389	IKEA Property Inc	Commercial	IKEA Norfolk Rooftop PV System	VA	62355	569PV	1.3	Solar Photovoltaic	SUN	PV
2019	3	9417	Interstate Power and Light Co	Electric Utility	English Farms	IA	61565	1	169.9	Onshore Wind Turbine	WND	WT
2019	3	9417	Interstate Power and Light Co	Electric Utility	Upland Prairie	IA	61564	1	299.3	Onshore Wind Turbine	WND	WT
2019	3	61687	KCE NY 1, LLC	IPP	KCE NY 1	NY	62147	KNY1	20.0	Batteries	MWH	BA
2019	3	62784	Kenyon Energy KS Solar 1 LLC	IPP	City of Pratt Solar	KS	62931	PRATT	6.0	Solar Photovoltaic	SUN	PV
2019	3	61679	MSC-GreyCloud01 LLC	IPP	MSC-GreyCloud01 Community Solar	MN	62143	52785	1.0	Solar Photovoltaic	SUN	PV
2019	3	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Ashburnham Energy Storage Project	MA	62219	AMLPB	3.0	Batteries	MWH	BA
2019	3	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Beebe Substation Battery Storage	MA	62585	WAKFD	3.0	Batteries	MWH	BA
2019	3	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA
2019	3	61227	Nautilus Solar Solutions	IPP	Nautilus Lindstrom Solar CSG	MN	62030	LI	2.0	Solar Photovoltaic	SUN	PV
2019	3	59300	PNM Resources	Electric Utility	Vista Solar Energy Center	NM	62467	VISTA	10.0	Solar Photovoltaic	SUN	PV
2019	3	61585	Pisces Community Solar Garden LLC	IPP	Pisces Community Solar Garden	MN	61992	CRUX	0.7	Solar Photovoltaic	SUN	PV
2019	3	62100	Starr Farm, LLC	IPP	Starr	NC	62602	STARR	4.5	Solar Photovoltaic	SUN	PV
2019	3	60117	SunShare	IPP	Becker Solar 2 CSG	MN	62084	BCKR2	1.0	Solar Photovoltaic	SUN	PV
2019	3	60117	SunShare	IPP	Becker Solar 3 CSG	MN	62085	BCKR3	1.0	Solar Photovoltaic	SUN	PV
2019	3	60117	SunShare	IPP	Becker Solar 4 CSG	MN	62086	BCKR4	1.0	Solar Photovoltaic	SUN	PV
2019	3	60117	SunShare	IPP	Becker Solar 5 CSG	MN	62087	BCKR5	1.0	Solar Photovoltaic	SUN	PV
2019	3	60117	SunShare	IPP	Becker Solar CSG	MN	62040	BCKR1	1.0	Solar Photovoltaic	SUN	PV
2019	3	18454	Tampa Electric Co	Electric Utility	Peace Creek Solar	FL	61666	GEN	55.4	Solar Photovoltaic	SUN	PV
2019	3	61532	Techren Solar I LLC	IPP	Techren	NV	61611	TECH1	100.0	Solar Photovoltaic	SUN	PV

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Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	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
2019	3	61558	Watauga Solar, LLC	IPP	Watauga Solar	SC	61951	15	2.0	Solar Photovoltaic	SUN	PV
2019	3	62715	Westbound Solar LLC	IPP	Bibb Jones	GA	62880	BIBBJ	1.0	Solar Photovoltaic	SUN	PV
2019	4	60571	AEP Onsite Partners	IPP	Bloomfield Municipal Utilities Solar	IA	62607	PV	1.6	Solar Photovoltaic	SUN	PV
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA01	1.0	Batteries	MWH	BA
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA02	1.0	Batteries	MWH	BA
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA03	1.0	Batteries	MWH	BA
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA06	1.2	Batteries	MWH	BA
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA1C	11.8	Batteries	MWH	BA
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	1	0.6	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2B	0.6	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	3	1.1	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4C	0.5	Petroleum Liquids	DFO	IC
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	61705	Boring Solar LLC	IPP	Boring Solar LLC	OR	62169	BSPV2	2.2	Solar Photovoltaic	SUN	PV
2019	4	58492	Chattanooga Metropolitan Airport	Commercial	Chattanooga Metropolitan Airport Solar	TN	58515	GEN3	0.4	Solar Photovoltaic	SUN	PV
2019	4	61060	Cypress Creek Renewables	IPP	Cascade Solar (TX)	TX	61875	GEN1	10.0	Solar Photovoltaic	SUN	PV
2019	4	61610	Delaware River Solar, LLC	IPP	Pool Brook Rd Community Solar Farm	NY	62156	15	2.0	Solar Photovoltaic	SUN	PV
2019	4	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT
2019	4	62673	Hopkinton MA 1, LLC	IPP	Hopkinton CSG	MA	62760	WT	2.0	Solar Photovoltaic	SUN	PV
2019	4	57389	IKEA Property Inc	Commercial	IKEA Live Oak Rooftop PV System	TX	62152	570	1.7	Solar Photovoltaic	SUN	PV
2019	4	61928	Jamison Solar Farm	Electric Utility	Jamison Solar Farm	SC	62396	1	1.1	Solar Photovoltaic	SUN	PV
2019	4	61550	Jessamine Solar, LLC	IPP	Jessamine Solar	SC	61944	10	1.9	Solar Photovoltaic	SUN	PV
2019	4	61964	Kimberly Clark - Mobile Alabama	Industrial	Kimberly Clark Mobile - CHP Plant	AL	62449	GT100	21.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	61964	Kimberly Clark - Mobile Alabama	Industrial	Kimberly Clark Mobile - CHP Plant	AL	62449	GT200	21.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	4	61680	MSC-Scandia01 LLC	IPP	MSC-Scandia01 CSG	MN	62144	52741	1.0	Solar Photovoltaic	SUN	PV
2019	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA6	3.0	Petroleum Liquids	DFO	IC
2019	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA7	3.0	Petroleum Liquids	DFO	IC
2019	4	61227	Nautilus Solar Solutions	IPP	Nautilus Saint Cloud Solar CSG	MN	62031	SC	5.0	Solar Photovoltaic	SUN	PV
2019	4	61227	Nautilus Solar Solutions	IPP	Nautilus Winsted Solar CSG	MN	62032	WS	3.0	Solar Photovoltaic	SUN	PV
2019	4	61612	Panda Solar NC 1, LLC	IPP	Panda Solar NC 1, LLC	NC	62089	20002	1.0	Solar Photovoltaic	SUN	PV
2019	4	61655	Panda Solar NC 2, LLC	IPP	Panda Solar NC 2, LLC	NC	62120	20003	2.0	Solar Photovoltaic	SUN	PV
2019	4	18454	Tampa Electric Co	Electric Utility	Lake Hancock Solar	FL	61657	PV1	49.6	Solar Photovoltaic	SUN	PV
2019	4	62715	Westbound Solar LLC	IPP	Richmond Hayes Solar	GA	62884	RICHA	2.3	Solar Photovoltaic	SUN	PV
2019	4	62715	Westbound Solar LLC	IPP	Troup RC50	GA	62885	TROUP	2.3	Solar Photovoltaic	SUN	PV
2019	5	61325	Aquarius Community Solar Gardens, LLC	IPP	Aquarius Community Solar	MN	61710	AQUA	1.0	Solar Photovoltaic	SUN	PV
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	59474	BQ Energy LLC	IPP	Homer Street East	NY	62725	HSE	1.6	Solar Photovoltaic	SUN	PV
2019	5	59474	BQ Energy LLC	IPP	Homer Street West	NY	62724	HSW	1.6	Solar Photovoltaic	SUN	PV
2019	5	59474	BQ Energy LLC	IPP	Steel Sun 2: 2303-III-2 Hamburg Tpke	NY	62723	SS22	2.0	Solar Photovoltaic	SUN	PV
2019	5	59474	BQ Energy LLC	IPP	Steel Sun 2: 2303-III-4 Hamburg Tpke	NY	62722	SS24	2.0	Solar Photovoltaic	SUN	PV
2019	5	59474	BQ Energy LLC	IPP	Steel Sun 2: 2303-III-9 Hamburg Tpke	NY	62721	SS29	2.0	Solar Photovoltaic	SUN	PV
2019	5	59239	Bannock County Landfill	Commercial	Bannock County LFG to Energy	ID	59529	GEN 2	1.4	Landfill Gas	LFG	IC
2019	5	60672	Birdsboro Power LLC	IPP	Birdsboro Power	PA	61035	GEN1	476.0	Natural Gas Fired Combined Cycle	NG	CS
2019	5	62003	CMR Solar, LLC	IPP	CMR Solar LLC	NY	62486	CMRSL	2.0	Solar Photovoltaic	SUN	PV
2019	5	62670	Carver MA 2, LLC	IPP	Carver CSG	MA	62763	CR	2.0	Solar Photovoltaic	SUN	PV
2019	5	61568	Chisago Holdco LLC	IPP	Chisago Holdco LLC, CSG	MN	61968	CHIS	3.0	Solar Photovoltaic	SUN	PV
2019	5	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYS	2.6	Solar Photovoltaic	SUN	PV
2019	5	61567	DP-C2 Episode 1 LLC	IPP	Blackville Solar II	SC	61973	C2BV	20.0	Solar Photovoltaic	SUN	PV
2019	5	61339	Deneb Community Solar Garden, LLC	IPP	Deneb Community Solar	MN	61715	DENE	1.0	Solar Photovoltaic	SUN	PV
2019	5	58970	Ecoplexus, Inc	IPP	Folsom SP and CSP Sacramento	CA	61698	FOLSM	1.3	Solar Photovoltaic	SUN	PV
2019	5	60496	Enerparc Inc.	IPP	Cloverdale Solar Center	CA	60813	ECA02	1.0	Solar Photovoltaic	SUN	PV
2019	5	56201	Engie North America	IPP	Seymour Hills Wind Project, LLC	TX	62227	WTGS	30.2	Onshore Wind Turbine	WND	WT
2019	5	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT
2019	5	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	5	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA
2019	5	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	5	97.4	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	62719	Green Street Power Partners	IPP	GSPP Imholte CSG	MN	62830	IMHOL	1.0	Solar Photovoltaic	SUN	PV
2019	5	62122	Minuteman Eenergy Storage, LLC	IPP	Minuteman Energy Storage	MA	62644	MMES	5.0	Batteries	MWH	BA
2019	5	13902	NorthWestern Energy	Electric Utility	Hauser	MT	2185	HAU7	3.4	Conventional Hydroelectric	WAT	HY
2019	5	62010	Prairie Queen Wind Farm LLC	IPP	Prairie Queen Wind Farm	KS	62488	WT	199.3	Onshore Wind Turbine	WND	WT
2019	5	61613	Sartell Holdco LLC	IPP	Sartell Holdco CSG	MN	62036	SARTE	5.0	Solar Photovoltaic	SUN	PV
2019	5	61616	Solar Provider Group MN I LLC	IPP	Syncarpha Dodge 1 CSG	MN	62053	SPGD1	1.0	Solar Photovoltaic	SUN	PV
2019	5	60531	Standard Solar	IPP	Mesa CSG 1 Murdock	CO	62719	X0038	1.5	Solar Photovoltaic	SUN	PV
2019	5	60531	Standard Solar	IPP	Mesa CSG 2 Massicotte	CO	62718	X0037	1.5	Solar Photovoltaic	SUN	PV
2019	5	61842	USS Webster Solar	IPP	USS Webster Solar CSG	MN	62336	USWEB	1.0	Solar Photovoltaic	SUN	PV
2019	5	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB1	0.3	Natural Gas Internal Combustion Engine	NG	IC
2019	5	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB2	0.3	Natural Gas Internal Combustion Engine	NG	IC
2019	5	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB3	0.3	Natural Gas Internal Combustion Engine	NG	IC
2019	5	57081	WGL Energy Systems, Inc	IPP	Nationals	DC	62710	SO435	1.0	Solar Photovoltaic	SUN	PV
2019	5	62715	Westbound Solar LLC	IPP	Freeman Avenue	GA	62887	FREAV	1.4	Solar Photovoltaic	SUN	PV
2019	5	62715	Westbound Solar LLC	IPP	Oil Dri 2 Solar	GA	62882	OLDRY	1.4	Solar Photovoltaic	SUN	PV
2019	5	62715	Westbound Solar LLC	IPP	Wilkinson DeFore	GA	62886	WILKD	2.3	Solar Photovoltaic	SUN	PV
2019	5	62669	Westtown NY 1, LLC	IPP	Westtown CSG	NY	62764	WT	2.0	Solar Photovoltaic	SUN	PV
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV Hybrid	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV Hybrid	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV Hybrid	SC	61956	CHPP	3.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	57449	Borrego Solar Systems Inc	Industrial	Clif Bar Bakery of Twin Falls	ID	62151	PV1	2.0	Solar Photovoltaic	SUN	PV
2019	6	62634	Chester Woods Point Solar, LLC	IPP	Chester Woods Point Solar, LLC CSG	MD	62720	5540	2.0	Solar Photovoltaic	SUN	PV
2019	6	58871	Citizens Enterprises Corporation	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV
2019	6	16604	City of San Antonio - (TX)	Electric Utility	Commerce ESS	TX	62609	BA1	10.0	Batteries	MWH	BA
2019	6	61567	DP-C2 Episode 1 LLC	IPP	Diamond Solar II	SC	61974	C2BV	8.2	Solar Photovoltaic	SUN	PV
2019	6	61567	DP-C2 Episode 1 LLC	IPP	Edison Solar II	SC	61975	C2BV	4.8	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT1	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT2	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT3	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT4	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT5	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND1	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND2	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND3	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND4	1.0	Solar Photovoltaic	SUN	PV
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND5	1.0	Solar Photovoltaic	SUN	PV
2019	6	61872	Gavilan District College Solar Project	IPP	Gavilan District College Solar Project	CA	61993	GDCBA	0.5	Batteries	MWH	BA
2019	6	7140	Georgia Power Co	Electric Utility	Waynesboro Community Solar	GA	62409	1	2.4	Solar Photovoltaic	SUN	PV
2019	6	7136	Georgia-Pacific Consr Prods LP-Naheola	Industrial	Georgia-Pacific Consr Prods LP-Naheola	AL	10699	TG4	29.4	Wood/Wood Waste Biomass	WDS	ST
2019	6	62719	Green Street Power Partners	IPP	GSPP Held LLC CSG	MN	62829	HELDM	3.0	Solar Photovoltaic	SUN	PV
2019	6	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXVIII LLC (CSG)	CO	62255	53973	1.5	Solar Photovoltaic	SUN	PV
2019	6	62131	HL Solar LLC	IPP	HL Solar	CA	62655	HLS	7.6	Solar Photovoltaic	SUN	PV
2019	6	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	302.4	Onshore Wind Turbine	WND	WT
2019	6	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV
2019	6	56990	NJR Clean Energy Ventures Corporation	IPP	IFF Union Beach Project	NJ	62306	IFFUB	5.5	Solar Photovoltaic	SUN	PV
2019	6	56990	NJR Clean Energy Ventures Corporation	IPP	McCullough Road Solar Farm	NJ	62638	WASHG	7.6	Solar Photovoltaic	SUN	PV
2019	6	61708	NRG Canal 3 Development LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	61943	North Rosamond Solar, LLC	IPP	North Rosamond Solar LLC	CA	59879	GEN01	160.0	Solar Photovoltaic	SUN	PV
2019	6	60685	Novel Energy Solutions	IPP	Novel Solar One CSG LLC	MN	62665	HELD	3.0	Solar Photovoltaic	SUN	PV
2019	6	61598	Novel Solar Three, LLC	IPP	Gibbon Solar	MN	62010	PGRK1	3.3	Solar Photovoltaic	SUN	PV
2019	6	59300	PNM Resources	Electric Utility	Rio De Oro Solar Energy Center	NM	62597	RDO	10.0	Solar Photovoltaic	SUN	PV
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	501	375.7	Natural Gas Fired Combined Cycle	NG	CT
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	502	200.6	Natural Gas Fired Combined Cycle	NG	CA
2019	6	61663	Panda Solar NC 10, LLC	IPP	Panda Solar NC 10, LLC	NC	62128	20031	2.0	Solar Photovoltaic	SUN	PV
2019	6	61664	Panda Solar NC 11, LLC	IPP	Panda Solar NC 11, LLC	NC	62129	20032	2.0	Solar Photovoltaic	SUN	PV
2019	6	61656	Panda Solar NC 3, LLC	IPP	Panda Solar NC 3, LLC	NC	62121	20011	2.0	Solar Photovoltaic	SUN	PV
2019	6	61657	Panda Solar NC 4, LLC	IPP	Panda Solar NC 4, LLC	NC	62122	20009	2.0	Solar Photovoltaic	SUN	PV
2019	6	61658	Panda Solar NC 5, LLC	IPP	Panda Solar NC 5, LLC	NC	62123	20007	1.0	Solar Photovoltaic	SUN	PV
2019	6	61660	Panda Solar NC 6, LLC	IPP	Panda Solar NC 6, LLC	NC	62124	20028	1.0	Solar Photovoltaic	SUN	PV
2019	6	61662	Panda Solar NC 9, LLC	IPP	Panda Solar NC 9, LLC	NC	62127	20022	2.0	Solar Photovoltaic	SUN	PV
2019	6	61743	Patriot Wind Farm, LLC	IPP	Patriot Wind Farm	TX	58614	PAT1	226.1	Onshore Wind Turbine	WND	WT
2019	6	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT
2019	6	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV
2019	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	174.0	Natural Gas Fired Combined Cycle	NG	CT

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	6	60947	Tesla Inc.	IPP	Estrella Mountain PV	AZ	60230	PV1	1.8	Solar Photovoltaic	SUN	PV
2019	6	61882	USS Eggo Solar CSG	IPP	USS Eggo Solar CSG	MN	62359	USEGG	1.0	Solar Photovoltaic	SUN	PV
2019	6	61839	USS Kost Trail Solar LLC	IPP	USS Kost Trail Solar CSG	MN	62339	USSKT	1.0	Solar Photovoltaic	SUN	PV
2019	6	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT1	5.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT2	5.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	BAT1	9.9	Batteries	MWH	BA
2019	6	62715	Westbound Solar LLC	Commercial	Amazon Maryland DCA1	MD	62876	DCA1	1.3	Solar Photovoltaic	SUN	PV
2019	6	62715	Westbound Solar LLC	IPP	McCleskey Cotton	GA	62878	MCCOT	1.9	Solar Photovoltaic	SUN	PV
2019	6	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK1	1.0	Solar Photovoltaic	SUN	PV
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK2	1.0	Solar Photovoltaic	SUN	PV
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK3	1.0	Solar Photovoltaic	SUN	PV
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK4	1.0	Solar Photovoltaic	SUN	PV
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK5	1.0	Solar Photovoltaic	SUN	PV
2019	7	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV
2019	7	61012	AES Distributed Energy	IPP	Williamsburg	MA	62202	WIL01	4.0	Solar Photovoltaic	SUN	PV
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA04	1.5	Batteries	MWH	BA
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA05	1.3	Batteries	MWH	BA
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA07	1.0	Batteries	MWH	BA
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA08	1.9	Batteries	MWH	BA
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA10	1.3	Batteries	MWH	BA
2019	7	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power LLC	TX	61242	VP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	7	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power LLC	TX	61242	VP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	7	62671	Chester NY 1, LLC	IPP	Chester CSG	NY	62761	CH	2.0	Solar Photovoltaic	SUN	PV
2019	7	61060	Cypress Creek Renewables	IPP	Palmetto Plains	SC	62679	1405	75.0	Solar Photovoltaic	SUN	PV
2019	7	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Piqua Manier	OH	62792	AMPPM	12.6	Solar Photovoltaic	SUN	PV
2019	7	61187	DG Minnesota CSG, LLC	IPP	Haven Solar Project CSG	MN	62651	HAVEN	3.0	Solar Photovoltaic	SUN	PV
2019	7	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV
2019	7	56201	Engie North America	IPP	Solomon Forks Wind Project, LLC	KS	61984	WTGS	275.6	Onshore Wind Turbine	WND	WT
2019	7	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV
2019	7	7140	Georgia Power Co	Electric Utility	Guyton Community Solar	GA	62392	1	3.6	Solar Photovoltaic	SUN	PV
2019	7	60428	Green City Recovery, LLC	IPP	Green City Recovery, LLC	KY	60703	2	1.0	Landfill Gas	LFG	IC
2019	7	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #2	CA	62418	4	1.0	Other Waste Biomass	OBG	IC
2019	7	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #3	CA	62419	4	1.0	Other Waste Biomass	OBG	IC
2019	7	9234	Indiana Municipal Power Agency	Electric Utility	Tipton Solar Park	IN	62305	STIP	5.3	Solar Photovoltaic	SUN	PV
2019	7	62649	KDC Solar ASGM LLC	IPP	KDC Solar ASGM	NJ	62739	ARDAH	3.8	Solar Photovoltaic	SUN	PV
2019	7	62038	MSC-Chisago01 LLC	IPP	MSC-Chisago01 LLC CSG	MN	62536	52739	1.0	Solar Photovoltaic	SUN	PV
2019	7	62039	MSC-Rice01 LLC	IPP	MSC-Rice01 LLC CSG	MN	62537	52738	1.0	Solar Photovoltaic	SUN	PV
2019	7	61227	Nautilus Solar Solutions	IPP	Synergen Panorama, LLC CSG	MD	62327	SP	6.6	Solar Photovoltaic	SUN	PV
2019	7	61659	Panda Solar NC 7 , LLC	IPP	Panda Solar NC 7, LLC	NC	62125	20038	1.5	Solar Photovoltaic	SUN	PV
2019	7	61677	Sol Systems	IPP	Warren Solar Farm LLC	NC	62223	10423	5.0	Solar Photovoltaic	SUN	PV
2019	7	60947	Tesla Inc.	IPP	Bd of Educ of Queen Anne's Cnty, Cnty HS	MD	62074	PV1	1.7	Solar Photovoltaic	SUN	PV
2019	7	60947	Tesla Inc.	IPP	Blue Shld Of Cal- El Dorado Hlls Mtr B	CA	62077	PV1	2.1	Solar Photovoltaic	SUN	PV
2019	7	60472	Tungsten Mountain	IPP	Tungsten Mountain	NV	60785	TMSOL	7.3	Solar Photovoltaic	SUN	PV
2019	8	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA09	4.5	Batteries	MWH	BA
2019	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	3A	0.5	Petroleum Liquids	DFO	IC
2019	8	62627	Alchemy Renewable Energy	IPP	TPE Pennsylvania Solar 1, LLC	PA	62686	PABOE	3.6	Solar Photovoltaic	SUN	PV
2019	8	57449	Borrego Solar Systems Inc	Industrial	Acushnet Ball Plant 2	MA	62835	ESS-1	1.0	Batteries	MWH	BA
2019	8	57449	Borrego Solar Systems Inc	Industrial	Acushnet Ball Plant 2	MA	62835	ESS-2	0.5	Batteries	MWH	BA
2019	8	58871	Citizens Enterprises Corporation	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV
2019	8	3913	City of Colby - (KS)	Electric Utility	Colby City of	KS	1272	9	3.0	Petroleum Liquids	DFO	IC
2019	8	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT
2019	8	40215	Cordova Electric Coop, Inc	Electric Utility	Eyak Service Center BESS	AK	62714	BESS1	1.0	Batteries	MWH	BA
2019	8	61060	Cypress Creek Renewables	IPP	Mars Solar	TX	63027	20	10.0	Solar Photovoltaic	SUN	PV
2019	8	61060	Cypress Creek Renewables	IPP	Trinity Solar	NC	60291	PV1	4.9	Solar Photovoltaic	SUN	PV
2019	8	62648	DG 1 Acquisition Co., LLC	IPP	Solar Star Palo Alto I, LLC	CA	62732	SSPAI	1.3	Solar Photovoltaic	SUN	PV
2019	8	60025	Greenbacker Renewable Energy Corporation	IPP	Camden Dam Solar, LLC	NC	62330	CMDND	5.0	Solar Photovoltaic	SUN	PV
2019	8	60025	Greenbacker Renewable Energy Corporation	IPP	Mill Pond Solar, LLC	NC	62328	MLLPD	5.0	Solar Photovoltaic	SUN	PV
2019	8	62674	Greenville NY 1, LLC	IPP	Greenville CSG	NY	62759	GV	2.0	Solar Photovoltaic	SUN	PV
2019	8	61886	Lockett Windfarm, LLC	IPP	Lockett Windfarm	TX	62356	LOC	183.8	Onshore Wind Turbine	WND	WT
2019	8	62037	MSC-Chisago02 LLC	IPP	MSC-Chisago02 LLC	MN	62538	52740	1.0	Solar Photovoltaic	SUN	PV
2019	8	62660	MSC-Empire01, LLC	IPP	MSC-Empire01, LLC	MN	62740	52784	1.0	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	8	62035	MSC-Scott01 LLC	IPP	MSC-Scott01 LLC	MN	62535	52737	1.0	Solar Photovoltaic	SUN	PV
2019	8	61396	Midway Wind, LLC	IPP	Midway Wind, LLC	TX	61776	MIDWY	162.9	Onshore Wind Turbine	WND	WT
2019	8	60879	NGI-Kayenta Solar Lessor I, LLC	IPP	Kayenta Solar Project	AZ	61268	PV2	28.0	Solar Photovoltaic	SUN	PV
2019	8	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	18	13.5	Petroleum Liquids	DFO	GT
2019	8	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	19	1.0	Petroleum Liquids	DFO	IC
2019	8	62149	Nautilus Goat Island Solar CSG LLC	IPP	Nautilus Goat Island Solar CSG LLC	RI	62672	GI	3.3	Solar Photovoltaic	SUN	PV
2019	8	62691	Novel Martin Solar One LLC	IPP	Novel Martin Solar One LLC (McLeod) CSG	MN	62779	MART	1.0	Solar Photovoltaic	SUN	PV
2019	8	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT
2019	8	61614	Rollingstone Holdco LLC	IPP	Rollingstone Holdco CSG	MN	62037	ROLLI	5.0	Solar Photovoltaic	SUN	PV
2019	8	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV
2019	8	60947	Tesla Inc.	IPP	Pima Community College	AZ	62075	PV1	1.1	Solar Photovoltaic	SUN	PV
2019	8	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant Hybrid	AR	62682	FAYE1	5.0	Solar Photovoltaic	SUN	PV
2019	8	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant Hybrid	AR	62682	FAYEB	6.0	Batteries	MWH	BA
2019	8	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant Hybrid	AR	62683	FAYW1	5.0	Solar Photovoltaic	SUN	PV
2019	8	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant Hybrid	AR	62683	FAYWB	6.0	Batteries	MWH	BA
2019	8	61885	USS East Hauer Watt Solar CSG	IPP	USS East Hauer Watt CSG	MN	62362	USEHW	1.0	Solar Photovoltaic	SUN	PV
2019	8	61881	USS King 2 CSG	IPP	USS King 2 CSG	MN	62358	USK12	1.0	Solar Photovoltaic	SUN	PV
2019	8	61841	USS Lake Patterson Solar	IPP	USS Lake Patterson Solar CSG	MN	62337	USLP	1.0	Solar Photovoltaic	SUN	PV
2019	9	61012	AES Distributed Energy	IPP	Palmer	MA	62135	PAL01	3.5	Solar Photovoltaic	SUN	PV
2019	9	60877	Antelope DSR 3 LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Arcadia Solar	WI	62744	A1	5.0	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Cashton Solar	WI	62858	CAS3	2.0	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Cumberland Solar	WI	62849	CUM4	2.5	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Elroy Solar	WI	62868	ELR5	1.5	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Fennimore Solar	WI	62847	FEN6	3.0	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	Forest City Solar	IA	62861	FOR7	3.0	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	New Lisbon Solar	WI	62848	NEW9	2.5	Solar Photovoltaic	SUN	PV
2019	9	62662	Butter Solar, LLC	IPP	St. Charles Solar	MN	62869	STC10	2.0	Solar Photovoltaic	SUN	PV
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7474	0.8	Other Waste Biomass	AB	ST
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7475	0.8	Other Waste Biomass	AB	ST
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7476	0.1	Other Waste Biomass	AB	ST
2019	9	8245	City of Hastings - (NE)	Electric Utility	Hastings Community Solar Farm	NE	62833	PV	0.3	Solar Photovoltaic	SUN	PV
2019	9	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT
2019	9	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT
2019	9	62856	Forefront Power, LLC	IPP	Dover CSG	NY	63106	21	2.0	Solar Photovoltaic	SUN	PV
2019	9	62856	Forefront Power, LLC	IPP	Ellsworth I CSG	NY	63112	22	2.0	Solar Photovoltaic	SUN	PV
2019	9	58959	Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex Hybrid	VT	62383	GMPBE	2.0	Batteries	MWH	BA
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex Hybrid	VT	62383	GMPSE	4.5	Solar Photovoltaic	SUN	PV
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh Hybrid	VT	62382	GMPBF	2.0	Batteries	MWH	BA
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh Hybrid	VT	62382	GMPSF	5.0	Solar Photovoltaic	SUN	PV
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton Hybrid	VT	62381	GMPBM	2.0	Batteries	MWH	BA
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton Hybrid	VT	62381	GMPSM	5.0	Solar Photovoltaic	SUN	PV
2019	9	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV
2019	9	62666	KDC Solar CSCP LLC	IPP	KDC Solar CSCP LLC	NJ	62746	CSCP	3.4	Solar Photovoltaic	SUN	PV
2019	9	60987	Lanikuhana Solar LLC	IPP	Lanikuhana Solar LLC	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV
2019	9	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARMS	1.6	Solar Photovoltaic	SUN	PV
2019	9	56990	NJR Clean Energy Ventures Corporation	IPP	Milford Solar Farm (NJ) LLC	NJ	62637	MILFD	7.5	Solar Photovoltaic	SUN	PV
2019	9	62706	NY Baldwin I, LLC	IPP	Breesport Road Community Solar Farm	NY	62157	235	2.0	Solar Photovoltaic	SUN	PV
2019	9	62630	NY Mooers I, LLC	IPP	Boas Rd #1 Community Solar Farm	NY	62530	496	2.0	Solar Photovoltaic	SUN	PV
2019	9	62631	NY Mooers II, LLC	IPP	Boas Rd #2 Community Solar Farm	NY	62531	1010	2.0	Solar Photovoltaic	SUN	PV
2019	9	62632	NY Mooers III, LLC	IPP	Boas Rd #3 Community Solar Farm	NY	62532	1011	2.0	Solar Photovoltaic	SUN	PV
2019	9	59300	PNM Resources	Electric Utility	San Miguel I Solar Energy Center	NM	63081	SMI	10.0	Solar Photovoltaic	SUN	PV
2019	9	61661	Panda Solar NC 8, LLC	IPP	Panda Solar NC 8, LLC	NC	62126	20052	2.0	Solar Photovoltaic	SUN	PV
2019	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPA	1.0	Solar Photovoltaic	SUN	PV
2019	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPB	1.0	Solar Photovoltaic	SUN	PV
2019	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPC	1.0	Solar Photovoltaic	SUN	PV
2019	9	61677	Sol Systems	IPP	Wendell Solar Farm LLC	NC	62595	10424	5.0	Solar Photovoltaic	SUN	PV
2019	9	62766	Somerville Solar, LLC	IPP	Somerville Solar	TN	62900	PV	2.3	Solar Photovoltaic	SUN	PV
2019	9	61916	Spencer-Tioga Solar, LLC	IPP	Pasto Solar	NY	62389	PASTO	16.0	Solar Photovoltaic	SUN	PV
2019	9	60531	Standard Solar	IPP	Sugarhill Road - Solitude Solar CSG	NY	62788	X0040	5.0	Solar Photovoltaic	SUN	PV
2019	9	61883	USS DVL Solar CSG	IPP	USS DVL Solar CSG	MN	62360	USDVL	1.0	Solar Photovoltaic	SUN	PV
2019	9	61522	Viridity Energy Solutions, Inc.	IPP	VEC Energy Storage	VT	62907	VEC	1.9	Batteries	MWH	BA
2019	9	62711	Wabasha Solar LLC	IPP	Wabasha Solar	MN	62800	WAB	1.0	Solar Photovoltaic	SUN	PV
2019	9	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV
2019	9	62712	Winona Solar I LLC	IPP	Winona Solar	MN	62799	WIN	1.0	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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

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, 2019

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	1	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	1	110.0	Natural Gas Steam Turbine	NG	ST
2019	1	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	2	110.0	Natural Gas Steam Turbine	NG	ST
2019	1	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	1	153.0	Conventional Steam Coal	BIT	ST
2019	1	1692	Big Rivers Electric Corp	Electric Utility	HMP&L Station Two Henderson	KY	1382	2	159.0	Conventional Steam Coal	BIT	ST
2019	1	56677	Cyrq Energy Corp	IPP	Soda Lake Geothermal No I II	NV	52174	OE11	0.8	Geothermal	GEO	ST
2019	1	56677	Cyrq Energy Corp	IPP	Soda Lake Geothermal No I II	NV	52174	OE12	0.9	Geothermal	GEO	ST
2019	1	56677	Cyrq Energy Corp	IPP	Soda Lake Geothermal No I II	NV	52174	OE13	0.9	Geothermal	GEO	ST
2019	1	56677	Cyrq Energy Corp	IPP	Soda Lake Geothermal No I II	NV	52174	OE21	1.1	Geothermal	GEO	ST
2019	1	19145	DTE Tuscola, LLC	Industrial	Tuscola Station	IL	55245	TG1	3.8	Natural Gas Steam Turbine	NG	ST
2019	1	11241	Entergy Louisiana LLC	Electric Utility	Sterlington	LA	1404	7B	44.0	Natural Gas Fired Combined Cycle	NG	CT
2019	1	58945	EthosEnergy Power Plant Services	Electric CHP	Quantum Pasco Power LP	FL	54424	GT1	48.5	Natural Gas Fired Combined Cycle	NG	CT
2019	1	58945	EthosEnergy Power Plant Services	Electric CHP	Quantum Pasco Power LP	FL	54424	GT2	48.5	Natural Gas Fired Combined Cycle	NG	CT
2019	1	58945	EthosEnergy Power Plant Services	Electric CHP	Quantum Pasco Power LP	FL	54424	ST1	24.0	Natural Gas Fired Combined Cycle	NG	CA
2019	1	20541	Wheelabrator Environmental Systems	IPP	Wheelabrator Ridge Energy	FL	54529	0001	47.1	Wood/Wood Waste Biomass	WDS	ST
2019	2	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	1	830.0	Conventional Steam Coal	RC	ST
2019	2	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	2	830.0	Conventional Steam Coal	RC	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	15534	TalenEnergy Montour LLC	IPP	TalenEnergy Montour	PA	3149	11	11.0	Conventional Steam Coal	RC	ST
2019	2	58105	University of Redlands	Commercial	Energy Center	CA	58168	EC01	1.5	Natural Gas Internal Combustion Engine	NG	IC
2019	3	11560	City of Manassas - (VA)	Electric Utility	Dean Drive Area Electric Generators	VA	56491	PG1	1.6	Petroleum Liquids	DFO	IC
2019	3	11560	City of Manassas - (VA)	Electric Utility	Dean Drive Area Electric Generators	VA	56491	PG2	1.6	Petroleum Liquids	DFO	IC
2019	3	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	GT7	19.0	Petroleum Liquids	DFO	GT
2019	3	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	1	151.0	Conventional Steam Coal	RC	ST
2019	3	6455	Duke Energy Florida, LLC	Electric Utility	Higgins	FL	630	P1	20.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	3	58945	EthosEnergy Power Plant Services	Electric CHP	Quantum Pasco Power LP	FL	54424	EDG1	1.2	Petroleum Liquids	DFO	IC
2019	3	58945	EthosEnergy Power Plant Services	Electric CHP	Quantum Pasco Power LP	FL	54424	EDG2	1.2	Petroleum Liquids	DFO	IC
2019	3	50129	Georgia-Pacific Cons Op LLC Port Hudson	Industrial	Georgia-Pacific Port Hudson	LA	10612	GEN1	67.7	Wood/Wood Waste Biomass	BLQ	ST
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	1	8.9	Municipal Solid Waste	MSW	ST
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	2	9.0	Municipal Solid Waste	MSW	ST
2019	3	7570	Great River Energy	Electric Utility	Elk River	MN	2039	3	16.9	Municipal Solid Waste	MSW	ST
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	19876	Virginia Electric & Power Co	Electric Utility	Bellmeade Power Station	VA	50966	1	95.0	Natural Gas Fired Combined Cycle	NG	CT
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Bellmeade Power Station	VA	50966	2	95.0	Natural Gas Fired Combined Cycle	NG	CT
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Bellmeade Power Station	VA	50966	3	77.0	Natural Gas Fired Combined Cycle	NG	CA
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Bremo Bluff	VA	3796	3	71.0	Natural Gas Steam Turbine	NG	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Bremo Bluff	VA	3796	4	156.0	Natural Gas Steam Turbine	NG	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Chesterfield	VA	3797	3	97.5	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Chesterfield	VA	3797	4	162.5	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Mecklenburg Power Station	VA	52007	GEN1	69.0	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Mecklenburg Power Station	VA	52007	GEN2	69.0	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Multitrade of Pittsylvania LP	VA	52118	GEN1	41.5	Wood/Wood Waste Biomass	WDS	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Multitrade of Pittsylvania LP	VA	52118	GEN2	41.5	Wood/Wood Waste Biomass	WDS	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Possum Point	VA	3804	3	96.0	Natural Gas Steam Turbine	NG	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Possum Point	VA	3804	4	220.0	Natural Gas Steam Turbine	NG	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2019	3	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2019	3	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	3	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	3	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	3	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST
2019	3	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0	Conventional Steam Coal	SUB	ST
2019	4	195	Alabama Power Co	Electric Utility	Gorgas	AL	8	10	727.7	Conventional Steam Coal	BIT	ST
2019	4	195	Alabama Power Co	Electric Utility	Gorgas	AL	8	8	163.0	Conventional Steam Coal	BIT	ST
2019	4	195	Alabama Power Co	Electric Utility	Gorgas	AL	8	9	172.0	Conventional Steam Coal	BIT	ST
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2a	0.5	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4	0.3	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4B	0.8	Petroleum Liquids	DFO	IC
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	5A	0.8	Petroleum Liquids	DFO	IC
2019	4	11701	City of Marquette - (MI)	Electric Utility	Shiras	MI	1843	1	11.6	Conventional Steam Coal	BIT	ST
2019	4	11701	City of Marquette - (MI)	Electric Utility	Shiras	MI	1843	2	19.5	Conventional Steam Coal	BIT	ST
2019	4	11701	City of Marquette - (MI)	Electric Utility	Shiras	MI	1843	3	41.0	Conventional Steam Coal	SUB	ST
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	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	2	146.0	Conventional Steam Coal	BIT	ST
2019	4	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	3	146.0	Petroleum Liquids	RFO	ST
2019	5	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	5	375.0	Conventional Steam Coal	BIT	ST

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	5	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	6	375.0	Conventional Steam Coal	BIT	ST
2019	5	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	677.2	Nuclear	NUC	ST
2019	5	13781	Northern States Power Co - Minnesota	Electric Utility	Bay Front	WI	3982	4	15.0	Wood/Wood Waste Biomass	WDS	ST
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	1	3.9	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	2	3.9	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	3	3.4	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	4	5.6	Conventional Hydroelectric	WAT	HY
2019	5	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	5	5.1	Conventional Hydroelectric	WAT	HY
2019	5	62639	Rosendale Renewable Energy, LLC	IPP	Oshkosh Foundation Rosedale Biodigester LLC	WI	58555	95100	1.4	Other Waste Biomass	OBG	IC
2019	5	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN1	46.3	Conventional Steam Coal	BIT	ST
2019	6	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN2	46.3	Conventional Steam Coal	BIT	ST
2019	6	4161	Constellation Power Source Gen	IPP	Gould Street	MD	1553	3	97.0	Natural Gas Steam Turbine	NG	ST
2019	6	4458	Covanta Warren Energy Resource Co LP	IPP	Covanta Warren Energy	NJ	10012	1	10.0	Municipal Solid Waste	MSW	ST
2019	6	12685	Entergy Mississippi LLC	Electric Utility	Rex Brown	MS	2053	4	197.7	Natural Gas Steam Turbine	NG	ST
2019	6	12685	Entergy Mississippi LLC	Electric Utility	Rex Brown	MS	2053	GT1	10.3	Petroleum Liquids	DFO	GT
2019	6	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	6	61336	Katahdin KI 50 LLC	Industrial	East Millinocket Mill	ME	55830	M2S1	14.5	Wood/Wood Waste Biomass	WDS	ST
2019	6	61336	Katahdin KI 50 LLC	Industrial	East Millinocket Mill	ME	55830	M2S2	14.5	Wood/Wood Waste Biomass	WDS	ST
2019	6	61336	Katahdin KI 50 LLC	Industrial	East Millinocket Mill	ME	55830	M2S3	28.1	Wood/Wood Waste Biomass	WDS	ST
2019	6	56355	LES Project Holdings LLC	IPP	I 95 Municipal Landfill Phase I	VA	52051	UNT1	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	I 95 Municipal Landfill Phase I	VA	52051	UNT2	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	I 95 Municipal Landfill Phase I	VA	52051	UNT3	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	I 95 Municipal Landfill Phase I	VA	52051	UNT4	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0201	0.8	Landfill Gas	LFG	IC
2019	6	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	6	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	4	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	6	56772	TX LFG Energy, LP	IPP	Coastal Plains	TX	55554	UNT1	1.7	Landfill Gas	LFG	IC
2019	6	56772	TX LFG Energy, LP	IPP	Coastal Plains	TX	55554	UNT3	1.7	Landfill Gas	LFG	IC
2019	6	56772	TX LFG Energy, LP	IPP	Coastal Plains	TX	55554	UNT4	1.7	Landfill Gas	LFG	IC
2019	6	50097	Verso Luke LLC	Industrial	Luke Mill	MD	50282	GEN1	32.0	Conventional Steam Coal	BIT	ST
2019	6	50097	Verso Luke LLC	Industrial	Luke Mill	MD	50282	GEN2	28.0	Conventional Steam Coal	BIT	ST
2019	7	7140	Georgia Power Co	Electric Utility	Hammond	GA	708	1	110.0	Conventional Steam Coal	BIT	ST
2019	7	7140	Georgia Power Co	Electric Utility	Hammond	GA	708	2	110.0	Conventional Steam Coal	BIT	ST
2019	7	7140	Georgia Power Co	Electric Utility	Hammond	GA	708	3	110.0	Conventional Steam Coal	BIT	ST
2019	7	7140	Georgia Power Co	Electric Utility	Hammond	GA	708	4	510.0	Conventional Steam Coal	BIT	ST
2019	7	7140	Georgia Power Co	Electric Utility	Langdale	AL	711	5	0.1	Conventional Hydroelectric	WAT	HY
2019	7	7140	Georgia Power Co	Electric Utility	Langdale	AL	711	6	0.1	Conventional Hydroelectric	WAT	HY
2019	7	7140	Georgia Power Co	Electric Utility	McIntosh	GA	6124	1	142.5	Conventional Steam Coal	SUB	ST
2019	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	UNIT3	0.4	Petroleum Liquids	DFO	IC
2019	8	55795	Bethlehem Renewable Energy LLC	IPP	Bethlehem Renewable Energy LLC	PA	56572	1	3.7	Landfill Gas	LFG	GT
2019	8	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	1	2.1	Petroleum Liquids	DFO	IC
2019	8	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	2	1.0	Petroleum Liquids	DFO	IC
2019	8	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	3	0.6	Petroleum Liquids	DFO	IC
2019	8	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC5	1.2	Petroleum Liquids	DFO	IC
2019	8	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC6	1.2	Petroleum Liquids	DFO	IC
2019	8	50158	Innovative Energy Systems Inc	IPP	SREC Bath LFGTE	NY	58295	GEN1	1.6	Landfill Gas	LFG	IC
2019	8	50158	Innovative Energy Systems Inc	IPP	SREC Bath LFGTE	NY	58295	GEN2	1.6	Landfill Gas	LFG	IC
2019	8	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	8	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	GT
2019	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2019	9	54736	AltaGas Pomona Energy Inc.	IPP	AltaGas Pomona Energy Inc.	CA	50300	GEN1	40.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	9	56888	Brea Generation LLC	IPP	Olinda Landfill Gas Recovery Plant	CA	10648	GEN1	1.7	Landfill Gas	LFG	IC
2019	9	56888	Brea Generation LLC	IPP	Olinda Landfill Gas Recovery Plant	CA	10648	GEN2	1.7	Landfill Gas	LFG	IC
2019	9	56888	Brea Generation LLC	IPP	Olinda Landfill Gas Recovery Plant	CA	10648	GEN3	1.7	Landfill Gas	LFG	IC
2019	9	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2019	9	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
2019	9	34672	DTE Energy Services	Electric CHP	Mobile Energy Services LLC	AL	50407	GEN5	56.1	Wood/Wood Waste Biomass	WDS	ST
2019	9	34672	DTE Energy Services	Electric CHP	Mobile Energy Services LLC	AL	50407	GEN6	33.2	Wood/Wood Waste Biomass	WDS	ST
2019	9	55951	Exelon Nuclear	IPP	Three Mile Island	PA	8011	1	802.8	Nuclear	NUC	ST
2019	9	10273	Kimberly-Clark Corp	Industrial	Chester Operations	PA	50410	5	67.0	Petroleum Coke	PC	ST
2019	9	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN1	3.3	Landfill Gas	LFG	GT
2019	9	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN2	3.3	Landfill Gas	LFG	GT

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2019

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	9	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	1	12.0	Conventional Steam Coal	BIT	ST
2019	9	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	2	12.0	Conventional Steam Coal	BIT	ST
2019	9	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	3	12.0	Conventional Steam Coal	BIT	ST
2019	9	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	ST4	64.0	Conventional Steam Coal	BIT	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)
2019	10	62139	1025 Traveller Solar, LLC	IPP	1025 Traveller Solar, LLC	NC	62660	1025	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	62140	1047 Little Mountain Solar, LLC	IPP	1047 Little Mountain Solar, LLC	NC	62661	1047	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	10	60571	AEP Onsite Partners	IPP	Lady Slipper Solar Array	MN	62414	PV1	4.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.4
2019	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT5	0.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.1
2019	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT6	0.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.1
2019	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT7	0.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.1
2019	10	15399	Avangrid Renewables LLC	IPP	Montague Wind Power Facility LLC	OR	58099	1	200.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	200.0
2019	10	61973	Black Hills Electric Generation LLC	IPP	Busch Ranch II Wind Farm	CO	62445	WT	59.4	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	59.4
2019	10	61745	Burgaw Solar, LLC	IPP	Burgaw Solar, LLC	NC	62240	1072	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	61934	CI III VK I TE Partnership LLC	IPP	Sage Solar I-III	UT	62399	77778	57.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	57.6
2019	10	16604	City of San Antonio - (TX)	Electric Utility	Commerce Solar	TX	62610	PV1	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	10	56769	Consolidated Edison Development Inc.	IPP	CED Northampton Solar LLC	MA	62695	NSMA	4.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.3
2019	10	61610	Delaware River Solar, LLC	IPP	Burritt Rd Community Solar Farm	NY	62480	635	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	10	61610	Delaware River Solar, LLC	IPP	Hospital Rd Community Solar Farm	NY	62155	9	1.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.4
2019	10	61610	Delaware River Solar, LLC	IPP	Podunk Road	NY	62834	871	2.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.2
2019	10	60496	Enerparc Inc.	IPP	Brush Solar Center	OR	61844	BRUSH	2.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.8
2019	10	60496	Enerparc Inc.	IPP	Morgan Solar Center	OR	61855	MORGN	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	10	60496	Enerparc Inc.	IPP	Vale Solar Center	OR	61856	VALE	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	10	62141	Ennis Solar, LLC	IPP	Ennis Solar, LLC	NC	62662	22503	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	12685	Entergy Mississippi LLC	Electric Utility	Hinds Energy Facility	MS	55218	H04BS	36.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	49.1
2019	10	62856	Forefront Power, LLC	IPP	SCCCD - Fresno Community College	CA	63068	231	2.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.2
2019	10	61374	Foxtail Wind, LLC	Electric Utility	Foxtail Wind, LLC	ND	61747	1	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2019	10	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	58.0	Wood/Wood Waste Biomass	WDS	ST	(TS) Construction complete, but not yet in commercial operation	58.0
2019	10	60846	GRP Madison Renewable Energy Facility, LLC	IPP	GRP Madison Renewable Energy Facility	GA	61213	GEN	58.0	Wood/Wood Waste Biomass	WDS	ST	(TS) Construction complete, but not yet in commercial operation	58.0
2019	10	19547	Hawaiian Electric Co Inc	Electric Utility	West Loch Solar One	HI	61987	WLS1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	10	62752	Holiday Hill Community Wind, LLC	IPP	Holiday Hill Community Wind	MA	62897	HHCW1	5.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	10	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	11	9.8	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.8
2019	10	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	12	9.8	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	9.8
2019	10	60986	Imperial Valley Solar 2, LLC	IPP	Mount Signal Solar 2	CA	61353	IVS2	153.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	153.5
2019	10	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 2 Solar Park	IN	62484	SCRA2	7.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	7.9
2019	10	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 3 Solar Park	IN	62485	SCRA3	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.8
2019	10	59898	Kawailoa Solar, LLC	IPP	Kawailoa Solar	HI	60125	KAWS	49.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	49.0
2019	10	61957	Kearny Mesa Storage LLC	IPP	Kearny Mesa Storage LLC	CA	62441	U1	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	10	62838	LSE Dorado, LLC	IPP	Goose Pond Solar	MA	62992	GPNOR	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	10	62838	LSE Dorado, LLC	IPP	Goose Pond Solar	MA	62992	GPSOU	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	10	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Berkshire Wind Power Project	MA	57721	HN-8	2.3	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.3
2019	10	11806	Massachusetts Mun Wholes Electric Co	Electric Utility	Berkshire Wind Power Project	MA	57721	HN-9	2.3	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	2.3
2019	10	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARFS	1.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.4
2019	10	54913	NSTAR Electric Company	Electric Utility	East Longmeadow Solar PV	MA	62059	LG400	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN2	14.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	16.5
2019	10	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN3	14.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	16.5
2019	10	59170	North American Biofuels, LLC	IPP	Morehead Generating Facility	KY	62641	M3516	1.4	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.4
2019	10	62863	Novel Bartel Solar LLC CSG	IPP	Novel Bartel Solar CSG	MN	63004	BART	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	10	62829	Novel Brooten Solar LLC CSG	IPP	Novel Brooten Solar CSG	MN	62961	BROOT	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	10	60685	Novel Energy Solutions	IPP	Novel Solar Two LLC	MN	62913	SCHNE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	62865	Novel Holmquist Solar LLC CSG	IPP	Novel Holmquist Solar CSG	MN	63006	HOLM	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	10	62866	Novel MNDot Solar LLC CSG	IPP	Novel MNDot Solar CSG	MN	63007	MNDT	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	10	62739	Otter River Road Solar LLC	IPP	Gardner - Otter River Road	MA	62870	79711	2.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.5
2019	10	59300	PNM Resources	Electric Utility	San Miguel II Solar Energy Center	NM	63082	SMII	10.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.0
2019	10	62138	Pecan Grove Solar, LLC	IPP	Pecan Grove Solar, LLC	NC	62659	1081	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	61515	Phoebe Energy Project, LLC	IPP	Phoebe Solar	TX	61906	PHOEB	250.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	250.0
2019	10	56215	RWE Renewables Americas LLC	IPP	Canadian Breaks, LLC	TX	63030	CBRKS	210.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	210.1
2019	10	61771	Ranchero Wind Farm LLC	IPP	Ranchero Wind Farm LLC	TX	62259	RAN	300.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	300.0
2019	10	61699	SR Meridian II	IPP	Meridian II	MS	62164	MRDII	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	10	61677	Sol Systems	IPP	Sabattus Solar LLC	NC	62596	11999	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	62123	SunRaise Investments, LLC	IPP	Happy Hollow CSG Hybrid	MA	62652	HHESS	3.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	3.3
2019	10	62123	SunRaise Investments, LLC	IPP	Happy Hollow CSG Hybrid	MA	62652	HHPV	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	10	61533	Techren Solar II LLC	IPP	Techren Solar II LLC	NV	61930	TECH2	200.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	200.0
2019	10	62853	Turquoise Liberty Co LLC	IPP	Turquoise Liberty Solar	NV	62980	PV	10.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.0
2019	10	61884	USS Brude Solar CSG	IPP	USS Brude Solar CSG	MN	62361	USBRU	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	10	61840	USS Rapidan Solar	IPP	USS Rapidan Solar CSG	MN	62338	USRAP	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	10	61980	Valta Energy	IPP	Mauka FIT One	HI	58662	3501	3.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	62715	Westbound Solar LLC	Commercial	Amazon Denver DEN3	CO	62877	ADEN3	4.6	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.6
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.9
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG4	225.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	232.9
2019	10	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	STG2	250.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	260.1
2019	10	59260	Wright Solar Park LLC	IPP	Wright Solar Park	CA	59525	FRWSP	200.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	200.0
2019	11	61012	AES Distributed Energy	IPP	Founders Homestead Farms Solar	RI	62302	RFH01	4.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.5
2019	11	61608	Agilon Energy Holdings II, LLC	IPP	Victoria City Power LLC	TX	61241	VC-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	11	61608	Agilon Energy Holdings II, LLC	IPP	Victoria City Power LLC	TX	61241	VC-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	50.0
2019	11	62051	Airport Solar LLC	IPP	Airport Solar	OR	62560	APS	47.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	47.3
2019	11	15399	Avangrid Renewables LLC	IPP	Coyote Ridge	SD	61047	WT1	98.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	98.0
2019	11	62063	Blue Summit III Wind, LLC	IPP	Blue Summit III Wind	TX	62566	BS3	200.2	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.2
2019	11	62772	CA ODEVI LLC	IPP	Windsor Floating Solar	CA	62902	WUS15	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	11	62885	CalCity Solar 1 , LLC	IPP	CalCity Solar 1	CA	63054	CALTR	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2019	11	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	7	4.4	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	4.4
2019	11	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	8	3.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	3.3
2019	11	60609	Clean Focus Renewables, Inc.	IPP	Rugged Solar LLC	CA	57960	1	80.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	80.0
2019	11	60290	Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2019	11	61060	Cypress Creek Renewables	IPP	Griffin Solar	TX	62953	1080	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	11	61060	Cypress Creek Renewables	IPP	Lampwick	TX	61872	GEN1	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2019	11	62084	DG Florham Park Solar LLC	IPP	DG Florham Park Solar LLC	NJ	62586	BASF	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	11	62132	DWW Solar II LLC	IPP	DWW Solar II	CT	62657	DWWS	36.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	36.9
2019	11	61610	Delaware River Solar, LLC	IPP	Chambers Road Solar	NY	62860	263	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2019	11	61610	Delaware River Solar, LLC	IPP	Dryden Rd #2 Community Solar Farm	NY	62477	372	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Gaskill Rd Community Solar Farm	NY	62474	928	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	11	61610	Delaware River Solar, LLC	IPP	Hickory Grove #1	NY	62831	25	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Hickory Grove #2	NY	62832	309	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	11	61610	Delaware River Solar, LLC	IPP	Woodoak Drive Community Solar Farm	NY	62479	175	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	57280	Eagle Creek RE LLC	IPP	Swinging Bridge 2	NY	2634	SWI3	1.2	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	1.2

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	11	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	11	61404	Edenton Solar	IPP	Edenton Solar	NC	61781	EDE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	11	62856	Forefront Power, LLC	IPP	Frog Hollow CSG	NY	63086	1731	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	62856	Forefront Power, LLC	IPP	Howell CSG	NY	63107	1725	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	62062	GD Richmond Buttonwoods I, LLC	IPP	GD Richmond Buttonwoods I, LLC	RI	62567	GDBUT	1.3	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.3
2019	11	61728	GlidePath Power Operations LLC	IPP	Prospect Storage	TX	62753	BESS	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2019	11	60259	Green River Wind Farm, LLC	IPP	Green River Wind Farm	IL	60471	GRNRV	212.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	212.0
2019	11	60025	Greenbacker Renewable Energy Corporation	IPP	Jamesville Road Solar, LLC	NC	62329	JMVLR	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	11	60025	Greenbacker Renewable Energy Corporation	IPP	Sol Phoenix	MD	62331	SOLPH	2.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.5
2019	11	62902	Highline Services, LLC	Electric Utility	Riverview Solar	CO	63092	RIVER	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	11	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	11	62894	Imeson Solar Farm LLC	IPP	Imeson Solar	FL	63186	IMESO	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	11	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(U) Under construction, less than or equal to 50 percent complete	1.6
2019	11	62961	Mountain Parks Services, Inc.	IPP	Tom Sifers Solar	CO	63163	SIFRS	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	11	62961	Mountain Parks Services, Inc.	IPP	Whiskey Hill Solar	CO	63164	WHSKY	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	11	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	11	61401	North 301 Solar	IPP	North 301 Solar	NC	61778	N301	26.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	26.9
2019	11	62864	Novel Haley Solar LLC CSG	IPP	Novel Haley Solar CSG	MN	63005	HALY	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	11	62831	Novel Historical Society Solar LLC CSG	IPP	Novel Historical Society Solar CSG	MN	62963	HIST	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	11	62830	Novel Reber Solar LLC CSG	IPP	Novel Reber Solar CSG	MN	62962	REBER	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	11	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L1	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L2	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L3	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62128	OEE XXX LLC	Industrial	Zephyr Wind Project - 2.0	OH	62653	T1	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62128	OEE XXX LLC	Industrial	Zephyr Wind Project - 2.0	OH	62653	T2	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62128	OEE XXX LLC	Industrial	Zephyr Wind Project - 2.0	OH	62653	T3	1.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.5
2019	11	62796	Paulding Wind Farm IV LLC	IPP	Timber Road IV	OH	62944	TRIV	125.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	125.1
2019	11	62047	Roadrunner Solar, LLC	IPP	Roadrunner, LLC	TX	62561	RODR1	200.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	200.0
2019	11	16191	Robbins Lumber Inc	Industrial	Robbins Lumber	ME	50230	WEG	8.5	Wood/Wood Waste Biomass	WDS	ST	(TS) Construction complete, but not yet in commercial operation	10.0
2019	11	61929	Runway Solar Farm	Electric Utility	Runway Solar Farm	SC	62397	1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	11	60975	SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332	NIKE2	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	11	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	11	2770	Terra-Gen Operating Co-Wind	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	131.1
2019	11	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
2019	11	60059	ZGlobal Inc	IPP	Eagle Creek	CA	63078	EGCRK	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	61012	AES Distributed Energy	IPP	25 Ashdown Road Solar, LLC	NY	62998	ASHDO	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	12	61012	AES Distributed Energy	IPP	AES Tonawanda Solar LLC	NY	63161	TNWDA	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	61012	AES Distributed Energy	IPP	Cronin Road Solar 1, LLC	MA	63011	CRONI	1.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	12	61012	AES Distributed Energy	IPP	Johnstown Solar 1, LLC	NY	63013	STATE	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2019	12	61012	AES Distributed Energy	IPP	RT 52 Walden Solar 1, LLC	NY	63000	WALDN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	12	61012	AES Distributed Energy	IPP	Ransomville Solar 1, LLC	NY	63012	SWANN	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	61012	AES Distributed Energy	IPP	West Street Solar 1 LLC	MA	63131	GRDNR	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	12	59496	Allete Clean Energy	IPP	Glen Ullin Energy Center	ND	62938	39001	106.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	106.7
2019	12	59496	Allete Clean Energy	IPP	South Peak Wind	MT	62939	41001	80.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	80.0
2019	12	61617	Alpha Value Solar, LLC	IPP	Alpha Value Solar	NC	62054	AVS01	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	12	60281	Altus Power America Management, LLC	IPP	FastSun 2 CSG	MN	62696	FS2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	12	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	TRCK1	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	12	59714	Antrim Wind Energy LLC	IPP	Antrim Wind	NH	59953	AWND1	28.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	28.8
2019	12	15399	Avangrid Renewables LLC	IPP	Karankawa Wind LLC	TX	61343	WT1	200.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	98.0
2019	12	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	12	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	12	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	12	61985	Beech Ridge II Wind Energy Center	IPP	Beech Ridge II Wind Energy Center	WV	62482	GEN1	56.2	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	56.2
2019	12	60328	Big Level Wind LLC	IPP	Big Level Wind	PA	60551	BLW01	90.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	90.0
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2019	12	58508	Carolina Solar Energy 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 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	61467	Central CA Fuel Cell 2, LLC	Electric CHP	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	12	60656	Chestnut Solar LLC	IPP	Chestnut Solar	NC	61011	PV1	74.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.9
2019	12	61773	Childress Solar Park LLC	IPP	Misae Solar	TX	62249	77777	240.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	240.0
2019	12	62855	Clear Creek Wind, LLC	IPP	Clear Creek Wind	MO	63025	V110	22.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	22.0
2019	12	62855	Clear Creek Wind, LLC	IPP	Clear Creek Wind	MO	63025	V120	220.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.0
2019	12	61817	Collard Holdings, LLC	IPP	Collard Holdings Solar	NC	62317	PV	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	4226	Consolidated Edison Co-NY Inc	Electric Utility	98th Street Battery Storage Station	NY	62839	ESS98	1.8	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	2.0
2019	12	56769	Consolidated Edison Development Inc.	IPP	CED Champaign Solar LLC	IL	62681	CSIL	1.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.6
2019	12	59550	Croda Inc.	Industrial	Croda Atlas Point CHP	DE	59783	91199	2.0	Landfill Gas	LFG	IC	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	61416	Crowned Ridge Wind, LLC	IPP	Crowned Ridge Wind Energy Center	SD	60503	CTTL1	200.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.1
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	Crooked Run	NC	62678	299	70.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	70.1
2019	12	60370	DG AMP Solar, LLC	IPP	DG AMP 1048 Wadsworth	OH	62942	A1048	6.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.3
2019	12	60370	DG AMP Solar, LLC	IPP	DG AMP Rittman Rd	OH	62941	AMPRR	2.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.6
2019	12	62800	DG Edison New Jersey LLC	IPP	DG Iron Mountain	NJ	62957	IRNMT	5.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.4
2019	12	62801	DG Linden New Jersey LLC	IPP	DG Infineum	NJ	62958	INFNM	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #1	NY	62525	40	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #2	NY	62526	41	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #3	NY	62527	390	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #4	NY	62528	391	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	58468	Dominion Renewable Energy	Electric Utility	Colonial Trail West	VA	61985	CTWS	142.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	142.4
2019	12	61911	Dougherty County Solar, LLC	IPP	Dougherty County Solar, LLC	GA	62375	PV1	120.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	120.0
2019	12	61926	Dryden-Tompkins Solar I, LLC	IPP	Ellis Solar	NY	62413	ELLIS	18.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	18.0
2019	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Duke Energy CHP at Clemson University	SC	63063	GT01	12.8	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	13.4
2019	12	6455	Duke Energy Florida, LLC	Electric Utility	Lake Placid Solar Power Plant	FL	62541	PV1	45.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2019	12	6455	Duke Energy Florida, LLC	Electric Utility	Trenton Solar Power Plant	FL	62543	PV1	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2019	12	15470	Duke Energy Indiana, LLC	Electric Utility	Tippecanoe Solar Power Plant	IN	63137	PV1	1.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT5	191.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	191.2
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT7	191.2	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	191.2
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST6	102.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	102.8
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST8	102.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	102.8

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	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	12	62963	E. Goenner Community Solar LLC	IPP	E. Goenner Project CSG	MN	63175	TC3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	57170	EDF Renewable Asset Holdings, Inc.	IPP	Valentine Solar, LLC	CA	62288	VAL01	111.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	111.2
2019	12	61420	ENGIE Storage Services NA LLC	Commercial	Pacific Union College BESS	CA	61795	12649	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	62845	ESA Four Oaks 2 NC LLC	IPP	ESA Four Oaks 2 NC LLC	NC	62996	PGR08	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	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	12	61915	Emmons-Logan Wind, LLC	IPP	Emmons-Logan Wind, LLC	ND	62380	ELLLC	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2019	12	60496	Enerparc Inc.	IPP	Baker City Solar	OR	61854	BAKER	15.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	15.0
2019	12	60496	Enerparc Inc.	IPP	Ontario Solar Center	OR	61860	ONTRO	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2019	12	56615	First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	12	61857	Five Forks Solar	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	12	62856	Forefront Power, LLC	IPP	Gibbons CSG	MD	63089	15122	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	62856	Forefront Power, LLC	IPP	Upper Marlboro 1 CSG	MD	63075	20	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	62856	Forefront Power, LLC	IPP	White CSG	MD	63085	15124	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3ST1	38.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 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	(V) Under construction, more than 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	(V) Under construction, more than 50 percent complete	102.0
2019	12	62061	GD West Greenwich Victory I, LLC	IPP	GD West Greenwich Victory I, LLC	RI	62568	GDVIC	1.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.8
2019	12	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2019	12	61194	Generate Capital	IPP	Boas Rd #4 Community Solar Farm	NY	62533	1023	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	12	61194	Generate Capital	IPP	Kelly Bridge Road Community Solar Farm	NY	62154	12	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	12	61194	Generate Capital	IPP	Sacket Lake Rd #1 Community Solar Farm	NY	62158	11	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	12	7140	Georgia Power Co	Electric Utility	Fort Valley State University Solar	GA	63062	1	10.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.8
2019	12	7140	Georgia Power Co	Electric Utility	Robins Air Force Base Solar	GA	61648	1	139.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	139.0
2019	12	61611	Glaciers Edge Wind Project LLC	IPP	Glaciers Edge Wind Project	IA	62035	GEW	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	211.7
2019	12	61912	Grazing Yak Solar, LLC	IPP	Grazing Yak Solar	CO	62376	PV1	35.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	35.0
2019	12	62962	Hartmann Community Solar LLC	IPP	Hartmann Project CSG	MN	63174	TC3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	60719	Harvest Ridge Wind Farm	IPP	Broadlands Wind Farm	IL	61161	GEN01	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2019	12	62638	Helen Solar LLC	IPP	Helen Solar CSG	MN	62706	SC	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	12	62106	Hidalgo Wind Farm II LLC	IPP	Hidalgo Wind Farm II	TX	62618	WT	50.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	50.4
2019	12	62046	High Lonesome Wind Power, LLC	IPP	High Lonesome Wind Power, LLC	TX	62562	HILO	449.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	449.5
2019	12	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	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	49893	Invenergy Services LLC	IPP	Wilkinson Solar LLC	NC	62544	GEN1	74.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.0
2019	12	61960	Lapetus Energy Project LLC	IPP	Lapetus	TX	62448	LAP	100.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	100.0
2019	12	56940	Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623	GEN1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2019	12	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Bluewater CDEC 1	NM	62994	NMBW1	2.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.4
2019	12	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Grants CDEC 2	NM	62995	NMGR1	4.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.5
2019	12	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Whitetail Solar 1	PA	62989	PAWT1	13.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	13.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	1	0.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	0.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	2	0.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	0.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	3	0.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	0.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	4	0.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	0.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	5	0.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	0.5
2019	12	61770	Mesteno Wind	IPP	Mesteno	TX	62258	MES	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	201.6
2019	12	12341	MidAmerican Energy Co	Electric Utility	Ida Grove II	IA	62795	1	201.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	201.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	North English II	IA	62608	1	140.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	140.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077	2	398.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	398.8
2019	12	12341	MidAmerican Energy Co	Electric Utility	Palo Alto Wind Farm	IA	63053	PAWF	250.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	250.0
2019	12	60018	NET Power, LLC	IPP	NET Power La Porte Station	TX	60910	NPLPS	25.5	Other Natural Gas	NG	OT	(TS) Construction complete, but not yet in commercial operation	25.5
2019	12	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	20	6.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	6.0
2019	12	56622	NextEra Energy Resources	IPP	Shaw Creek Solar, LLC	SC	61790	SHAWC	74.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.9
2019	12	62640	Northfield Solar LLC	IPP	Northfield Solar CSG	MN	62708	SC	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	58764	Origis Energy USA, Inc	IPP	OR Solar 2, LLC	OR	61200	ORSR2	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	12	62009	Palmer Solar LLC	IPP	Palmer Solar	CO	62495	20181	60.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	60.0
2019	12	62964	Prawer Community Solar LLC	IPP	Prawer Project CSG	MN	63176	TC3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	61758	Prevailing Wind Park, LLC	IPP	Prevailing Wind Park	SD	62247	PWPSD	220.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	220.0
2019	12	56215	RWE Renewables Americas LLC	IPP	Peyton Creek Wind Farm LLC	TX	62417	WT1	220.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	220.0
2019	12	56215	RWE Renewables Americas LLC	IPP	West of the Pecos Solar	TX	62415	WOTP1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2019	12	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	12	61586	Rankin Solar Center, LLC	IPP	Rankin Solar Center, LLC	SC	61996	RANKI	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2019	12	62129	SFDK Solar, LLC	IPP	SFDK Solar	CA	62649	SFDK	6.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.3
2019	12	61899	SR Arlington II, LLC	IPP	SR Arlington II	GA	62367	ARLII	102.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	102.5
2019	12	61635	SR Hazlehurst III, LLC	IPP	Hazlehurst III	GA	62057	HZIII	40.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	40.0
2019	12	61701	SR Meridian III	IPP	Meridian III	MS	62163	MRDII	52.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.5
2019	12	62966	STAG St. Paul Community Solar LLC	IPP	STAG St. Paul Project CSG	MN	63178	TC3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	62965	Schwinghamer Community Solar LLC	IPP	Schwinghamer Project CSG	MN	63177	TC3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	12	61321	Seabrook Solar, LLC	IPP	Seabrook Solar	SC	61701	GEN1	70.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	72.5
2019	12	62023	Skeleton Creek Energy Center	IPP	Skeleton Creek Energy Center Hybrid	OK	62494	SKC	250.0	Onshore Wind Turbine	WND	WT	(OT) Other	250.0
2019	12	61677	Sol Systems	IPP	Grove Solar, LLC	NC	62807	12083	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	61677	Sol Systems	IPP	Thanksgiving Fire Solar Farm, LLC	NC	62786	12087	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	17650	Southern Power Co	IPP	Reading Wind Project	KS	60999	READW	200.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.1
2019	12	17650	Southern Power Co	IPP	Wildhorse Mountain Wind Facility	OK	61866	1	100.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100.0
2019	12	60531	Standard Solar	IPP	MHG Wallingford	VT	62728	X0041	2.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.2
2019	12	60531	Standard Solar	IPP	Town of Burrillville Solar	RI	62898	X0042	4.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.2
2019	12	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.9
2019	12	62904	Syncarpha El Rito I, LLC	IPP	Syncarpha El Rito	NM	63124	SYNEL	1.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.6
2019	12	62906	Syncarpha Questa I, LLC	IPP	Syncarpha Questa	NM	63125	SYNQU	1.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.6
2019	12	60193	Tamworth Holdings, LLC	IPP	Tamworth Holdings	NC	60394	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	60410	Tanager Holdings, LLC	IPP	Tanager Holdings	NC	60691	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	61847	USS Centerfield Solar LLC	IPP	USS Centerfield Solar CSG	MN	62335	USCEN	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	12	62930	USS Cheyenne Solar LLC	IPP	USS Cheyenne Solar LLC CSG	MN	63145	CHYNE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62938	USS Christoffer Solar LLC	IPP	USS Christoffer Solar LLC CSG	MN	63152	CHRST	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62928	USS Greenhouse Solar LLC	IPP	USS Greenhouse Solar LLC CSG	MN	63143	GRHSE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62917	USS Haven Solar LLC	IPP	USS Haven Solar LLC CSG	MN	63138	USHAV	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0

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	61846	USS Hockey Pad Solar LLC	IPP	USS Hockey Pad Solar CSG	MN	62334	USHP	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	12	62929	USS Mayhew Solar LLC	IPP	USS Mayhew Solar LLC CSG	MN	63144	MAYHW	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62931	USS Midtown Solar LLC	IPP	USS Midtown Solar LLC CSG	MN	63146	MDTWN	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62927	USS Milkweed Solar LLC	IPP	USS Milkweed Solar LLC CSG	MN	63142	MLKWD	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62932	USS Monarch Solar LLC	IPP	USS Monarch Solar LLC CSG	MN	63147	MNRCH	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62937	USS Solar Sources LLC	IPP	USS Solar Sources LLC CSG	MN	63151	SOURC	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62926	USS Sunrise Solar LLC	IPP	USS Sunrise Solar LLC CSG	MN	63141	SNRSE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62933	USS Turkey Solar LLC	IPP	USS Turkey Solar LLC CSG	MN	63148	TURKY	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62925	USS Westeros Solar LLC	IPP	USS Westeros Solar LLC CSG	MN	63140	USSWS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62924	USS White Cloud Solar LLC	IPP	USS White Cloud LLC CSG	MN	63139	USSWC	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	62701	Vista Solar, Inc.	IPP	Shelter Creek Condominiums Solar	CA	62806	SCC01	2.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2019	12	62637	Walcott Solar LLC	IPP	Walcott Solar CSG	MN	62707	SC	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
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	62103	Whitney Hill Wind Power LLC	IPP	Whitney Hill Wind Power LLC	IL	62606	WTHWP	65.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	65.0
2020	1	61012	AES Distributed Energy	IPP	Finchville Solar, LLC	NY	62999	FINCH	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2020	1	55918	Acciona Wind Energy USA LLC	IPP	Palmas Wind, LLC	TX	61773	PW	142.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	144.9
2020	1	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKA2	103.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	103.4
2020	1	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN1	342.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	372.0
2020	1	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN2	342.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	372.0
2020	1	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN3	416.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	453.0
2020	1	62835	Caden Energix Hickory LLC	IPP	Caden Energix Hickory LLC	VA	63084	ENX02	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	1	62835	Caden Energix Hickory LLC	IPP	Caden Energix Hickory LLC	VA	63084	ENX03	12.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	12.0
2020	1	62900	Caden Energix Rives Road LLC	IPP	Caden Energix Rives Road LLC	VA	63087	ENX01	19.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	19.7
2020	1	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U001	143.3	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	1	61060	Cypress Creek Renewables	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	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	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	1	56615	First Solar Project Development	IPP	Sun Streams, LLC	AZ	60827	GEN01	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2020	1	56615	First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826	GEN01	103.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	103.4
2020	1	6452	Florida Power & Light Co	Electric Utility	Babcock Preserve	FL	62634	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Blue Heron Solar	FL	62631	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Cattle Ranch	FL	62632	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Northern Preserve Solar	FL	62645	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Southfork Solar	FL	62493	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Sweetbay Solar Center	FL	62394	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Twin Lakes	FL	62633	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2020	1	60025	Greenbacker Renewable Energy Corporation	IPP	Blue Star	MD	62332	BLUES	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2020	1	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Park 3	IN	62770	SRIC3	6.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.7
2020	1	9417	Interstate Power and Light Co	Electric Utility	Whispering Willow North	IA	62079	1	199.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	199.9
2020	1	62085	Mesquite Star LLC	IPP	Mesquite Star	TX	62587	MESQ	418.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	418.9
2020	1	61925	Middlesex-Yates Solar, LLC	IPP	Daum Solar	NY	62412	DAUM	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2020	1	56990	NJR Clean Energy Ventures Corporation	IPP	Franklin Solar	NJ	63149	FRANK	8.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	8.8
2020	1	56990	NJR Clean Energy Ventures Corporation	IPP	Pohatcong Solar Farm	NJ	63150	POHAT	8.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	8.0
2020	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
2020	1	62849	Novel Byron Solar LLC CSG	IPP	Novel Byron Solar CSG	MN	62985	BYRN	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	1	62832	Novel Herber Solar LLC CSG	IPP	Novel Herber Solar CSG	MN	62966	HERB	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	1	62848	Novel Jewison Solar LLC CSG	IPP	Novel Jewison Solar CSG	MN	62984	JEWI	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	1	62846	Novel Schmoll Farms Solar LLC CSG	IPP	Novel Schmoll Farms Solar CSG	MN	62982	SCHM	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	1	61910	Quitman Solar, LLC	IPP	Quitman Solar	GA	62584	QUITM	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2020	1	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
2020	1	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
2020	1	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
2020	1	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
2020	1	62821	Syncarpha Northampton, LLC	IPP	Syncarpha Northampton Hybrid	MA	62976	SYNOB	2.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.0
2020	1	62821	Syncarpha Northampton, LLC	IPP	Syncarpha Northampton Hybrid	MA	62976	SYNOS	3.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.6
2020	1	62826	Syncarpha Puddon I, LLC	IPP	Syncarpha Puddon I Hybrid	MA	62969	SYP1B	4.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	4.0
2020	1	62826	Syncarpha Puddon I, LLC	IPP	Syncarpha Puddon I Hybrid	MA	62969	SYP1S	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2020	1	62827	Syncarpha Puddon II, LLC	IPP	Syncarpha Puddon II Hybrid	MA	62970	SYP2B	4.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	4.0
2020	1	62827	Syncarpha Puddon II, LLC	IPP	Syncarpha Puddon II Hybrid	MA	62970	SYP2S	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2020	1	18454	Tampa Electric Co	Electric Utility	Little Manatee River Solar	FL	62750	GEN1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	1	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	1	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	1	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	1	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	1	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	1	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	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT1	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	60.5
2020	2	62834	Caden Energix Pamplin LLC	IPP	Caden Energix Pamplin LLC	VA	63083	ENX04	15.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	15.7
2020	2	7626	City of Greenfield - (IA)	Electric Utility	Greenfield	IA	1144	1	2.2	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	2.2
2020	2	7626	City of Greenfield - (IA)	Electric Utility	Greenfield	IA	1144	2	2.2	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	2.2
2020	2	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U002	143.3	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	2	58970	Ecoplexus, Inc	IPP	Underwood PV2	NC	60998	UNWD2	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2020	2	56201	Engie North America	IPP	Jumbo Hill Wind Project	TX	62630	WTGS1	160.7	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	160.7
2020	2	62856	Forefront Power, LLC	IPP	Harmony Road Solar	IL	63069	1823	1.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.9
2020	2	62856	Forefront Power, LLC	IPP	Mooseheart School Solar	IL	63073	1817	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	2	62856	Forefront Power, LLC	IPP	Reed Road Solar	IL	63071	1822	1.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.3
2020	2	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
2020	2	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	2	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	2	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	2	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	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	3	61012	AES Distributed Energy	IPP	Lane Ave Solar LLC	MA	63041	HANRA	1.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.5
2020	3	61012	AES Distributed Energy	IPP	Ryan Road Solar LLC	MA	63044	ORCHA	4.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.3
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1A	194.0	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	194.0	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	215.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	237.2
2020	3	62747	Acorn I Energy Storage LLC	IPP	Acorn I Energy Storage LLC	CA	62874	ACOR1	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 1 CSG	MN	63046	FS1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 10 CSG	MN	63038	FS10	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0

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	3	60281	Altus Power America Management, LLC	IPP	FastSun 11 CSG	MN	63037	FS11	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 13 CSG	MN	63035	FS13	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 14 CSG	MN	63036	FS14	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 18 CSG	MN	63034	FS18	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 19 CSG	MN	63033	FS19	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 3 CSG	MN	63042	FS3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 5 CSG	MN	63045	FS5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 7 CSG	MN	63043	FS7	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 8 CSG	MN	63039	FS8	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	60281	Altus Power America Management, LLC	IPP	FastSun 9 CSG	MN	63040	FS9	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2020	3	18488	City of Taunton	Electric Utility	Cleary Flood Hybrid	MA	1682	BS1	2.9	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U003	143.3	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	174.2
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U004	195.4	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U005	195.4	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U006	195.4	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	263.3
2020	3	5109	DTE Electric Company	Electric Utility	Polaris Wind Park	MI	62290	1	168.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	168.6
2020	3	61610	Delaware River Solar, LLC	IPP	Big Tree Community Solar Farm	NY	62476	607	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	3	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #1	NY	62472	617	2.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.2
2020	3	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #3	NY	62473	1035	2.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2020	3	61610	Delaware River Solar, LLC	IPP	Washington St Community Solar Farm #4	NY	62471	1034	2.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2020	3	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #1 Community Solar Farm	NY	62517	1142	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2020	3	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #2 Community Solar Farm	NY	62518	1181	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2020	3	61610	Delaware River Solar, LLC	IPP	Yellow Mills Rd #3 Community Solar Farm	NY	62519	1244	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Columbia Solar Power Plant	FL	61982	PV1	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Debary Solar Power Plant	FL	62542	PV1	74.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.5
2020	3	15470	Duke Energy Indiana, LLC	Electric Utility	Nabb Battery Energy Storage System	IN	62862	ES1	5.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	5.0
2020	3	61420	ENGIE Storage Services NA LLC	Commercial	San Diego International Airport BESS	CA	62754	BA	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	3	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
2020	3	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
2020	3	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
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	60496	Enerparc Inc.	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
2020	3	62856	Forefront Power, LLC	IPP	Square Barn Solar	IL	63070	1820	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2020	3	62856	Forefront Power, LLC	IPP	UC Santa Cruz Solar	CA	63091	246	1.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.8
2020	3	62130	Foundation CA Fund X Manager LLC	IPP	Foundation Dole Fresh Vegetables	CA	62654	WTG1	2.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	2.8
2020	3	62130	Foundation CA Fund X Manager LLC	IPP	Foundation Dole Fresh Vegetables	CA	62654	WTG2	2.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	2.8
2020	3	61873	GA Solar 4	IPP	Twiggs Solar	GA	61696	TWIGG	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	3	9234	Indiana Municipal Power Agency	Electric Utility	Scottsburg Solar Park	IN	62766	SCCOT	7.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.1
2020	3	9417	Interstate Power and Light Co	Electric Utility	Golden Plains	IA	62081	1	198.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	198.8
2020	3	10273	Kimberly-Clark Corp	Industrial	Chester Operations	PA	50410	6	14.1	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	17.3
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	(T) Regulatory approvals received. Not under construction	50.0
2020	3	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Johnson Corner Solar 1	KS	62993	KSJC1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2020	3	62837	Novel DeCook Solar LLC CSG	IPP	Novel DeCook Solar CSG	MN	62979	DECO	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	3	62833	Novel Herickhoff Solar LLC CSG	IPP	Novel Herickhoff Solar CSG	MN	62967	HERIC	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	3	61521	Pegasus Wind, LLC	IPP	Pegasus Wind	MI	61916	PWEC	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
2020	3	17609	Southern California Edison Co	Electric Utility	DESI-2 Battery Storage Facility	CA	62460	DESI2	1.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.4
2020	3	60970	SunShare Management	IPP	Linden 01 CSG	MN	63179	KANE1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2020	3	60970	SunShare Management	IPP	Linden 02 CSG	MN	63182	LIND2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2020	3	60970	SunShare Management	IPP	Linden 03 CSG	MN	63183	LIND3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2020	3	62641	Warsaw Solar LLC	IPP	Warsaw Solar CSG	MN	62709	SC	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2020	3	62748	Wildcat I Energy Storage LLC	IPP	Wildcat I Energy Storage LLC	CA	62875	WILD1	3.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	3.0
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1A	194.0	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	194.0	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	215.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	216.0
2020	4	61012	AES Distributed Energy	IPP	Allis Medina Solar LLC	NY	63129	ALLIS	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2020	4	61012	AES Distributed Energy	IPP	Beals Medina Solar LLC	NY	63130	BEALS	3.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.5
2020	4	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
2020	4	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
2020	4	10623	City of Lakeland - (FL)	Electric Utility	C D McIntosh Jr	FL	676	GT2	115.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	135.0
2020	4	61610	Delaware River Solar, LLC	IPP	County Route 11 Community Solar Farm	NY	62507	1419	4.1	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.1
2020	4	61610	Delaware River Solar, LLC	IPP	Route 22 Community Solar Farm	NY	62524	1444	3.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.7
2020	4	56201	Engie North America	IPP	East Fork Wind Project, LLC	KS	62220	WTGS	195.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	195.8
2020	4	6452	Florida Power & Light Co	Electric Utility	Echo River Solar	FL	62490	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Hibiscus Solar Energy Center	FL	62206	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Okeechobee Solar	FL	62491	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2020	4	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
2020	4	9234	Indiana Municipal Power Agency	Electric Utility	Gas City Solar Park	IN	62767	SGASC	2.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2020	4	62850	Novel Kanewischer Solar LLC CSG	IPP	Novel Kanewischer Solar CSG	MN	62986	KANE	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	4	62847	Novel Pederson Solar LLC CSG	IPP	Novel Pederson Solar CSG	MN	62983	PED	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	4	62788	Oberon Solar IA	IPP	Oberon IA	TX	62933	OBR1A	150.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	150.0
2020	4	62789	Oberon Solar IB	IPP	Oberon IB	TX	62932	OBR1B	30.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	30.0
2020	4	56215	RWE Renewables Americas LLC	IPP	Cranell Wind Farm LLC	TX	62416	WT1	220.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.0
2020	4	62029	Renew Solar ABC Sacramento LLC	IPP	Renew Solar ABC Sacramento LLC	CA	62545	SACRA	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2020	4	62113	Sage Draw Wind, LLC	IPP	Sage Draw Wind	TX	62620	SD	338.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	338.4
2020	4	60163	Soltage LLC	IPP	Ace Solar	SC	61937	18	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2020	4	62822	Syncarpha Blandford, LLC	IPP	Syncarpha Blandford Hybrid	MA	62975	SYBLB	3.5	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	3.5
2020	4	62822	Syncarpha Blandford, LLC	IPP	Syncarpha Blandford Hybrid	MA	62975	SYBLS	4.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.9
2020	4	62814	Syncarpha Leicester, LLC	IPP	Syncarpha Leicester Hybrid	MA	62972	SYLEB	1.9	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	1.9
2020	4	62814	Syncarpha Leicester, LLC	IPP	Syncarpha Leicester Hybrid	MA	62972	SYLES	2.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.6
2020	4	62820	Syncarpha Millbury, LLC	IPP	Syncarpha Millbury Hybrid	MA	62974	SYMIB	3.8	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	3.8
2020	4	62820	Syncarpha Millbury, LLC	IPP	Syncarpha Millbury Hybrid	MA	62974	SYMIS	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2020	4	62824	Syncarpha Northbridge I, LLC	IPP	Syncarpha Northbridge I Hybrid	MA	62977	SYN1B	4.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	4.0
2020	4	62824	Syncarpha Northbridge I, LLC	IPP	Syncarpha Northbridge I Hybrid	MA	62977	SYN1S	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2020	4	62825	Syncarpha Northbridge II, LLC	IPP	Syncarpha Northbridge II Hybrid	MA	62978	SYN2B	3.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	3.0
2020	4	62825	Syncarpha Northbridge II, LLC	IPP	Syncarpha Northbridge II Hybrid	MA	62978	SYN2S	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2020	4	62905	Syncarpha Taos I, LLC	IPP	Syncarpha Taos	NM	63123	SYNTA	3.1	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.1
2020	4	62813	Syncarpha Westminster, LLC	IPP	Syncarpha Westminster Hybrid	MA	62971	SYWEB	2.9	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.9

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)
2020	4	62813	Syncarpha Westminster, LLC	IPP	Syncarpha Westminster Hybrid	MA	62971	SYWES	4.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.7
2020	4	62828	TWE Bowman Solar Project, LLC	IPP	TWE Bowman Solar Project	SC	62828	BOW	73.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	5	61012	AES Distributed Energy	IPP	W. Orange Rd Solar LLC	MA	63047	HEYES	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	5	61012	AES Distributed Energy	IPP	Wilbur Woods Solar LLC	MA	63048	DESMO	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
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	61060	Cypress Creek Renewables	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	5	61610	Delaware River Solar, LLC	IPP	Frey Rd #1 Community Solar Farm	NY	62504	1159	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	5	61610	Delaware River Solar, LLC	IPP	Frey Rd #2 Community Solar Farm	NY	62521	1442	1.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.4
2020	5	61610	Delaware River Solar, LLC	IPP	Furnace Rd Community Solar Farm	NY	62508	1420	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2020	5	61610	Delaware River Solar, LLC	IPP	Route 19 #1 Community Solar Farm	NY	62500	1258	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2020	5	61610	Delaware River Solar, LLC	IPP	Route 19 #2 Community Solar Farm	NY	62502	1415	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	5	61610	Delaware River Solar, LLC	IPP	Telegraph Rd #1 Community Solar Farm	NY	62496	1268	3.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.8
2020	5	61610	Delaware River Solar, LLC	IPP	Telegraph Rd #2 Community Solar Farm	NY	62498	1413	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2020	5	7140	Georgia Power Co	Electric Utility	Moody Air Force Base Solar	GA	62377	1	49.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	49.5
2020	5	61888	Gloversville Community Solar LLC	IPP	Gloversville Landfill Solar	NY	62357	08158	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	5	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
2020	5	9234	Indiana Municipal Power Agency	Electric Utility	Tell City Solar Park	IN	62790	STEL2	3.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.2
2020	5	62867	Novel Winegar Partnership Solar CSG	IPP	Novel Winegar Partnership Solar CSG	MN	63008	WINE	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	5	56545	Pattern Operators LP	IPP	Old Jackson Solar LLC	TX	62501	1	127.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	128.0
2020	5	61634	SR Terrell, LLC	IPP	SR Terrell	GA	62058	TERRL	74.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.0
2020	5	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	5	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	5	62919	TPE King Solar Holdings1 LLC	IPP	King CSG	RI	63135	KING1	7.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.0
2020	5	62919	TPE King Solar Holdings1 LLC	IPP	King CSG	RI	63135	KING2	7.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.8
2020	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
2020	6	62685	10 Briggs Solar NG, LLC	IPP	10 Briggs Solar NG, LLC (East)	RI	62781	02818	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	6	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
2020	6	61524	226HC 8me LLC	IPP	Holstein 1 Solar Farm	TX	61962	HSF01	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	59272	41MB 8me, LLC	IPP	Borden Solar Farm	CA	59531	BRDN	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	6	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
2020	6	59474	BQ Energy LLC	IPP	West Valley East	NY	62738	WVE	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	6	59474	BQ Energy LLC	IPP	West Valley West	NY	62737	WVW	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	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
2020	6	62680	BT Coniglio Solar LLC	IPP	Coniglio Solar	TX	62772	BTCON	135.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	135.0
2020	6	62681	BT Cooke Solar, LLC	IPP	Rippey Solar	TX	62773	BTCOO	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2020	6	62682	BT Kellam Solar LLC	IPP	Kellam Solar	TX	62774	BTKEL	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2020	6	61466	Bakersfield Fuel Cell 1, LLC	Electric CHP	Bolthouse Farms Fuel Cell	CA	61845	MM28	2.5	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	2.5
2020	6	61466	Bakersfield Fuel Cell 1, LLC	Electric CHP	Bolthouse Farms Fuel Cell	CA	61845	MM29	2.5	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	2.5
2020	6	59613	BayWa r.e. Solar Projects LLC	IPP	Fern Solar LLC	NC	62798	FERN	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	6	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG-1H	1.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.5
2020	6	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG-2H	1.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.5
2020	6	61519	Blackville Solar Farm, LLC	IPP	Blackville Solar Farm, LLC	SC	61918	1	7.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.2
2020	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	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	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
2020	6	49846	Covanta Honolulu Resource Recovery	Commercial	H Power	HI	10334	PV1	2.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.1
2020	6	61610	Delaware River Solar, LLC	IPP	Route 5 & 20 Community Solar Farm	NY	62523	1093	2.3	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.3
2020	6	61610	Delaware River Solar, LLC	IPP	State Route 64N Community Solar Farm	NY	62520	1089	1.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.2
2020	6	62091	Derby Fuel Cell LLC	IPP	Derby Fuel Cell	CT	62588	MM45	2.8	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	6	62091	Derby Fuel Cell LLC	IPP	Derby Fuel Cell	CT	62588	MM46	2.8	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	6	5248	Dominion Energy Inc	Electric Utility	Grasshopper Solar	VA	62813	GRHS	80.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	80.0
2020	6	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville-Rock Hill Battery	NC	63064	ES1	8.8	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	8.8
2020	6	58970	Ecoplexus, Inc	IPP	Willoughby PV1	NC	60003	WILL1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	6	58135	Ecos Energy LLC	IPP	Apple Hill Solar	VT	61037	APPL	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2020	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
2020	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
2020	6	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
2020	6	56201	Engie North America	IPP	ENGIE Long Draw Solar LLC	TX	62845	SP1	225.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	225.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 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	(V) Under construction, more than 50 percent complete	500.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG1	283.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	450.0
2020	6	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
2020	6	9191	Idaho Power Co	Electric Utility	Shoshone Falls	ID	818	4	3.2	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	3.2
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	9234	Indiana Municipal Power Agency	Electric Utility	Centerville Solar Park	IN	62794	SCENT	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	6	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville Solar Park 4	IN	62776	SCRA4	2.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.3
2020	6	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Whitetail Solar 2	PA	62990	PAWT2	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2020	6	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Whitetail Solar 3	PA	62991	PAWT3	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
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	62869	Novel Benedix Solar LLC CSG	IPP	Novel Benedix Solar CSG	MN	63010	BNDX	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	6	56545	Pattern Operators LP	IPP	G.S.E. One LLC	TX	62505	1	82.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	83.0
2020	6	62913	Roundhouse Renewable Energy, LLC	Industrial	Roundhouse Wind Energy Project	WY	63133	82059	124.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	124.0
2020	6	62913	Roundhouse Renewable Energy, LLC	Industrial	Roundhouse Wind Energy Project	WY	63133	82060	79.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	79.0
2020	6	62913	Roundhouse Renewable Energy, LLC	Industrial	Roundhouse Wind Energy Project	WY	63133	82061	23.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	23.0
2020	6	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
2020	6	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
2020	6	62048	Westlands Almond LLC	IPP	Almond	CA	62546	ALMND	19.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	19.9
2020	7	62627	Alchemy Renewable Energy	IPP	Twittys Creek Solar, LLC	VA	63077	VATC	13.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	13.8
2020	7	4180	Connecticut Mun Elec Engy Coop	Electric Utility	Subase Microgrid Project	CT	59701	SFC1	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7

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	7	4180	Connecticut Mun Elec Engy Coop	Electric Utility	Subase Microgrid Project	CT	59701	SFC2	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2020	7	61060	Cypress Creek Renewables	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.0
2020	7	61060	Cypress Creek Renewables	IPP	Willard Solar	NC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	7	59685	JPMorgan Chase Bank	Commercial	South Campus Solar	DE	59922	G1789	1.8	Solar Photovoltaic	SUN	PV	(OT) Other	1.8
2020	7	61219	Longroad Energy Services LLC	IPP	El Campo Wind	TX	62765	CAMPO	242.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	242.8
2020	7	61219	Longroad Energy Services LLC	IPP	Prospero Solar	TX	62755	PROSP	300.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	300.0
2020	7	11479	Madison Gas & Electric Co	Electric Utility	Middleton Airport Solar	WI	62731	1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	7	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	GT200	17.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	21.7
2020	7	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	GT300	17.7	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	21.7
2020	7	58718	Na Pua Makani Power Partners LLC	IPP	Na Pua Makani Wind Project	HI	58837	WT1	25.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	25.0
2020	7	62868	Novel Peter Solar LLC CSG	IPP	Novel Peter Solar CSG	MN	63009	PETR	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
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	61678	RE Rambler LLC	IPP	Rambler	TX	62141	RMBLR	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	7	62875	Shakespeare Solar, LLC	IPP	Shakespeare Solar	NC	63014	PGR12	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	7	61677	Sol Systems	IPP	Ruff Solar LLC	NC	62594	11625	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	22.0
2020	7	62774	Solar Hagerstown LLC	IPP	Solar Hagerstown	MD	62912	137	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2020	7	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
2020	7	62757	SunEast Hills Solar LLC	IPP	SunEast Hills Solar Project	NY	62895	Q581	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	7	62756	SunEast Watkins Road Solar LLC	IPP	SunEast Watkins Road Solar Project	NY	62896	Q586	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	8	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-3	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62050	Castleman Power Development LLC	IPP	SJRR Power LLC	TX	62548	SJ-4	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	8	62091	Derby Fuel Cell LLC	IPP	Derby Fuel Cell	CT	62588	MM47	2.8	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	8	56201	Engie North America	IPP	Prairie Hill Wind Project	TX	63100	WTG	300.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	300.0
2020	8	49893	Invenergy Services LLC	IPP	Millican Solar Energy LLC	OR	63050	GEN1	71.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	71.4
2020	8	49893	Invenergy Services LLC	IPP	Prineville Solar Energy LLC	OR	63049	GEN1	46.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	46.2
2020	8	62819	Syncarpha Halifax, LLC	IPP	Syncarpha Halifax Hybrid	MA	62973	SYHAB	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2020	8	62819	Syncarpha Halifax, LLC	IPP	Syncarpha Halifax Hybrid	MA	62973	SYHAS	1.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.7
2020	8	62812	Syncarpha Tewksbury, LLC	IPP	Syncarpha Tewksbury Hybrid	MA	62968	SYTKB	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2020	8	62812	Syncarpha Tewksbury, LLC	IPP	Syncarpha Tewksbury Hybrid	MA	62968	SYTKS	2.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.8
2020	8	62946	USS All In Solar LLC	IPP	USS All In Solar LLC CSG	MN	63160	ALLIN	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62944	USS Cougar Solar LLC	IPP	USS Cougar Solar LLC CSG	MN	63158	COUGR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62945	USS Flower Solar LLC	IPP	USS Flower Solar LLC CSG	MN	63159	FLOWR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62940	USS Horne North Solar LLC	IPP	USS Horne North Solar LLC CSG	MN	63154	HORNN	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62941	USS Horne South Solar LLC	IPP	USS Horne South Solar LLC CSG	MN	63155	HORNS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62942	USS JJ Clay Solar LLC	IPP	USS JJ Clay Solar LLC CSG	MN	63156	JJCLY	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	62943	USS Verde Solar LLC	IPP	USS Verde Solar LLC CSG	MN	63157	VERDE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	8	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	9	62805	Bluestone Farm Solar, LLC	IPP	Bluestone Solar	VA	62950	BLUE1	49.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	49.9
2020	9	62050	Castleman Power Development LLC	IPP	Palestine Power Peaking Facility	TX	62684	PP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Palestine Power Peaking Facility	TX	62684	PP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Palestine Power Peaking Facility	TX	62684	PP-3	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Palestine Power Peaking Facility	TX	62684	PP-4	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Sealy Power Peaking Facility	TX	62685	SP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Sealy Power Peaking Facility	TX	62685	SP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Sealy Power Peaking Facility	TX	62685	SP-3	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62050	Castleman Power Development LLC	IPP	Sealy Power Peaking Facility	TX	62685	SP-4	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	9	62091	Derby Fuel Cell LLC	IPP	Derby Fuel Cell	CT	62588	MM48	2.8	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	9	62720	Frontier Windpower II, LLC	IPP	Frontier Windpower II	OK	62837	FW2	351.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	351.8
2020	9	62696	Gichi Noodin Wind Farm, LLC	IPP	Gichi Noodin Wind Farm	MI	62815	GNWF1	72.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	72.8
2020	9	61594	Highlander Solar Station 1 LLC	IPP	Highlander Solar Station 1	VA	62014	HLND1	165.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	165.0
2020	9	9234	Indiana Municipal Power Agency	Electric Utility	Columbia City Solar Park	IN	62769	SCOLU	4.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.6
2020	9	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Park 4	IN	62791	SRIC4	7.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	7.9
2020	9	9417	Interstate Power and Light Co	Electric Utility	Richland	IA	62080	1	130.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	130.1
2020	9	62897	MSB Investors, LLC	Electric CHP	ReSource Center	CA	63094	SBAD1	1.1	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1.1
2020	9	62897	MSB Investors, LLC	Electric CHP	ReSource Center	CA	63094	SBAD2	1.1	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	1.1
2020	9	62726	Mountain Breeze Wind, LLC	IPP	Mountain Breeze Wind, LLC	CO	62840	MTBRZ	170.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	170.0
2020	9	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
2020	9	56545	Pattern Operators LP	IPP	Solemio LLC	TX	62522	1	79.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2020	9	61592	Pleinmont Solar 1 LLC	IPP	Pleinmont Solar 1	VA	62012	PLNM1	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2020	9	62047	Roadrunner Solar, LLC	IPP	Roadrunner, LLC	TX	62561	RODR2	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG1	37.1	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	41.5
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG2	37.1	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	41.5
2020	9	62844	Spring Hope Solar 3, LLC	IPP	Spring Hope Solar 3, LLC	NC	62997	PGR09	4.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.9
2020	9	62044	TG High Prairie Wind, LLC	IPP	High Prairie Wind Farm	MO	62563	HPWF	400.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	400.0
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	61890	Tenaska Nobles 2 Power Partners, LLC	IPP	Nobles 2 Wind Project	MN	62364	WT1	250.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	250.0
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	62119	Antelope Expansion 3A, LLC	IPP	Antelope Expansion 3A	CA	62673	ANX3A	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	10	62118	Antelope Expansion 3B, LLC	IPP	Antelope Expansion 3B	CA	62674	ANX3B	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
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	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
2020	10	62803	Cove Mountain Solar 2 LLC	IPP	Cove Mountain Solar 2	UT	62470	GEN01	122.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	122.0
2020	10	62091	Derby Fuel Cell LLC	IPP	Derby Fuel Cell	CT	62588	MM49	2.8	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	10	61951	Dodge County Wind, LLC	IPP	Dodge County Wind	MN	62437	WT	170.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	170.0
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	56201	Engie North America	IPP	Las Lomas Wind Project	TX	63101	WTG	201.6	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	201.6
2020	10	61734	Flip Solar	IPP	Flip Solar	SC	62214	38	15.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	15.8
2020	10	61942	Griffin Trail Wind, LLC	IPP	Griffin Trail Wind	TX	62411	GTWND	225.6	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	225.6
2020	10	61697	Hillcrest Solar I, LLC	IPP	Hillcrest Solar	OH	62200	HILLC	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	10	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 5 Solar Park	IN	62793	SCRA5	9.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	9.9
2020	10	61853	Innogy Renewables US LLC	IPP	Scioto Ridge Wind Farm	OH	58780	1	189.2	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	189.2
2020	10	49893	Invenergy Services LLC	IPP	Harry Allen Solar Energy LLC	NV	63080	GEN1	118.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	118.8
2020	10	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Wildflower Solar 1	CA	62988	CAWF1	13.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	13.0

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	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	61219	Longroad Energy Services LLC	IPP	Weaver Wind	ME	63132	WEAVR	72.6	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	72.6
2020	10	62758	Orchard Windfarm, LLC	IPP	Orchard Windfarm, LLC	OR	62935	OCHW	40.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	40.0
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	56215	RWE Renewables Americas LLC	IPP	Raymond Wind Farm, LLC	TX	62909	ERAYM	200.2	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.2
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	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
2020	10	16609	San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366	TGES	30.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	30.0
2020	10	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG3	37.1	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	41.5
2020	10	62744	St. James Solar, LLC	IPP	St. James Solar (LA)	LA	62854	SJS	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	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
2020	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
2020	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
2020	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
2020	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
2020	10	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	10	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
2020	10	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	10	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	11	62049	Aquamarine Westside LLC	IPP	Aquamarine	CA	62547	AQUAM	250.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	250.0
2020	11	61711	Ashley Solar (SC)	IPP	Ashley Solar (SC)	SC	62179	21	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	61712	Atlantic Solar	IPP	Atlantic Solar	SC	62180	22	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	11	61713	B & K Solar	IPP	B & K Solar	SC	62181	23	63.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	63.0
2020	11	61544	Bani Solar, LLC	IPP	Bani Solar	SC	61938	4	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	61714	Battle Solar	IPP	Battle Solar	SC	62182	24	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	61716	Big Fork Solar	IPP	Big Fork Solar	SC	62184	26	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2020	11	61731	Denmark Solar	IPP	Denmark Solar	SC	62211	35	6.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.0
2020	11	56201	Engie North America	IPP	Dakota Range III Wind Project	SD	63102	WTG	151.2	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	151.2
2020	11	56201	Engie North America	IPP	King Plains Wind Project	OK	63104	WTG	250.2	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	250.2
2020	11	56201	Engie North America	IPP	Triple H Wind Project	SD	63103	WTG	250.2	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	250.2
2020	11	61736	Gaines Solar	IPP	Gaines Solar	SC	62216	41	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	49893	Invenergy Services LLC	IPP	Crescent Valley Solar	NV	62888	GEN1	149.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	149.0
2020	11	49893	Invenergy Services LLC	IPP	Lovelock Solar	NV	62934	GEN1	190.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	190.0
2020	11	61219	Longroad Energy Services LLC	IPP	Milford Solar 1	UT	62812	MS1	99.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	99.0
2020	11	61790	McCormick Solar	IPP	McCormick Solar	SC	62279	57	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	14232	Otter Tail Power Co	Electric Utility	Merricourt Wind Project	ND	57048	1	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
2020	11	14354	PacifiCorp	Electric Utility	Ekola Flats	WY	62591	1	250.9	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	250.9
2020	11	14354	PacifiCorp	Electric Utility	TB Flats	WY	62516	1	503.2	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	503.2
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	62694	Rappahannock Solar, LLC	IPP	Rappahannock Solar, LLC	VA	62780	100	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2020	11	62896	Rooney Ranch, LLC	IPP	Rooney Ranch	CA	63088	ROONR	21.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	21.0
2020	11	62907	Sand Hill A, LLC	IPP	Sand Hill A	CA	63126	SNDHA	13.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	13.5
2020	11	61814	Sandifer Solar	IPP	Sandifer Solar	SC	62298	70	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG1	72.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	75.0
2020	11	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG2	72.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	75.0
2020	11	61829	Shem Solar	IPP	Shem Solar	SC	62308	72	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
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	61835	Tarpon Solar I	IPP	Tarpon Solar I	SC	62314	78	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	18617	Tesoro Alaska Company LLC	Industrial	Tesoro Kenai Cogeneration Plant	AK	52184	GEN3	6.3	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	7.8
2020	11	61860	Trask East Solar	IPP	Trask East Solar	SC	62346	83	12.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	12.0
2020	11	62954	USS Bush Solar LLC	IPP	USS Bush Solar LLC CSG	MN	63166	BUSH	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62959	USS Chariot Solar LLC	IPP	USS Chariot Solar LLC	MN	63171	CHROT	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62955	USS Hancock Solar	IPP	USS Hancock Solar LLC CSG	MN	63167	HNCCK	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62957	USS KVPV Solar LLC	IPP	USS KVPV Solar LLC	MN	63169	KVPV	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62958	USS Kass Solar LLC	IPP	USS Kass Solar LLC	MN	63170	KASS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62956	USS Pheasant Solar LLC	IPP	USS Pheasant Solar LLC	MN	63168	HNCCK	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2020	11	62953	USS Reindeer Solar LLC	IPP	USS Reindeer Solar LLC CSG	MN	63165	RENDR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
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	11	61865	Wayfair Solar	IPP	Wayfair Solar	SC	62345	89	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	11	62635	Wildcat Creek Wind Farm LLC	IPP	Wildcat Creek Wind Farm LLC	TX	62715	WCCWF	180.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	180.1
2020	11	61870	Yemassee Solar	IPP	Yemassee Solar	SC	62353	93	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2020	12	62006	7X Energy, Inc.	IPP	Taygete Energy Project LLC	TX	62483	PV1	255.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	255.0
2020	12	61344	Advanced Microgrid Solutions	IPP	Hybrid Holdings 1 Capistrano	CA	62515	HH4MW	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
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	59495	Ameren Missouri	Electric Utility	Green City Renewable Energy Center	MO	63065	GBESS	2.5	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.5
2020	12	59495	Ameren Missouri	Electric Utility	Green City Renewable Energy Center	MO	63065	GCREC	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	59495	Ameren Missouri	Electric Utility	Richwoods Renewable Energy Center	MO	63066	RBESS	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	12	59495	Ameren Missouri	Electric Utility	Richwoods Renewable Energy Center	MO	63066	RREC	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	59495	Ameren Missouri	Electric Utility	Utica Renewable Energy Center	MO	63067	UBESS	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	12	59495	Ameren Missouri	Electric Utility	Utica Renewable Energy Center	MO	63067	UREC	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	61949	Assembly Solar, LLC	IPP	Assembly Solar Project	MI	62422	ASP01	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
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	61715	Bell Solar	IPP	Bell Solar	SC	62183	25	6.1	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.1
2020	12	60560	Big Blue River Wind Farm LLC	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	61717	Birch Solar	IPP	Birch Solar	SC	62185	27	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
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	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	62718	Broad River Solar, LLC	IPP	Broad River Solar, LLC	NC	62822	GEN1	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	12	60714	Burke Wind LLC	IPP	Burke Wind, LLC	ND	61100	GE23	199.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	199.4
2020	12	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	G6PV	0.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	0.8
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

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	62872	Carolina Lily Solar, LLC	IPP	Carolina Lily Solar	NC	63016	1096	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	12	58508	Carolina Solar Energy LLC	IPP	Cabaniss Solar	NC	60430	PV1	4.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.2
2020	12	58508	Carolina Solar Energy LLC	IPP	Sellers Farm Solar	NC	60439	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	12	61718	Chapman Solar	IPP	Chapman Solar	SC	62186	28	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61719	Clark Solar	IPP	Clark Solar	SC	62187	29	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
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	61720	Colleton Solar	IPP	Colleton Solar	SC	62188	30	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	12	61721	Collins Farm Solar	IPP	Collins Farm Solar	SC	62189	31	5.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.4
2020	12	62705	Concho Bluff LLC	IPP	Greasewood	TX	62804	GREA1	255.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	255.0
2020	12	62679	Constellation Solar Rhode Island LLC	IPP	Dry Bridge Solar (Brown University)	RI	62771	DBS1	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	62679	Constellation Solar Rhode Island LLC	IPP	Dry Bridge Solar (Brown University)	RI	62771	DBS2	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	62679	Constellation Solar Rhode Island LLC	IPP	Dry Bridge Solar (Brown University)	RI	62771	DBS3	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	62679	Constellation Solar Rhode Island LLC	IPP	Dry Bridge Solar (Brown University)	RI	62771	DBS4	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	12	61978	Convergent Energy and Power LP	IPP	Henrietta D Energy Storage LLC	CA	60641	HDES1	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2020	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
2020	12	62802	Cove Mountain Solar LLC	IPP	Cove Mountain Solar	UT	62469	GEN01	58.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	58.0
2020	12	61722	Crossroads Solar	IPP	Crossroads Solar	SC	62190	32	67.7	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	67.7
2020	12	61729	Culpepper Solar	IPP	Culpepper Solar	SC	62221	33	69.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	69.5
2020	12	61730	Dadswell Solar	IPP	Dadswell Solar	SC	62222	34	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2020	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
2020	12	61709	Desert Harvest, LLC	IPP	Desert Harvest, LLC	CA	62177	DH001	150.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	150.0
2020	12	62898	Dflex Power, LLC	IPP	John Paul Jones	TX	63095	JPJDX	18.7	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.7
2020	12	5248	Dominion Energy Inc	Electric Utility	Sadler Solar	VA	62814	SADL	100.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	100.0
2020	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Gaston Solar Power Plant	NC	62669	PV1	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Maiden Creek Solar Power Plant	NC	62668	PV1	69.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	69.3
2020	12	61785	EDP Renewables North America LLC	IPP	Crossing Trails Wind Farm	CO	62489	GEN1	104.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	104.0
2020	12	61785	EDP Renewables North America LLC	IPP	Headwaters Wind Farm II LLC	IN	62592	HWII	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2020	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
2020	12	62667	East Line Solar, LLC	IPP	East Line Solar	AZ	62899	EASTL	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	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
2020	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
2020	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
2020	12	5860	Empire District Electric Co	Electric Utility	Kings Point Wind Energy Center	MO	62475	KPW1	149.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	149.4
2020	12	5860	Empire District Electric Co	Electric Utility	Neosho Ridge Wind Energy Center	KS	62481	NRW1	301.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	301.0
2020	12	5860	Empire District Electric Co	Electric Utility	North Fork Ridge Wind Energy Center	MO	62478	NFRW1	149.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	149.4
2020	12	59497	Eversource	IPP	Martha's Vineyard Community Battery	MA	62605	MVESS	4.9	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	4.9
2020	12	59497	Eversource	IPP	Outer Cape Community Battery	MA	62604	OCESS	25.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	25.0
2020	12	61732	Fairfield Solar	IPP	Fairfield Solar	SC	62212	36	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
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	Little Bear 3	CA	62463	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	12	56615	First Solar Project Development	IPP	Little Bear 4	CA	62464	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	56615	First Solar Project Development	IPP	Little Bear 5	CA	62465	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	56615	First Solar Project Development	IPP	Little Bear Solar 1, LLC	CA	59870	GEN01	40.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	40.0
2020	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
2020	12	61733	Fishwater Solar	IPP	Fishwater Solar	SC	62213	37	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2020	12	6452	Florida Power & Light Co	Electric Utility	Egret Solar Center	FL	62925	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	6452	Florida Power & Light Co	Electric Utility	Lakeside Solar Center	FL	62922	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	6452	Florida Power & Light Co	Electric Utility	Magnolia Springs Solar Center	FL	62915	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	6452	Florida Power & Light Co	Electric Utility	Nassau Solar Center	FL	62914	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	6452	Florida Power & Light Co	Electric Utility	Trailside Solar Center	FL	62916	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	6452	Florida Power & Light Co	Electric Utility	Union Springs Solar Center	FL	62923	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	12	61735	Foreman Solar	IPP	Foreman Solar	SC	62215	39	6.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.4
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	61737	GEB Solar	IPP	GEB Solar	SC	62217	40	60.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.0
2020	12	61738	Gedosch Solar II	IPP	Gedosch Solar II	SC	62218	42	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	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
2020	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
2020	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
2020	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
2020	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
2020	12	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH2	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
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	61746	Holliday Solar I	IPP	Holliday Solar I	SC	62229	43	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	12	62134	Hunter Solar LLC	IPP	Hunter Solar LLC	UT	62656	HUSOL	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2020	12	61747	Indigo Solar	IPP	Indigo Solar	SC	62230	44	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61853	Innogy Renewables US LLC	IPP	Baron Winds Farm	NY	60596	1	272.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	272.0
2020	12	61853	Innogy Renewables US LLC	IPP	Cassadaga Wind Farm	NY	58777	1	126.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.0
2020	12	61853	Innogy Renewables US LLC	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	61853	Innogy Renewables US LLC	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
2020	12	61853	Innogy Renewables US LLC	IPP	Mason Dixon Wind Farm	PA	60212	1	79.9	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	79.9
2020	12	61853	Innogy Renewables US LLC	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
2020	12	61853	Innogy Renewables US LLC	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
2020	12	49893	Invenergy Services LLC	IPP	Badger Hollow Solar Farm LLC	WI	62955	GEN1	300.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	300.0
2020	12	49893	Invenergy Services LLC	IPP	Deuel Harvest Wind Energy LLC	SD	62943	GEN1	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2020	12	49893	Invenergy Services LLC	IPP	Hardin Solar Energy LLC	OH	63029	GEN1	150.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	12	61749	Jackson Solar	IPP	Jackson Solar	SC	62232	46	14.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	14.0
2020	12	61750	Jefferson Solar	IPP	Jefferson Solar	SC	62233	47	8.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	8.2
2020	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT	0.4	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.4
2020	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT1	0.4	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.4
2020	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT2	0.4	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.4
2020	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	RGHT	0.4	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.4
2020	12	61751	Juniper Solar	IPP	Juniper Solar	SC	62234	48	65.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	65.5
2020	12	62883	Kruger Energy Hertford, LLC	IPP	Kruger Energy Hertford, LLC	NC	63024	KEH	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	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
2020	12	62664	Lock 14 Hydro Partners, LLC	IPP	Heidelberg Hydroelectric Project	KY	62749	1	0.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	0.5
2020	12	62664	Lock 14 Hydro Partners, LLC	IPP	Heidelberg Hydroelectric Project	KY	62749	2	0.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	0.5
2020	12	62664	Lock 14 Hydro Partners, LLC	IPP	Heidelberg Hydroelectric Project	KY	62749	3	0.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	0.5
2020	12	62664	Lock 14 Hydro Partners, LLC	IPP	Heidelberg Hydroelectric Project	KY	62749	4	0.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	0.5
2020	12	62664	Lock 14 Hydro Partners, LLC	IPP	Heidelberg Hydroelectric Project	KY	62749	5	0.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	0.5
2020	12	61752	Lone Star Solar	IPP	Lone Star Solar	SC	62235	49	66.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	66.0
2020	12	61753	Luz Solar	IPP	Luz Solar	SC	62236	50	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	58849	Mariah del Este LLC	IPP	Mariah East	TX	59006	MARN	152.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	152.5
2020	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT1	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT2	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT3	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT4	2.6	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.6
2020	12	61755	Marshall Solar	IPP	Marshall Solar	SC	62238	52	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61796	Martin Central Solar	IPP	Martin Central Solar	SC	62285	53	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61787	Martin East Solar	IPP	Martin East Solar	SC	62276	54	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61788	Martin West Solar	IPP	Martin West Solar	SC	62277	55	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	62721	Maryneal Windpower, LLC	IPP	Maryneal Windpower	TX	62836	MNW	182.4	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	182.4
2020	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
2020	12	62740	Maverick Creek Wind, LLC	IPP	Maverick Creek Wind	TX	62853	MVRCK	524.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	524.4
2020	12	61710	Maverick Solar, LLC	IPP	Maverick Solar, LLC	CA	62178	MAV01	225.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	225.0
2020	12	61789	McClain Solar	IPP	McClain Solar	SC	62278	56	17.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	17.3
2020	12	62675	Meherrin Solar LLC	IPP	Meherrin Solar	VA	62758	MEHER	59.6	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	59.6
2020	12	61791	Melsam Solar	IPP	Melsam Solar	SC	62280	58	60.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.5
2020	12	12341	MidAmerican Energy Co	Electric Utility	Arbor Hill II	IA	62796	1	60.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	60.0
2020	12	61792	Middleton Solar	IPP	Middleton Solar	SC	62281	59	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61459	Minco Wind V, LLC	IPP	Minco Wind V, LLC	OK	61837	MV	220.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	220.0
2020	12	62916	Mohave County Wind Farm	IPP	Mohave County Wind Farm	AZ	63114	MCWF	350.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	350.0
2020	12	14328	Pacific Gas & Electric Co.	Electric Utility	Elkhorn Battery Energy Storage System	CA	62564	ELKHO	182.5	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	182.5
2020	12	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	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	61826	Pawcatuck Solar Center, LLC	IPP	Pawcatuck Solar Center, LLC	CT	62318	PAWCA	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	12	61793	Pee Dee Solar I	IPP	Pee Dee Solar I	SC	62282	60	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61794	Pee Dee Solar II	IPP	Pee Dee Solar II	SC	62283	61	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	59967	Phoenix Energy	IPP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(OT) Other	2.0
2020	12	62689	Piney Creek, LLC	IPP	Piney Creek Solar	VA	62768	PCSOL	80.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2020	12	62873	Plott Hound Solar, LLC	IPP	Plott Hound Solar	NC	63015	1088	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	12	62633	Plum Creek Wind, LLC	IPP	Plum Creek Wind Project (NE)	NE	62711	PLUM	230.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	230.0
2020	12	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	7	9.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	9.0
2020	12	15248	Portland General Electric Co	Electric Utility	Faraday	OR	3045	8	9.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	9.0
2020	12	61795	Power Solar	IPP	Power Solar	SC	62284	62	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2020	12	61946	Prairie State Solar, LLC	IPP	Prairie State Solar Project	IL	62420	PSS01	99.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	99.0
2020	12	61804	Pruger Solar I	IPP	Pruger Solar I	SC	62292	63	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61805	Pruger Solar II	IPP	Pruger Solar II	SC	62293	64	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61806	Pruger Solar III	IPP	Pruger Solar III	SC	62294	65	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	15466	Public Service Co of Colorado	Electric Utility	Cheyenne Ridge Wind Farm	CO	62952	CRW01	488.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	498.4
2020	12	61807	Quest Solar	IPP	Quest Solar	SC	62299	66	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
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	PV1	250.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	250.0
2020	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
2020	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
2020	12	56215	RWE Renewables Americas LLC	IPP	Boiling Springs Wind Farm	OK	62871	BGSPS	148.4	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	148.4
2020	12	56215	RWE Renewables Americas LLC	IPP	Magic Valley Wind Farm III LLC	TX	60362	MVIII	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.0
2020	12	56215	RWE Renewables Americas LLC	IPP	West Raymond Wind Farm LLC	TX	62855	WRAYM	239.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	239.8
2020	12	62778	Rattlesnake Flat, LLC	IPP	Rattlesnake	WA	62936	RAT	144.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	144.0
2020	12	62871	Ray Wilson Solar, LLC	IPP	Ray Wilson Solar	NC	63017	1090	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	12	61727	Reloj del Sol Wind Farm LLC	IPP	Reloj del Sol Wind Farm	TX	62207	RELOJ	209.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	209.4
2020	12	61808	Rollins Solar	IPP	Rollins Solar	SC	62295	67	63.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	63.0
2020	12	62761	Rosewater Wind Farm LLC	IPP	Rosewater Wind Farm	IN	62891	ROSEW	102.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	102.0
2020	12	61809	Ross Solar	IPP	Ross Solar	SC	62296	68	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2020	12	62743	RoxWind LLC	IPP	RoxWind	ME	62857	WIND1	15.3	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	15.3
2020	12	61810	Rutledge Solar	IPP	Rutledge Solar	SC	62297	69	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61624	SR Snipesville	IPP	Snipesville	GA	62165	SNIPE	61.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	61.0
2020	12	61828	Scarlet Solar	IPP	Scarlet Solar	SC	62307	71	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61830	Shining Sun Solar	IPP	Shining Sun Solar	SC	62309	73	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2020	12	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
2020	12	61831	Shorthorn Solar	IPP	Shorthorn Solar	SC	62310	74	60.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.5
2020	12	62146	Sigurd Solar LLC	IPP	Sigurd Solar LLC	UT	62666	SGSOL	80.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	80.0
2020	12	61832	Snoopy Solar	IPP	Snoopy Solar	SC	62311	75	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61833	Southard Solar	IPP	Southard Solar	SC	62312	76	6.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.0
2020	12	62717	Speedway Solar NC, LLC	IPP	Speedway Solar NC, LLC	NC	62821	GEN1	22.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	22.6
2020	12	61834	Starney Solar	IPP	Starney Solar	SC	62313	77	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	62716	Stony Knoll Solar, LLC	IPP	Stony Knoll Solar, LLC	NC	62820	GEN1	22.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	22.6
2020	12	62699	SunEast Dog Corners Solar LLC	IPP	SunEast Dog Corners Solar Project	NY	62823	Q584	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	62698	SunEast Skyline Solar LLC	IPP	SunEast Skyline Solar Project	NY	62816	Q670	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61954	Techren Solar V LLC	IPP	Techren Solar V	NV	62440	TECH5	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2020	12	61836	Tedder Solar	IPP	Tedder Solar	SC	62315	79	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61837	Ten Governors Solar	IPP	Ten Governors Solar	SC	62316	80	28.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	28.0
2020	12	2782	Terra-Gen Operating Co-Geo	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	61862	Thomas Solar	IPP	Thomas Solar	SC	62352	81	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	62799	Thunderhead Wind Energy LLC	IPP	Thunderhead Wind Energy LLC	NE	62956	GEN1	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2020	12	61861	Topaz Solar	IPP	Topaz Solar (SC)	SC	62349	82	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	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	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
2020	12	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	12	56633	Trishe Wind Minnesota	IPP	Trishe Wind Minnesota	MN	57255	1	40.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	40.0
2020	12	62939	USS Buckaroo Solar LLC	IPP	USS Buckaroo Solar LLC CSG	MN	63153	BUCKR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0

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	61859	Ulmer Solar	IPP	Ulmer Solar	SC	62343	85	22.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	22.0
2020	12	19876	Virginia Electric & Power Co	IPP	Desper Solar	VA	62730	1	88.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	88.2
2020	12	61522	Viridity Energy Solutions, Inc.	IPP	ORNI 34 LLC	CA	62801	ORN34	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2020	12	61868	WSW Solar	IPP	WSW Solar	SC	62350	86	30.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	30.0
2020	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
2020	12	61863	Washington Solar (SC)	IPP	Washington Solar (SC)	SC	62342	87	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61864	Washington Solar II (SC)	IPP	Washington Solar II (SC)	SC	62344	88	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	12	61866	Weaver Solar	IPP	Weaver Solar	SC	62347	90	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
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
2020	12	62668	Wheatridge Wind Energy, LLC	IPP	Wheatridge Hybrid	OR	62745	WIND	300.2	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	300.0
2020	12	62079	White Cloud Wind Project, LLC	IPP	White Cloud Wind Project, LLC	MO	62624	WTCWF	236.5	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	236.5
2020	12	62808	Whitehorn Solar, LLC	IPP	Whitehorn Solar	VA	62959	WHIT1	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2020	12	20860	Wisconsin Public Service Corp	Electric Utility	Two Creeks Solar	WI	63105	1	150.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	150.0
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	12	61869	Wysong Solar	IPP	Wysong Solar	SC	62351	92	2.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.3
2020	12	61871	York Solar	IPP	York Solar	SC	62354	94	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2021	1	62160	AES ES Alamitos, LLC	IPP	AES ES ALAMITOS, LLC	CA	61204	ALMTS	100.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	100.0
2021	1	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
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	59315	Bradley Farm LLC	IPP	Bradley Farm (Dudley)	NC	62593	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2021	1	61978	Convergent Energy and Power LP	IPP	Orange County Energy Storage 2	CA	62497	OCES2	9.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	9.0
2021	1	61978	Convergent Energy and Power LP	IPP	Orange County Energy Storage 3	CA	62499	OCES3	6.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	6.0
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	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH3	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2021	1	62763	Hecate Grid, LLC	IPP	Hecate Energy Johanna Facility	CA	62889	HEGJF	15.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	15.0
2021	1	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
2021	1	60131	South Field Energy, LLC	IPP	South Field Energy	OH	60356	SFECC	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	1,105.0
2021	1	18454	Tampa Electric Co	Electric Utility	Mountain View Solar (FL)	FL	61664	GEN1	52.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	52.5
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	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R1	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R2	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R3	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
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	2	61060	Cypress Creek Renewables	IPP	Pine Valley Solar Farm, LLC	NC	60298	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2021	3	61684	Diablo Energy Storage, LLC	IPP	Diablo Energy Storage	CA	62175	DIBLO	250.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	250.0
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	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES1	129.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	129.0
2021	3	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES2	98.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	98.0
2021	3	61130	Helix Ravenswood, LLC	IPP	Ravenswood	NY	2500	RWES3	89.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	89.0
2021	3	62912	Iris Solar LLC	IPP	Iris Solar LLC	LA	63128	ISLLC	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
2021	3	62646	Painter Energy Storage, LLC	IPP	Painter Energy Storage	CA	62729	PAIN1	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
2021	3	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
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	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
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	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
2021	4	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
2021	4	6452	Florida Power & Light Co	Electric Utility	Discovery Solar Center	FL	63109	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2021	4	6452	Florida Power & Light Co	Electric Utility	Orange Blossom Solar Center	FL	62919	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2021	4	6452	Florida Power & Light Co	Electric Utility	Palm Bay Solar	FL	62921	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2021	4	6452	Florida Power & Light Co	Electric Utility	Pelican Solar Center	FL	62924	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2021	4	6452	Florida Power & Light Co	Electric Utility	Rodeo Solar Center	FL	62917	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2021	4	6452	Florida Power & Light Co	Electric Utility	Sabal Palm Solar Center	FL	63110	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
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	62152	Skipjack Solar Center, LLC	IPP	Skipjack Solar Center	VA	62675	SKIPJ	175.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	175.0
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	62794	AP Solar 2, LLC	IPP	Fighting Jays Solar Project	TX	62945	FJSOL	350.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	350.0
2021	5	61818	CC Polymers LLC	Industrial	M&G Resins USA	TX	60642	1	11.7	All Other	WH	OT	(P) Planned for installation, but regulatory approvals not initiated	14.3
2021	5	61818	CC Polymers LLC	Industrial	M&G Resins USA	TX	60642	2	11.7	All Other	WH	OT	(P) Planned for installation, but regulatory approvals not initiated	14.3
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	62807	Hawtree Creek Farm Solar, LLC	IPP	Hawtree Solar	NC	62951	HAWT1	65.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	65.0
2021	5	62064	Hill Top Energy Center, LLC	IPP	Hill Top Energy Center, LLC	PA	62565	GEN1	619.1	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	664.7
2021	5	59677	Middlesex Energy Center LLC	IPP	Middlesex Energy Center LLC	NJ	59909	CT001	570.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	570.0
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	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
2021	6	61825	Antelope Expansion 1B, LLC	IPP	Antelope Expansion 1B	CA	62320	ANE1B	17.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	17.0
2021	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
2021	6	62797	Canisteo Wind Farm	IPP	Canisteo Wind Farm	NY	62947	GEN1	290.7	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	290.7
2021	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
2021	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
2021	6	62746	Don Lee BESS 1 LLC	IPP	Don Lee BESS 1 LLC	CA	62872	DONL1	6.5	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	6.5
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

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	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
2021	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
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	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
2021	6	56615	First Solar Project Development	IPP	Muscle Shoals	AL	62462	GEN01	227.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	227.0
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	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	232.0
2021	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
2021	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN1	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	177.0
2021	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	177.0
2021	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
2021	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
2021	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
2021	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
2021	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
2021	6	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV2	250.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	250.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT3	237.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT4	237.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.0
2021	6	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST2	232.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	260.0
2021	6	62918	TPE Hopkins Solar Holdings1 LLC	IPP	Hopkins Hill CSG	RI	63136	HH1	4.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.8
2021	6	62918	TPE Hopkins Solar Holdings1 LLC	IPP	Hopkins Hill CSG	RI	63136	HH2	4.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.7
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	6	19564	University of Notre Dame	Commercial	Notre Dame Hydro	IN	62918	HYD1	2.5	Conventional Hydroelectric	WAT	HY	(T) Regulatory approvals received. Not under construction	2.5
2021	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
2021	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
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	59056	Tri Global Energy, LLC	IPP	Easter	TX	59971	ESTR1	300.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	300.0
2021	8	56615	First Solar Project Development	IPP	Willow Spring Solar 3, LLC	CA	60325	GEN01	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2021	9	62724	Seventus 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
2021	9	62700	SunEast Clay Solar LLC	IPP	SunEast Clay Solar Project	NY	62819	Q669	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2021	10	62659	BMP Wind LLC	IPP	BMP Wind (TX)	TX	62809	BMP	293.6	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	293.3
2021	10	62709	Bakerstand Solar LLC	IPP	Bakerstand Solar (NY)	NY	62811	BKSTD	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2021	10	62886	Clover Creek Solar, LLC	IPP	Clover Creek Solar	UT	63061	CLVR	80.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	10	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	5.3
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	10	59056	Tri Global Energy, LLC	IPP	Water Valley Wind Energy	TX	62846	WWE1	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2021	11	62734	Blue Marmot IX LLC	IPP	Blue Marmot IX	OR	62867	DVRO	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62735	Blue Marmot V LLC	IPP	Blue Marmot V	OR	62866	DNZE	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62736	Blue Marmot VI LLC	IPP	Blue Marmot VI	OR	62865	DNZW	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62737	Blue Marmot VII LLC	IPP	Blue Marmot VII	OR	62864	RSHEI	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62738	Blue Marmot VIII LLC	IPP	Blue Marmot VIII	OR	62863	PRMLE	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	6452	Florida Power & Light Co	Electric Utility	Manatee Solar Energy Center	FL	60014	BMS	409.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	409.0
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	61797	Hecate Energy LLC	IPP	Hecate Energy Columbia County Solar	NY	62273	HECC1	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	11	61762	Long Ridge Energy Generation 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
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	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
2021	12	61783	Alabama Ledge Wind Farm LLC	IPP	Alabama Ledge Wind Farm LLC	NY	62261	GEN1	79.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	79.8
2021	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
2021	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
2021	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
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	803	Arizona Public Service Co	Electric Utility	Cotton Center Solar Hybrid	AZ	57561	CC17M	17.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	17.0
2021	12	803	Arizona Public Service Co	Electric Utility	Desert Star Hybrid	AZ	62965	DS10M	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
2021	12	803	Arizona Public Service Co	Electric Utility	El Sol BESS	AZ	62964	EL50M	50.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	50.0
2021	12	803	Arizona Public Service Co	Electric Utility	Foothills Solar Plant Hybrid	AZ	57997	FH38M	38.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	38.0
2021	12	803	Arizona Public Service Co	Electric Utility	Gila Bend Hybrid	AZ	59020	GB36M	36.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	36.0
2021	12	803	Arizona Public Service Co	Electric Utility	Hyder II	AZ	58383	H214M	14.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	14.0
2021	12	803	Arizona Public Service Co	Electric Utility	Hyder Solar	AZ	57563	H116M	16.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	16.0
2021	12	803	Arizona Public Service Co	Electric Utility	Paloma Solar Hybrid	AZ	57562	PA17M	17.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	17.0
2021	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
2021	12	15399	Avangrid Renewables LLC	IPP	Midland Wind	IL	63003	1	101.1	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	101.1
2021	12	59613	BayWa r.e. Solar Projects LLC	IPP	Bluebird Solar LLC	KY	62797	BBIRD	80.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	12	62708	Black Bear Wind LLC	IPP	Black Bear Wind (MT)	MT	62808	BBW	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	12	62713	Buenos Aires Windpower LLC	IPP	Buenos Aires Phase 1	TX	62803	BAW1	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
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	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC5	18.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	12	61060	Cypress Creek Renewables	IPP	Battle Mountain Solar Project	NV	61098	BMSP	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	101.0
2021	12	62911	Drew Solar LLC	IPP	Drew Solar LLC	CA	63127	DS	100.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2021	12	54802	Dynegy -Moss Landing LLC	IPP	Dynegy Moss Landing Power Plant	CA	260	BAT1	300.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	300.0
2021	12	61785	EDP Renewables North America LLC	IPP	Saddle Mountain East Wind Farm	WA	62263	GEN1	126.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	126.0
2021	12	59380	Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61390	PMRDO	6.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	6.0

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	62759	Geronimo Energy	IPP	Prairie Wolf Solar LLC	IL	62893	PWOLF	200.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	200.0
2021	12	62704	Grizzly Wind LLC	IPP	Grizzly Wind LLC	MT	62802	GW	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	12	62153	Hecate Energy Highland LLC	IPP	Hecate Energy Highland LLC	OH	62670	HIGHL	300.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	300.0
2021	12	62765	High Bridge Wind, LLC	IPP	High Bridge Wind Project	NY	62894	WT	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2021	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
2021	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
2021	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
2021	12	62899	Horseshoe Solar Energy LLC	IPP	Horseshoe Solar Energy	NY	63096	GEN1	180.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	180.0
2021	12	61853	Innogy Renewables US LLC	IPP	Buckeye Wind Farm	OH	58776	1	99.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	99.0
2021	12	49893	Invenergy Services LLC	IPP	Alle-Catt Wind Energy LLC	NY	62954	GEN1	340.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	340.0
2021	12	49893	Invenergy Services LLC	IPP	Yum Yum Solar LLC	TN	63026	GEN1	147.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	147.0
2021	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
2021	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
2021	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
2021	12	62663	Lock 13 Hydro Partners	IPP	Evelyn Hydroelectric Project	KY	62748	1	0.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.6
2021	12	62663	Lock 13 Hydro Partners	IPP	Evelyn Hydroelectric Project	KY	62748	2	0.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.6
2021	12	62663	Lock 13 Hydro Partners	IPP	Evelyn Hydroelectric Project	KY	62748	3	0.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.6
2021	12	62663	Lock 13 Hydro Partners	IPP	Evelyn Hydroelectric Project	KY	62748	4	0.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.6
2021	12	62663	Lock 13 Hydro Partners	IPP	Evelyn Hydroelectric Project	KY	62748	5	0.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.6
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	56215	RWE Renewables Americas LLC	IPP	Blackjack Creek Wind Farm	TX	62783	BLKJK	239.6	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	239.6
2021	12	61784	Rolling Upland Wind Farm LLC	IPP	Rolling Upland Wind Farm LLC	NY	62262	GEN1	60.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	12	61900	SR Arlington, LLC	IPP	SR Arlington I	GA	62436	ARLI	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2021	12	62109	Searcy Solar, LLC	IPP	Searcy Solar Hybrid	AR	62617	SEABT	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
2021	12	62109	Searcy Solar, LLC	IPP	Searcy Solar Hybrid	AR	62617	SEARC	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2021	12	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN01	160.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	180.0
2021	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
2021	12	62668	Wheatridge Wind Energy, LLC	IPP	Wheatridge Hybrid	OR	62745	BTRY	30.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	30.0
2021	12	62668	Wheatridge Wind Energy, LLC	IPP	Wheatridge Hybrid	OR	62745	SOLAR	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
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	61060	Cypress Creek Renewables	IPP	Thigpen Farms Solar, LLC	NC	60850	PV1	5.0	Solar Photovoltaic	SUN	PV	(OT) Other	5.0
2022	1	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
2022	1	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
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	1	62895	Vineyard Wind LLC	IPP	Vineyard Wind 1	MA	63093	VW01	800.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	800.0
2022	2	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
2022	2	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
2022	2	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
2022	2	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC	374.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	501.0
2022	2	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC2	257.6	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	312.8
2022	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
2022	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
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	11	359.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	394.4
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	12	359.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	394.4
2022	4	5109	DTE Electric Company	Electric Utility	Blue Water Energy Center	MI	62192	1S	428.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	478.6
2022	4	62787	Jackson Generation, LLC	IPP	Jackson Generation, LLC	IL	62926	01	600.0	Natural Gas Fired Combined Cycle	NG	CS	(T) Regulatory approvals received. Not under construction	600.0
2022	4	62787	Jackson Generation, LLC	IPP	Jackson Generation, LLC	IL	62926	02	600.0	Natural Gas Fired Combined Cycle	NG	CS	(T) Regulatory approvals received. Not under construction	600.0
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	6	62921	Arroyo Solar LLC	IPP	Arroyo Solar Energy Storage Hybrid	NM	63172	ARESS	40.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	40.0
2022	6	62921	Arroyo Solar LLC	IPP	Arroyo Solar Energy Storage Hybrid	NM	63172	ARSOL	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
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	62920	Cabin Point Solar Center LLC	IPP	Cabin Point Solar Center	VA	63134	CBNPT	75.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	75.0
2022	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
2022	6	6452	Florida Power & Light Co	Electric Utility	Lauderdale	FL	613	7GT1	385.6	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	385.6
2022	6	6452	Florida Power & Light Co	Electric Utility	Lauderdale	FL	613	7GT2	385.6	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	385.6
2022	6	6452	Florida Power & Light Co	Electric Utility	Lauderdale	FL	613	ST7	391.8	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	391.8
2022	6	62008	Hale Kuawehi Solar LLC	IPP	Hale Kuawehi Solar Hybrid	HI	62529	HKBA	30.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	30.0
2022	6	62008	Hale Kuawehi Solar LLC	IPP	Hale Kuawehi Solar Hybrid	HI	62529	HKSOL	30.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	30.0
2022	6	62036	Paeahu Solar LLC	IPP	Paeahu Solar Hybrid	HI	62534	PHBA	15.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	15.0
2022	6	62036	Paeahu Solar LLC	IPP	Paeahu Solar Hybrid	HI	62534	PHSOL	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2022	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	1,022.9
2022	6	62650	Victorville Energy Center, LLC	Industrial	Victorville Energy Center, LLC (CA)	CA	62726	1	19.9	All Other	WH	ST	(P) Planned for installation, but regulatory approvals not initiated	19.9
2022	7	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	7	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	8	62806	Guernsey Power Station LLC	IPP	Guernsey Power Station	OH	62949	GPS1	612.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	685.0
2022	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
2022	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
2022	9	62806	Guernsey Power Station LLC	IPP	Guernsey Power Station	OH	62949	GPS2	612.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	685.0
2022	10	62806	Guernsey Power Station LLC	IPP	Guernsey Power Station	OH	62949	GPS3	612.0	Natural Gas Fired Combined Cycle	NG	CS	(L) Regulatory approvals pending. Not under construction	685.0
2022	10	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
2022	10	61906	Rye Development	IPP	Allegheny L&D2 Hydroelectric Project	PA	62401	NA1	2.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.5
2022	10	61906	Rye Development	IPP	Arkabutla Lake Hydroelectric Project	MS	62402	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Beverly L&D Hydroelectric Project	OH	62403	NA1	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	10	61906	Rye Development	IPP	Devola L&D Hydroelectric Project	OH	62435	NA1	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	10	61906	Rye Development	IPP	Emsworth BC Hydroelectric Project	PA	62434	NA1	3.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.5
2022	10	61906	Rye Development	IPP	Emsworth L&D Hydroelectric Project	PA	62433	NA1	5.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.5
2022	10	61906	Rye Development	IPP	Enid Lake Hydroelectric Project	MS	62432	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Grays Landing L&D Hydroelectric Project	PA	62388	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Grenada Lake Hydroelectric Project	MS	62430	NA1	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.0
2022	10	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA1	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	10	61906	Rye Development	IPP	Lowell L&D Hydroelectric Project	OH	62429	NA1	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Maxwell L&D Hydroelectric Project	PA	62385	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Monongahela L&D4 Hydroelectric Project	PA	62404	NA1	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	10	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	10	61906	Rye Development	IPP	Morgantown L&D Hydroelectric Project	WV	62387	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Opekiska L&D Hydroelectric Project	WV	62386	NA1	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	3.0

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)
2022	10	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	10	61906	Rye Development	IPP	Philo L&D Hydroelectric Project	OH	62427	NA1	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	10	61906	Rye Development	IPP	Point Marion L&D Hydroelectric Project	PA	62384	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	10	61906	Rye Development	IPP	Rokeby L&D Hydroelectric Project	OH	62426	NA1	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	10	61906	Rye Development	IPP	Sardis Lake Hydroelectric Project	MS	62425	NA1	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	7.5
2022	11	60797	68SF 8me LLC	IPP	Eland Solar & Storage Center, Phase 1 Hybrid	CA	61168	61168	150.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	150.0
2022	11	60797	68SF 8me LLC	IPP	Eland Solar & Storage Center, Phase 1 Hybrid	CA	61168	68SF8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	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
2022	11	61906	Rye Development	IPP	Allegheny L&D2 Hydroelectric Project	PA	62401	NA2	2.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.5
2022	11	61906	Rye Development	IPP	Arkabutla Lake Hydroelectric Project	MS	62402	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Beverly L&D Hydroelectric Project	OH	62403	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Devola L&D Hydroelectric Project	OH	62435	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Emsworth BC Hydroelectric Project	PA	62434	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.5
2022	11	61906	Rye Development	IPP	Emsworth L&D Hydroelectric Project	PA	62433	NA2	6.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.5
2022	11	61906	Rye Development	IPP	Enid Lake Hydroelectric Project	MS	62432	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Grays Landing L&D Hydroelectric Project	PA	62388	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Grenada Lake Hydroelectric Project	MS	62430	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.0
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA2	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA3	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA4	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA5	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	Lowell L&D Hydroelectric Project	OH	62429	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA1	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Maxwell L&D Hydroelectric Project	PA	62385	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Monongahela L&D4 Hydroelectric Project	PA	62404	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Morgantown L&D Hydroelectric Project	WV	62387	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Opekiska L&D Hydroelectric Project	WV	62386	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	3.0
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA5	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA6	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Philo L&D Hydroelectric Project	OH	62427	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Point Marion L&D Hydroelectric Project	PA	62384	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Rokeby L&D Hydroelectric Project	OH	62426	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Sardis Lake Hydroelectric Project	MS	62425	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	7.5
2022	12	61768	Arrow Canyon Solar LLC	IPP	Arrow Canyon Solar Hybrid	NV	62248	1	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	12	61768	Arrow Canyon Solar LLC	IPP	Arrow Canyon Solar Hybrid	NV	62248	2	75.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	75.0
2022	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
2022	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
2022	12	62760	EDPR CA Solar Park VI LLC	IPP	EDPR CA Solar Park VI LLC (CA) Hybrid	CA	62892	SONR2	40.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	40.0
2022	12	62760	EDPR CA Solar Park VI LLC	IPP	EDPR CA Solar Park VI LLC (CA) Hybrid	CA	62892	SONRI	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	201.0
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	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
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
2022	12	49893	Invenergy Services LLC	IPP	Tip Top Solar Energy Center LLC	NM	63028	GEN1	220.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	220.0
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG1	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	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
2022	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2022	12	56215	RWE Renewables Americas LLC	IPP	Pinckard Solar	AL	62787	PCKND	79.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	85.1
2022	12	21554	Seminole Electric Cooperative Inc	Electric Utility	Seminole (FL)	FL	136	CT1	349.8	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	384.2
2022	12	21554	Seminole Electric Cooperative Inc	Electric Utility	Seminole (FL)	FL	136	CT2	349.8	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	384.2
2022	12	21554	Seminole Electric Cooperative Inc	Electric Utility	Seminole (FL)	FL	136	ST	396.6	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	414.8
2023	5	62733	Cranberry Point Energy Storage LLC	IPP	Cranberry Point Energy Storage	MA	62844	NA	150.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	150.0
2023	5	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	4	88.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	88.0
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	7	60798	69SV 8me LLC	IPP	Eland Solar & Storage Center, Phase 2 Hybrid	CA	61169	61169	150.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	150.0
2023	7	60798	69SV 8me LLC	IPP	Eland Solar & Storage Center, Phase 2 Hybrid	CA	61169	69SV8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2023	9	62910	300MS 8me LLC	IPP	Southern Bighorn Solar Hybrid	NV	63113	BESS	135.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	135.0
2023	9	62910	300MS 8me LLC	IPP	Southern Bighorn Solar Hybrid	NV	63113	SBS	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2023	10	61914	Juwi Inc	IPP	Spanish Peaks Solar	CO	62379	47301	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2023	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
2023	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
2023	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
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-B	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2023	12	62023	Skeleton Creek Energy Center	IPP	Skeleton Creek Energy Center Hybrid	OK	62494	SCBAT	200.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	200.0
2023	12	62023	Skeleton Creek Energy Center	IPP	Skeleton Creek Energy Center Hybrid	OK	62494	SCSOL	250.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	250.0
2023	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
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	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
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	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
2024	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
2024	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
2024	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-C	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
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

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)
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
2025	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
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	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
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
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	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN1	34.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2019	11	5517	Dynegy Midwest Generation Inc	IPP	Havana	IL	891	6	411.0	Conventional Steam Coal	RC	ST
2019	11	5517	Dynegy Midwest Generation Inc	IPP	Hennepin Power Station	IL	892	1	68.0	Conventional Steam Coal	RC	ST
2019	11	5517	Dynegy Midwest Generation Inc	IPP	Hennepin Power Station	IL	892	2	218.0	Conventional Steam Coal	RC	ST
2019	11	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	3	830.0	Conventional Steam Coal	RC	ST
2019	11	520	Illinois Power Generating Co	IPP	Coffeen	IL	861	1	330.0	Conventional Steam Coal	RC	ST
2019	11	520	Illinois Power Generating Co	IPP	Coffeen	IL	861	2	565.0	Conventional Steam Coal	RC	ST
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	11	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
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	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	1	1.5	Other Waste Biomass	OBG	IC
2019	12	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	2	1.5	Other Waste Biomass	OBG	IC
2019	12	56753	AgPower Jerome LLC	Electric CHP	Double A Digester	ID	57425	3	1.5	Other Waste Biomass	OBG	IC
2019	12	4226	Consolidated Edison Co-NY Inc	Electric Utility	Hudson Avenue	NY	2496	4	13.5	Petroleum Liquids	KER	GT
2019	12	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	GT8	20.0	Petroleum Liquids	DFO	GT
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	1	189.0	Conventional Steam Coal	BIT	ST
2019	12	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	2	189.0	Conventional Steam Coal	BIT	ST
2019	12	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 2 Power Plant	CA	10349	GEN1	49.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	49756	Illinois Power Resources Generating LLC	IPP	Duck Creek	IL	6016	1	410.0	Conventional Steam Coal	RC	ST
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	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	17698	Southwestern Electric Power Co	Electric Utility	Lieberman	LA	1417	2	26.0	Natural Gas Steam Turbine	NG	ST
2019	12	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	ST1	81.0	Natural Gas Steam Turbine	NG	ST
2019	12	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	ST2	81.0	Natural Gas Steam Turbine	NG	ST
2020	1	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG1	0.6	Natural Gas Internal Combustion Engine	NG	IC
2020	1	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG2	0.6	Natural Gas Internal Combustion Engine	NG	IC
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	1	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	2	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	1	307.0	Conventional Steam Coal	SUB	ST
2020	1	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	2	307.0	Conventional Steam Coal	SUB	ST
2020	1	18642	Tennessee Valley Authority	Electric Utility	Paradise	KY	1378	3	971.0	Conventional Steam Coal	BIT	ST
2020	1	61854	Veolia Energy Operating Service	Electric CHP	Spruance Genco LLC	VA	54081	GEN1	52.5	Conventional Steam Coal	BIT	ST
2020	1	61854	Veolia Energy Operating Service	Electric CHP	Spruance Genco LLC	VA	54081	GEN2	52.5	Conventional Steam Coal	BIT	ST
2020	1	20424	West Texas Wind Energy Partners LLC	IPP	West Texas Wind Energy LLC	TX	55367	01	75.0	Onshore Wind Turbine	WND	WT
2020	1	20854	Winnebago County	Electric CHP	Winnebago County Landfill Gas	WI	50936	EG2	0.9	Landfill Gas	LFG	IC
2020	2	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	GTG1	12.0	Natural Gas Fired Combined Cycle	NG	CT
2020	2	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	STG1	1.0	Natural Gas Fired Combined Cycle	NG	CA
2020	3	56046	High Plains Wind Power LLC	IPP	High Plains	TX	56834	1	10.0	Onshore Wind Turbine	WND	WT
2020	3	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	3	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	3	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	59878	Clean Fuel Partners Dane	Electric CHP	Clean Fuel Dane Community Digester	WI	59559	GEN#1	1.0	Other Waste Biomass	OBG	IC
2020	4	59878	Clean Fuel Partners Dane	Electric CHP	Clean Fuel Dane Community Digester	WI	59559	GEN#2	1.0	Other Waste Biomass	OBG	IC
2020	4	6027	Entergy Nuclear Indian Point 2	IPP	Indian Point 2	NY	2497	2	1,018.5	Nuclear	NUC	ST
2020	4	17897	St Mary's Hospital	Commercial	Saint Marys Hospital Power Plant	MN	54262	6	2.7	Natural Gas Internal Combustion Engine	NG	IC
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	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

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	5	6526	FirstEnergy Generation Corp	IPP	FirstEnergy W H Sammis	OH	2866	4	180.0	Conventional Steam Coal	BIT	ST
2020	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	4	780.0	Conventional Steam Coal	BIT	ST
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	7483	City of Grand Haven - (MI)	Electric Utility	J B Sims	MI	1825	3	69.1	Conventional Steam Coal	BIT	ST
2020	6	14268	City of Owensboro - (KY)	Electric Utility	Elmer Smith	KY	1374	1	137.0	Conventional Steam Coal	BIT	ST
2020	6	14268	City of Owensboro - (KY)	Electric Utility	Elmer Smith	KY	1374	2	262.8	Conventional Steam Coal	BIT	ST
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT2	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT3	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT4	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT5	14.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT6	15.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT7	14.5	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT8	16.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	4161	Constellation Power Source Gen	IPP	Westport	MD	1560	GT5	115.8	Natural Gas Fired Combustion Turbine	NG	GT
2020	6	5860	Empire District Electric Co	Electric Utility	Asbury	MO	2076	1	198.0	Conventional Steam Coal	SUB	ST
2020	6	6035	Exelon Power	IPP	Fairless Hills	PA	7701	A	30.0	Landfill Gas	LFG	ST
2020	6	6035	Exelon Power	IPP	Fairless Hills	PA	7701	B	30.0	Landfill Gas	LFG	ST
2020	6	6035	Exelon Power	IPP	Pennsbury	PA	7690	1	2.0	Landfill Gas	LFG	GT
2020	6	6035	Exelon Power	IPP	Pennsbury	PA	7690	2	2.0	Landfill Gas	LFG	GT
2020	6	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	ST
2020	6	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	8	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2020	8	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN1	57.8	Conventional Steam Coal	BIT	ST
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN2	57.8	Conventional Steam Coal	BIT	ST
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	1	80.0	Conventional Steam Coal	BIT	ST
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	2	238.0	Conventional Steam Coal	BIT	ST
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	3	238.0	Conventional Steam Coal	BIT	ST
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL00	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL01	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL02	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL03	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL04	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL05	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL06	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1	Other Waste Biomass	OBG	FC
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	3	332.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	4	335.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	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	6452	Florida Power & Light Co	Electric Utility	Indiantown Cogeneration LP	FL	50976	GEN1	330.0	Conventional Steam Coal	BIT	ST
2020	12	15908	GenOn California South, LP	IPP	Ellwood	CA	8076	01	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	9210	International Paper Co-Riegelwood	Industrial	International Paper Riegelwood Mill	NC	54656	NO 1	7.8	Wood/Wood Waste Biomass	BLQ	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	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	12.5	Natural Gas Fired Combustion Turbine	NG	GT

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.4	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.9	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	12199	Montana-Dakota Utilities Co	Electric Utility	Lewis & Clark	MT	6089	1	53.1	Conventional Steam Coal	LIG	ST
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	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	21.5	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	45.1	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	33.7	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	27.2	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	1	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	2	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	3	7.0	Natural Gas Fired Combined Cycle	NG	CA
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	1	741.0	Natural Gas Steam Turbine	NG	ST
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	2	750.0	Natural Gas Steam Turbine	NG	ST
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
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	1,037.8	Nuclear	NUC	ST
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	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN18	0.4	Conventional Hydroelectric	WAT	HY
2021	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN19	0.4	Conventional Hydroelectric	WAT	HY
2021	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN20	0.4	Conventional Hydroelectric	WAT	HY
2021	6	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Eastlake	OH	2837	6	24.0	Petroleum Liquids	DFO	GT
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	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2021	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	ST
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	ST2	385.0	Conventional Steam Coal	BIT	ST
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	1575	1.6	Conventional Hydroelectric	WAT	HY
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	500	0.5	Conventional Hydroelectric	WAT	HY
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	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	1	2.6	Petroleum Liquids	DFO	IC
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	2	1.1	Petroleum Liquids	DFO	IC
2021	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	1	197.7	Conventional Steam Coal	SUB	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	1	29.5	Conventional Steam Coal	LIG	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	2	74.8	Conventional Steam Coal	LIG	ST
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	4	6452	Florida Power & Light Co	Electric Utility	Manatee	FL	6042	1	809.0	Petroleum Liquids	RFO	ST
2022	4	6452	Florida Power & Light Co	Electric Utility	Manatee	FL	6042	2	809.0	Petroleum Liquids	RFO	ST
2022	5	5109	DTE Electric Company	Electric Utility	River Rouge	MI	1740	3	272.0	Conventional Steam Coal	SUB	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	2	154.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	3	160.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	6	311.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	7	440.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	Trenton Channel	MI	1745	9	495.0	Conventional Steam Coal	SUB	ST
2022	6	11241	Entergy Louisiana LLC	Electric Utility	Sterlington	LA	1404	7A	47.6	Natural Gas Fired Combined Cycle	NG	CT
2022	6	56192	Entergy Nuclear Palisades LLC	IPP	Palisades	MI	1715	1	804.2	Nuclear	NUC	ST
2022	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	1	212.0	Natural Gas Steam Turbine	NG	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	1	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	2	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	3	1.4	Natural Gas Internal Combustion Engine	NG	IC
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	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

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	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	2	682.0	Conventional Steam Coal	SUB	ST
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	Cunningham	NM	2454	1	71.0	Natural Gas Steam Turbine	NG	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	1	38.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	1	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	2	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	3	260.0	Conventional Steam Coal	SUB	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	4	334.0	Conventional Steam Coal	SUB	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	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	1	1.1	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	2	0.8	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	3	1.0	Petroleum Liquids	DFO	IC
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	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	1A	127.5	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	1B	127.5	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	2A	130.0	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	2B	130.0	Conventional Steam Coal	SUB	ST
2023	6	18488	City of Taunton	Electric Utility	Cleary Flood Hybrid	MA	1682	8	26.0	Petroleum Liquids	RFO	ST
2023	6	12685	Entergy Mississippi LLC	Electric Utility	Baxter Wilson	MS	2050	1	529.8	Natural Gas Steam Turbine	NG	ST
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	10	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
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	163.0	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	17633	Southern Indiana Gas & Elec Co	Electric Utility	F B Culley	IN	1012	2	90.0	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
2023	12	18642	Tennessee Valley Authority	Electric Utility	Bull Run	TN	3396	1	870.0	Conventional Steam Coal	BIT	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	6	11241	Entergy Louisiana LLC	Electric Utility	Waterford 1 & 2	LA	8056	2	427.5	Natural Gas Steam Turbine	NG	ST
2024	7	1951	White Pine Electric Power LLC	IPP	White Pine Electric Power	MI	10148	GEN3	18.0	Natural Gas Steam Turbine	NG	ST
2024	11	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	1	1,122.0	Nuclear	NUC	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	1	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	2	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	1	217.0	Natural Gas Steam Turbine	NG	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	2	230.0	Natural Gas Steam Turbine	NG	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	3	412.0	Natural Gas Steam Turbine	NG	ST
2024	12	5416	Duke Energy Carolinas, LLC	Electric Utility	G G Allen	NC	2718	1	162.0	Conventional Steam Coal	BIT	ST
2024	12	5416	Duke Energy Carolinas, LLC	Electric Utility	G G Allen	NC	2718	2	162.0	Conventional Steam Coal	BIT	ST
2024	12	5416	Duke Energy Carolinas, LLC	Electric Utility	G G Allen	NC	2718	3	258.0	Conventional Steam Coal	BIT	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	Saxon Falls	WI	1756	1	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	2	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	1	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	2	0.5	Conventional Hydroelectric	WAT	HY
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	Natural Gas Steam Turbine	NG	ST
2025	1	17568	Cooperative Energy	Electric Utility	Moselle	MS	2070	3	59.0	Natural Gas Steam Turbine	NG	ST
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	1	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	2	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	3	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	6	814	Entergy Arkansas LLC	Electric Utility	Lake Catherine	AR	170	4	522.0	Natural Gas Steam Turbine	NG	ST
2025	7	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	1	0.2	Conventional Hydroelectric	WAT	HY
2025	7	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	9417	Interstate Power and Light Co	Electric Utility	Prairie Creek	IA	1073	1	3.6	Conventional Steam Coal	SUB	ST
2025	12	9417	Interstate Power and Light Co	Electric Utility	Prairie Creek	IA	1073	3	26.4	Conventional Steam Coal	SUB	ST
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	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
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	51.0	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	427.0	Conventional Steam Coal	SUB	ST
2026	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
2026	6	11241	Entergy Louisiana LLC	Electric Utility	Little Gypsy	LA	1402	2	416.0	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	3	410.7	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	4	533.4	Natural Gas Steam Turbine	NG	ST
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	11.9	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	9.4	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	97.0	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	IPP	L'Oreal Piscataway	NJ	57868	UNIT1	0.8	Solar Photovoltaic	SUN	PV
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	1	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	2	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	3	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	5	47.0	Natural Gas Fired Combustion Turbine	NG	GT

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
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	6	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	7	1.8	Petroleum Liquids	DFO	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	8	1.8	Petroleum Liquids	DFO	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Alamosa	CO	464	CT1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Alamosa	CO	464	CT2	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fort Lupton	CO	8067	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fort Lupton	CO	8067	2	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Fruita	CO	471	1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	15466	Public Service Co of Colorado	Electric Utility	Valmont	CO	477	6	43.0	Natural Gas Fired Combustion Turbine	NG	GT
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HH	0.5	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HII	0.4	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HJC	0.2	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	UNIT1	2.7	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
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Red Wing	MN	1926	1	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Red Wing	MN	1926	2	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	1	1.8	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	2	1.8	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	3	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	4	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	5	2.0	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	6	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	7	2.0	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	8	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wilmarth	MN	1934	1	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wilmarth	MN	1934	2	9.0	Municipal Solid Waste	MSW	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Cherokee	CO	469	4	310.0	Natural Gas Steam Turbine	NG	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	2	0.6	Conventional Hydroelectric	WAT	HY
2027	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	4	190.0	Natural Gas Steam Turbine	NG	ST
2028	1	56997	Marina Energy LLC	IPP	Freeze Solar	NJ	60759	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	A	0.8	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	B	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	C	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HM	0.8	Solar Photovoltaic	SUN	PV
2028	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	2	410.0	Natural Gas Steam Turbine	NG	ST
2028	12	9324	Indiana Michigan Power Co	Electric Utility	Rockport	IN	6166	1	1,300.0	Conventional Steam Coal	SUB	ST
2028	12	56997	Marina Energy LLC	IPP	ACCC Mays Landing	NJ	60802	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	12	56997	Marina Energy LLC	IPP	IFF Hazlet	NJ	60709	GRND	3.0	Solar Photovoltaic	SUN	PV
2028	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	1	112.0	Natural Gas Steam Turbine	NG	ST
2029	5	5109	DTE Electric Company	Electric Utility	Belle River	MI	6034	ST1	635.0	Conventional Steam Coal	RC	ST
2029	6	11241	Entergy Louisiana LLC	Electric Utility	Little Gypsy	LA	1402	3	524.4	Natural Gas Steam Turbine	NG	ST
2029	10	56667	Loraine Windpower Project	IPP	Loraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2030	5	5109	DTE Electric Company	Electric Utility	Belle River	MI	6034	ST2	635.0	Conventional Steam Coal	RC	ST
2030	12	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG1	60.0	Onshore Wind Turbine	WND	WT
2030	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	3	244.0	Natural Gas Steam Turbine	NG	ST
2031	6	11241	Entergy Louisiana LLC	Electric Utility	Nine Mile Point	LA	1403	6(4)	729.2	Natural Gas Steam Turbine	NG	ST
2031	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	1	243.0	Natural Gas Steam Turbine	NG	ST
2033	6	11241	Entergy Louisiana LLC	Electric Utility	Nine Mile Point	LA	1403	5	745.4	Natural Gas Steam Turbine	NG	ST
2034	6	55937	Entergy Texas Inc.	Electric Utility	Lewis Creek	TX	3457	1	252.1	Natural Gas Steam Turbine	NG	ST
2034	6	55937	Entergy Texas Inc.	Electric Utility	Lewis Creek	TX	3457	2	253.0	Natural Gas Steam Turbine	NG	ST
2034	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	3	876.0	Conventional Steam Coal	SUB	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	2	243.0	Natural Gas Steam Turbine	NG	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Quay County	NM	58125	1	17.0	Petroleum Liquids	DFO	GT
2035	6	12685	Entergy Mississippi LLC	Electric Utility	Gerald Andrus	MS	8054	1	736.0	Natural Gas Steam Turbine	NG	ST
2036	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	1	339.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	1	532.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	2	535.0	Conventional Steam Coal	SUB	ST
2038	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	2	339.0	Conventional Steam Coal	SUB	ST
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	3	106.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	4	103.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	3	340.0	Conventional Steam Coal	SUB	ST
2043	12	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT
2047	7	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2056	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	3	166.0	Natural Gas Fired Combustion Turbine	NG	GT
2058	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	4	168.0	Natural Gas Fired Combustion Turbine	NG	GT

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

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 6.07.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels

Year/Month	Coal		Natural Gas								Petroleum					
			Combined Cycle		Gas Turbine		Steam Turbine		Internal Combustion		Steam Turbine		Gas Turbine		Internal Combustion	
	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor
Annual Data																
2009	312,091.2	64.2%	200,546.1	43.9%	117,120.3	6.8%	80,357.5	10.9%	2,360.1	6.6%	32,621.3	15.0%	19,812.2	1.7%	5,002.0	2.4%
2010	313,393.9	67.1%	202,404.4	44.3%	116,426.0	7.8%	80,233.7	11.1%	2,543.0	6.5%	29,871.2	13.6%	19,565.5	2.0%	5,016.0	2.1%
2011	314,056.1	62.8%	210,518.7	44.3%	119,144.1	7.9%	78,898.6	11.7%	2,822.5	8.4%	26,683.0	12.6%	18,397.7	1.3%	4,986.0	2.2%
2012	304,974.9	56.2%	217,938.2	52.2%	119,319.4	8.9%	74,200.2	13.3%	2,988.8	7.3%	22,483.7	13.7%	17,773.5	1.3%	4,942.5	2.0%
2013	302,604.4	59.4%	219,902.9	48.8%	123,025.6	8.3%	75,810.5	11.2%	2,996.2	8.8%	20,022.9	12.6%	17,224.1	0.9%	4,999.4	2.1%
2014	299,064.7	60.5%	224,183.2	48.6%	124,736.9	8.3%	75,049.1	10.3%	3,026.7	10.8%	18,057.0	13.0%	16,791.5	1.2%	5,011.3	2.1%
2015	286,082.7	54.3%	231,467.5	55.8%	123,444.3	9.8%	80,348.0	11.3%	3,507.8	11.9%	14,965.4	14.0%	16,122.8	1.3%	5,075.2	2.1%
2016	269,477.1	52.8%	236,442.8	55.4%	125,148.4	11.0%	81,225.1	12.3%	3,684.3	11.5%	13,993.7	12.2%	15,114.0	1.3%	5,082.8	2.3%
2017	259,930.2	53.1%	242,839.1	51.2%	125,806.6	9.6%	79,149.4	10.7%	4,225.5	11.6%	13,290.9	13.7%	14,275.3	1.0%	5,153.3	2.1%
2018	246,866.8	53.6%	254,403.3	55.0%	126,763.4	11.9%	76,177.8	12.6%	4,446.6	13.0%	13,300.1	14.2%	14,234.9	1.3%	5,289.7	1.9%
Year 2017																
January	262,832.9	59.2%	238,604.9	47.1%	125,758.5	8.1%	79,997.2	5.0%	3,984.2	10.7%	13,545.9	11.5%	14,360.0	1.0%	5,165.1	2.7%
February	262,623.9	49.4%	238,711.5	44.7%	125,637.1	8.2%	79,997.2	4.6%	4,151.9	9.5%	13,545.9	10.9%	14,360.0	1.0%	5,162.5	2.2%
March	262,179.7	45.8%	239,783.7	44.8%	125,636.3	9.3%	79,980.6	7.6%	4,198.4	9.5%	13,545.9	13.7%	14,336.4	1.0%	5,153.8	2.4%
April	260,949.7	43.3%	239,783.7	42.6%	125,704.3	8.3%	79,618.6	9.0%	4,218.8	9.7%	13,545.9	10.5%	14,336.4	0.7%	5,159.8	1.7%
May	260,949.7	47.9%	242,325.8	45.6%	125,668.3	8.9%	79,584.1	9.4%	4,239.0	10.0%	13,545.9	16.0%	14,336.4	0.9%	5,158.8	1.8%
June	259,190.0	57.8%	242,355.4	55.5%	125,748.3	10.4%	78,791.5	14.1%	4,240.1	12.4%	13,110.9	16.4%	14,286.4	1.0%	5,149.4	1.8%
July	259,190.0	66.3%	244,634.3	66.3%	125,748.3	12.3%	78,791.5	20.4%	4,240.6	15.1%	13,110.9	17.1%	14,238.4	1.1%	5,149.0	1.9%
August	259,190.0	62.2%	245,481.9	64.9%	125,797.8	11.3%	78,697.5	16.0%	4,246.9	14.3%	13,110.9	15.5%	14,238.4	1.1%	5,137.2	2.1%
Sept	259,006.0	53.2%	245,481.9	55.4%	125,887.8	10.6%	78,645.7	13.2%	4,297.0	12.7%	13,110.9	14.6%	14,238.4	1.2%	5,144.8	2.1%
October	258,429.0	47.2%	245,521.9	48.1%	125,894.8	9.5%	78,643.7	12.5%	4,297.0	11.8%	13,110.9	12.0%	14,238.4	1.1%	5,148.9	1.9%
November	258,278.0	49.0%	245,521.9	45.8%	126,098.8	8.6%	78,551.6	7.6%	4,297.0	11.5%	13,110.9	12.8%	14,191.8	0.9%	5,144.3	1.9%
December	256,530.0	55.8%	245,520.9	52.3%	126,089.8	9.4%	78,543.2	9.0%	4,293.0	11.9%	13,110.9	13.5%	14,149.8	1.6%	5,165.9	2.3%
Year 2018																
January	251,730.8	64.0%	247,709.0	51.4%	126,362.3	11.7%	78,615.1	10.9%	4,280.9	11.8%	13,440.4	19.9%	14,336.6	3.5%	5,330.8	2.5%
February	250,522.8	49.1%	247,709.0	51.6%	126,189.1	9.3%	78,185.1	5.8%	4,292.9	12.0%	13,440.4	12.1%	14,336.6	0.8%	5,333.5	1.8%
March	249,781.8	43.8%	247,709.0	49.1%	126,170.5	10.3%	77,411.2	7.5%	4,288.5	11.9%	13,440.4	10.9%	14,336.6	0.9%	5,326.9	1.8%
April	248,603.8	41.5%	248,199.0	45.6%	126,338.5	10.5%	77,369.9	8.5%	4,372.4	10.9%	13,440.4	12.9%	14,336.6	1.0%	5,317.8	2.0%
May	248,603.8	46.7%	252,604.7	49.8%	126,690.5	11.3%	76,359.3	15.3%	4,372.4	12.0%	13,440.4	10.0%	14,336.6	1.1%	5,319.2	1.8%
June	245,407.8	58.0%	255,100.3	58.7%	126,881.1	12.4%	75,658.1	16.3%	4,362.4	13.1%	13,440.4	15.0%	14,166.6	1.4%	5,275.1	1.8%
July	245,407.8	63.8%	256,721.3	69.8%	126,878.6	16.3%	75,658.1	23.3%	4,369.0	18.3%	13,440.4	16.6%	14,166.6	1.5%	5,276.5	1.8%
August	245,407.8	63.6%	257,487.3	69.3%	127,267.4	15.0%	75,658.1	20.3%	4,594.6	16.9%	13,440.4	15.6%	14,166.6	1.3%	5,277.8	2.1%
Sept	245,113.4	55.3%	258,463.3	63.2%	127,146.3	13.8%	75,650.6	15.6%	4,594.3	13.8%	13,440.4	16.9%	14,166.6	1.3%	5,274.0	2.0%
October	244,837.5	48.5%	258,836.7	52.9%	127,104.0	11.6%	75,120.6	12.6%	4,595.0	12.4%	13,440.4	13.7%	14,166.6	1.1%	5,269.0	2.0%
November	244,426.5	53.2%	260,948.0	48.8%	126,977.7	10.5%	74,758.6	8.7%	4,613.6	11.7%	13,440.4	13.4%	14,154.6	1.1%	5,240.4	1.8%
December	242,785.6	55.9%	260,868.5	48.9%	127,108.3	9.1%	73,841.6	6.3%	4,613.6	11.0%	11,788.4	12.6%	14,154.6	1.0%	5,237.9	1.7%
Year 2019																
January	242,483.1	56.5%	263,721.2	54.0%	127,635.0	8.0%	73,620.8	8.7%	4,616.7	10.0%	11,788.4	12.8%	14,154.6	0.7%	5,237.9	2.0%
February	239,549.6	50.5%	263,721.2	55.3%	127,635.0	8.5%	74,611.3	8.0%	4,689.2	12.3%	11,788.4	12.8%	14,154.6	0.7%	5,239.9	1.7%
March	238,318.6	45.0%	263,404.2	50.0%	127,622.1	8.0%	74,002.3	9.0%	4,689.2	10.9%	11,855.4	12.2%	14,135.6	0.5%	5,237.1	1.6%
April	236,952.8	35.9%	266,149.0	45.0%	127,735.3	9.6%	73,998.0	11.0%	4,872.2	10.0%	11,709.4	11.1%	14,135.6	0.8%	5,234.7	1.8%
May	236,202.8	41.7%	266,366.4	48.6%	128,182.4	10.4%	73,998.0	13.8%	4,872.2	10.7%	11,709.4	15.8%	14,135.6	1.0%	5,243.5	2.1%
June	236,095.2	47.0%	268,090.8	59.7%	128,299.5	11.4%	73,703.3	16.4%	4,873.1	12.7%	11,709.4	15.0%	14,125.3	1.1%	5,243.5	2.3%
July	235,112.7	58.4%	268,908.8	69.8%	128,644.2	19.3%	73,673.3	24.7%	4,895.1	21.2%	11,709.4	16.7%	14,125.3	2.3%	5,247.0	3.0%
August	235,112.7	54.6%	268,908.8	70.9%	128,759.7	18.8%	73,673.3	25.3%	4,895.1	22.1%	11,709.4	16.4%	14,119.6	2.4%	5,236.9	3.2%
Sept	235,012.7	51.6%	268,908.8	63.9%	128,719.7	14.8%	73,673.3	19.9%	4,895.1	17.6%	11,642.4	15.1%	14,133.1	1.6%	5,261.2	2.7%

Values for 2018 and prior years are final. Values for 2019 are preliminary.
Time adjusted capacity for month rows is the summer capacity of generators in operation for the entire month; units that began operation during the month or that retired during the month are excluded. Time adjusted capacity for year rows is a time weighted average of the month rows.
Capacity factors are a comparison of net generation with available capacity. See the technical note for an explanation of how capacity factors are calculated.
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 6.07.B. Capacity Factors for Utility Scale Generators Primarily Using Non-Fossil Fuels

	Geothermal		Hydroelectric		Nuclear		Other Biomass		Other Gas		Solar				Wind		Wood	
Year/Month											Photovoltaic		Thermal					
	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor	Time Adjusted Capacity	Capacity Factor
Annual Data																		
2009	2,278.0	73.0%	78,500.4	39.6%	101,003.7	90.3%	4,183.9	65.0%	1,752.2	43.4%	81.9	20.0%	468.2	23.6%	28,996.9	28.1%	6,936.4	61.7%
2010	2,392.1	71.6%	78,810.3	37.5%	101,167.4	91.1%	4,298.7	64.2%	1,929.0	50.5%	206.8	20.2%	473.0	24.5%	35,702.6	29.7%	6,991.5	61.5%
2011	2,407.9	71.5%	78,564.7	45.8%	101,265.1	89.1%	4,469.8	64.2%	1,902.7	54.1%	537.0	19.0%	485.3	23.9%	42,019.2	32.1%	7,000.3	59.6%
2012	2,531.8	68.3%	78,296.6	39.6%	101,166.0	86.6%	4,639.7	63.3%	1,802.8	59.6%	1,527.1	20.4%	476.0	23.6%	49,458.0	31.8%	7,089.1	61.3%
2013	2,509.5	71.8%	78,873.5	38.8%	99,006.8	90.8%	4,949.7	62.3%	2,171.6	55.9%	3,525.2	24.5%	552.1	17.4%	59,175.6	32.4%	7,887.9	59.0%
2014	2,513.3	72.0%	79,582.8	37.2%	98,569.3	91.7%	5,114.6	62.7%	1,994.0	54.0%	6,555.6	25.6%	1,445.3	18.3%	60,587.8	34.0%	8,319.7	60.0%
2015	2,523.0	71.9%	79,650.8	35.7%	98,614.6	92.3%	5,104.5	62.6%	2,527.7	60.8%	9,521.6	25.5%	1,697.3	21.7%	67,106.2	32.2%	9,024.5	59.3%
2016	2,516.6	71.6%	79,806.0	38.2%	99,364.8	92.3%	5,099.5	62.7%	2,458.8	64.8%	14,161.4	25.0%	1,757.9	22.1%	74,162.7	34.5%	8,979.8	58.3%
2017	2,460.4	73.2%	79,698.8	43.0%	99,619.5	92.3%	5,125.6	61.8%	2,375.8	62.8%	21,940.9	25.6%	1,757.9	21.8%	83,355.6	34.6%	8,807.5	60.2%
2018	2,391.5	76.0%	79,771.9	41.9%	99,605.2	92.5%	5,059.0	61.8%	2,543.9	65.4%	27,143.3	25.1%	1,757.9	23.6%	89,228.5	34.6%	8,760.2	60.6%
Year 2017																		
January	2,511.1	73.6%	79,657.2	45.2%	99,609.9	98.7%	5,095.1	65.5%	2,375.8	63.8%	20,249.8	12.6%	1,757.9	7.3%	81,337.2	32.6%	8,748.6	61.4%
February	2,511.1	73.0%	79,657.2	44.2%	99,609.9	95.0%	5,097.3	63.0%	2,375.8	65.3%	20,603.7	17.2%	1,757.9	11.6%	81,713.0	38.6%	8,748.6	61.6%
March	2,451.1	73.6%	79,657.2	49.4%	99,609.9	87.8%	5,097.3	61.2%	2,375.8	64.9%	20,792.6	25.0%	1,757.9	22.9%	81,962.1	40.6%	8,741.6	60.0%
April	2,451.1	75.4%	79,660.1	51.2%	99,609.9	79.2%	5,105.7	60.4%	2,375.8	61.8%	21,177.9	28.2%	1,757.9	24.8%	83,041.4	41.1%	8,789.1	56.4%
May	2,451.1	70.0%	79,660.1	54.6%	99,609.9	82.8%	5,122.7	62.8%	2,375.8	58.1%	21,700.6	32.4%	1,757.9	30.9%	83,182.1	36.2%	8,796.6	55.0%
June	2,451.1	68.4%	79,660.1	52.7%	99,609.9	93.5%	5,126.7	62.9%	2,375.8	59.1%	22,006.1	35.8%	1,757.9	37.9%	83,313.5	32.9%	8,802.9	60.6%
July	2,451.1	73.9%	79,667.4	44.6%	99,628.9	96.2%	5,145.2	61.4%	2,375.8	58.9%	22,242.6	32.6%	1,757.9	25.3%	83,498.6	25.6%	8,802.9	62.1%
August	2,451.1	73.4%	79,614.2	36.8%	99,628.9	97.7%	5,147.3	61.6%	2,375.8	65.0%	22,356.4	30.3%	1,757.9	27.5%	83,980.6	21.8%	8,856.4	63.3%
Sept	2,451.1	73.1%	79,761.5	33.2%	99,628.9	95.0%	5,147.2	59.2%	2,375.8	61.8%	22,547.7	29.0%	1,757.9	29.1%	83,980.6	29.5%	8,856.4	58.6%
October	2,451.1	67.0%	79,797.5	30.8%	99,628.9	89.0%	5,147.2	57.9%	2,375.8	62.1%	22,762.8	26.2%	1,757.9	24.1%	84,229.8	40.2%	8,856.4	57.4%
November	2,451.1	72.7%	79,797.1	35.8%	99,628.9	92.9%	5,143.9	62.0%	2,375.8	65.1%	23,095.3	19.3%	1,757.9	10.3%	84,483.3	39.0%	8,856.4	61.2%
December	2,446.3	84.6%	79,794.4	37.7%	99,628.9	99.4%	5,129.5	63.4%	2,375.8	67.4%	23,660.0	17.6%	1,757.9	9.0%	85,431.2	38.0%	8,830.9	65.3%
Year 2018																		
January	2,387.5	75.3%	79,771.8	42.2%	99,730.6	100.6%	5,108.5	62.2%	2,543.9	66.2%	25,311.1	16.3%	1,757.9	10.0%	87,552.6	38.7%	8,813.0	65.3%
February	2,403.5	78.9%	79,771.8	46.4%	99,730.6	96.7%	5,083.1	64.6%	2,543.9	66.6%	25,968.4	20.9%	1,757.9	16.1%	88,563.2	38.8%	8,813.0	62.5%
March	2,382.2	76.8%	79,785.3	43.6%	99,730.6	90.3%	5,086.1	62.0%	2,543.9	63.3%	26,067.6	24.3%	1,757.9	19.2%	88,787.7	40.0%	8,780.5	61.7%
April	2,392.2	69.0%	79,792.3	48.9%	99,730.6	82.4%	5,086.1	60.9%	2,543.9	61.6%	26,591.3	29.7%	1,757.9	24.4%	88,789.2	41.3%	8,780.5	55.6%
May	2,392.2	77.7%	79,753.3	51.3%	99,730.6	90.7%	5,083.5	59.4%	2,543.9	63.2%	26,859.7	31.8%	1,757.9	32.9%	89,086.2	36.0%	8,761.5	58.0%
June	2,392.2	75.5%	79,753.8	48.1%	99,730.6	97.1%	5,006.9	63.0%	2,543.9	64.1%	27,291.3	34.9%	1,757.9	41.7%	89,078.2	38.4%	8,775.5	61.7%
July	2,392.2	77.0%	79,751.6	42.3%	99,730.6	97.7%	5,050.2	62.3%	2,543.9	65.8%	27,451.7	31.1%	1,757.9	30.1%	89,227.2	24.7%	8,767.2	63.7%
August	2,392.2	76.8%	79,751.6	37.1%	99,730.6	97.4%	5,042.5	62.6%	2,543.9	68.7%	27,590.1	30.5%	1,757.9	32.5%	89,387.5	29.8%	8,748.7	62.2%
Sept	2,392.2	77.1%	79,751.6	33.4%	99,277.9	90.3%	5,042.5	58.3%	2,543.9	67.2%	27,674.0	27.7%	1,757.9	34.8%	89,469.5	28.6%	8,748.7	58.5%
October	2,392.2	71.5%	79,753.6	32.9%	99,277.9	80.4%	5,041.4	61.0%	2,543.9	64.3%	27,989.5	22.4%	1,757.9	20.7%	89,941.8	31.5%	8,748.7	56.5%
November	2,392.2	77.3%	79,753.6	38.1%	99,432.9	89.3%	5,039.0	62.3%	2,543.9	67.4%	28,158.3	17.3%	1,757.9	13.3%	90,282.8	33.8%	8,694.6	60.4%
December	2,387.9	79.4%	79,870.8	38.4%	99,432.9	96.9%	5,038.6	63.2%	2,543.9	67.0%	28,690.2	13.7%	1,757.9	7.0%	90,534.1	34.8%	8,694.6	61.4%
Year 2019																		
January	2,447.0	77.9%	79,867.1	40.8%	99,431.1	99.6%	5,027.6	59.8%	2,543.9	67.4%	30,151.8	15.5%	1,757.9	8.4%	94,417.7	35.5%	8,647.5	62.7%
February	2,447.0	79.5%	79,880.6	40.7%	99,431.1	96.9%	5,027.6	59.3%	2,543.9	68.9%	30,815.5	17.7%	1,757.9	10.9%	95,314.6	35.9%	8,647.5	62.6%
March	2,447.0	78.8%	79,896.6	43.0%	99,431.1	88.0%	4,993.7	58.1%	2,543.9	64.8%	31,016.3	24.2%	1,757.9	19.8%	95,806.4	36.4%	8,496.8	58.5%
April	2,454.9	70.0%	79,896.6	44.3%	99,586.1	84.5%	4,993.7	56.4%	2,548.9	63.2%	31,234.4	28.7%	1,757.9	25.5%	96,636.4	42.7%	8,573.7	56.3%
May	2,454.9	73.7%	79,876.7	50.6%	98,908.9	90.8%	4,988.1	58.8%	2,548.9	65.6%	31,323.5	29.2%	1,757.9	25.7%	96,638.2	36.0%	8,558.7	59.1%
June	2,454.9	77.0%	79,880.6	46.0%	98,908.9	96.6%	4,970.4	61.0%	2,548.9	66.2%	31,385.7	33.1%	1,757.9	35.5%	96,867.7	32.6%	8,489.2	61.8%
July	2,454.9	77.2%	79,882.1	39.9%	98,908.9	98.1%	4,972.0	60.3%	2,548.9	70.2%	31,698.8	32.6%	1,757.9	31.4%	98,111.8	30.0%	8,518.6	63.7%
August	2,454.9	77.1%	79,778.3	35.0%	98,908.9	97.7%	4,968.1	60.9%	2,548.9	67.1%	31,940.8	31.1%	1,757.9	32.0%	98,387.4	26.9%	8,518.6	66.1%
Sept	2,454.9	78.2%	79,778.1	28.5%	98,106.1	92.8%	4,956.4	59.5%	2,548.9	69.0%	32,176.4	27.4%	1,757.9	24.3%	99,011.3	33.9%	8,429.3	60.7%

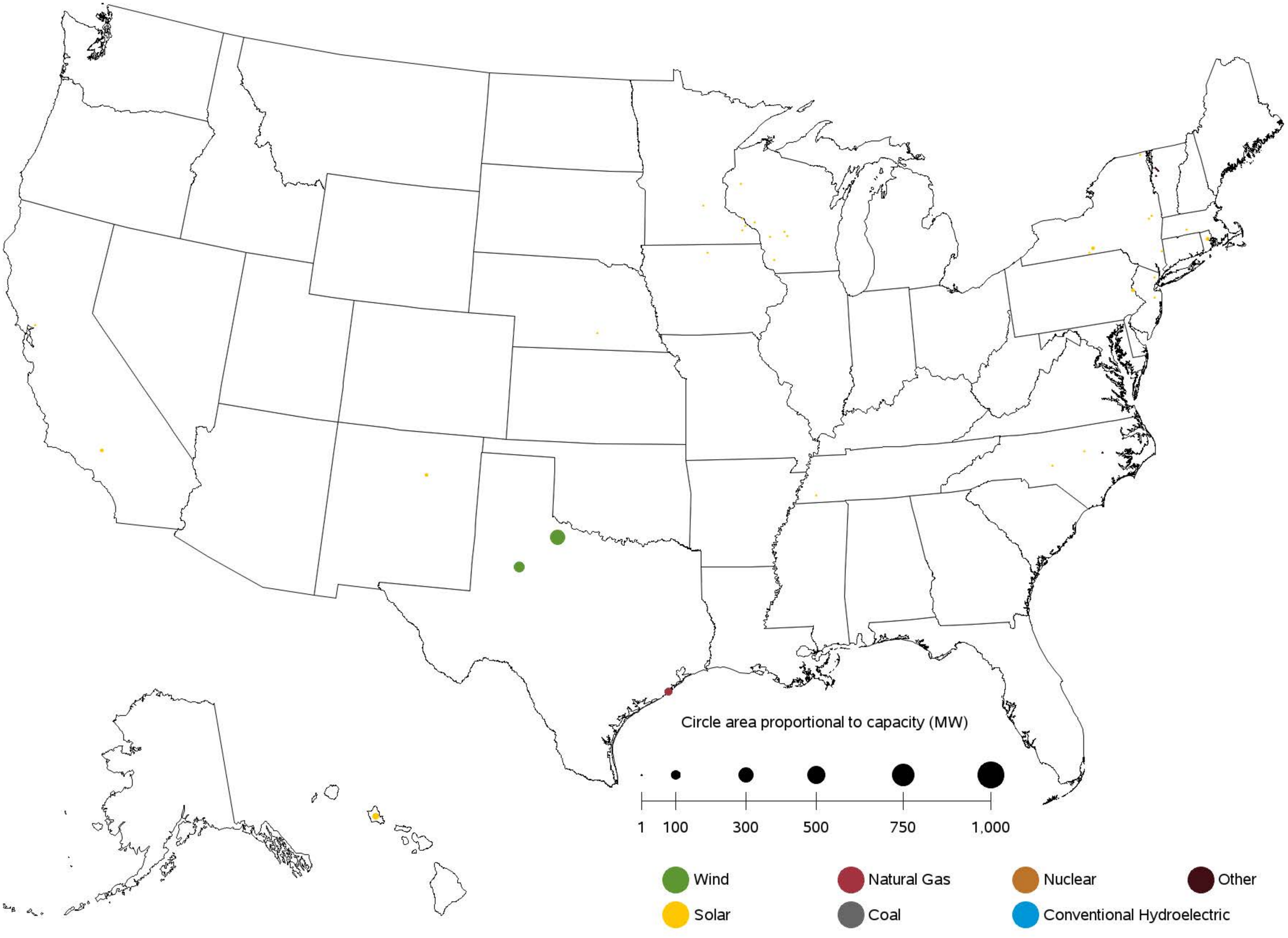
Values for 2018 and prior years are final. Values for 2019 are preliminary.
Time adjusted capacity for month rows is the summer capacity of generators in operation for the entire month; units that began operation during the month or that retired during the month are excluded. Time adjusted capacity for year rows is a time weighted average of the month rows.
Capacity factors are a comparison of net generation with available capacity. See the technical note for an explanation of how capacity factors are calculated.
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 6.07.C. Usage Factors for Utility Scale Storage Generators

	Battery		Pumped Storage	
Year/Month	Time Adjusted Capacity	Usage Factor	Time Adjusted Capacity	Usage Factor
Annual Data				
2013	126.7	0.7%	22,389.3	9.8%
2014	155.1	1.7%	22,477.9	10.2%
2015	206.8	3.6%	22,568.9	10.2%
2016	423.0	3.8%	22,752.7	11.2%
2017	632.8	6.8%	22,791.7	11.4%
2018	713.6	5.2%	22,815.4	10.8%
Year 2017				
January	562.8	6.9%	22,753.4	10.2%
February	573.8	7.4%	22,753.4	8.0%
March	581.8	8.3%	22,753.4	8.5%
April	611.8	7.6%	22,753.4	9.5%
May	627.7	6.8%	22,810.4	11.7%
June	641.2	6.8%	22,810.4	14.2%
July	643.2	6.2%	22,810.4	16.9%
August	645.4	6.8%	22,810.4	16.2%
Sept	678.2	6.1%	22,810.4	12.9%
October	679.4	6.6%	22,810.4	10.2%
November	681.4	6.8%	22,810.4	9.0%
December	663.4	6.2%	22,810.4	9.1%
Year 2018				
January	643.7	5.2%	22,785.2	9.8%
February	663.5	5.1%	22,785.2	9.6%
March	667.1	5.2%	22,785.2	7.9%
April	681.1	5.0%	22,785.2	8.2%
May	690.6	5.2%	22,830.2	11.0%
June	696.1	4.9%	22,830.2	13.2%
July	742.1	5.6%	22,830.2	15.5%
August	740.1	5.6%	22,830.2	16.1%
Sept	746.4	5.6%	22,830.2	12.2%
October	748.9	5.0%	22,830.2	9.4%
November	768.9	5.3%	22,830.2	8.2%
December	770.7	5.1%	22,830.2	7.7%
Year 2019				
January	858.3	3.9%	22,830.2	9.3%
February	869.3	4.2%	22,830.2	9.1%
March	894.1	5.2%	22,830.2	8.3%
April	923.2	4.6%	22,852.2	10.1%
May	939.2	4.6%	22,852.2	11.8%
June	944.2	3.7%	22,909.2	11.6%
July	964.6	3.7%	22,909.2	15.0%
August	971.6	3.5%	22,909.2	13.6%
Sept	995.1	4.5%	22,909.2	12.3%

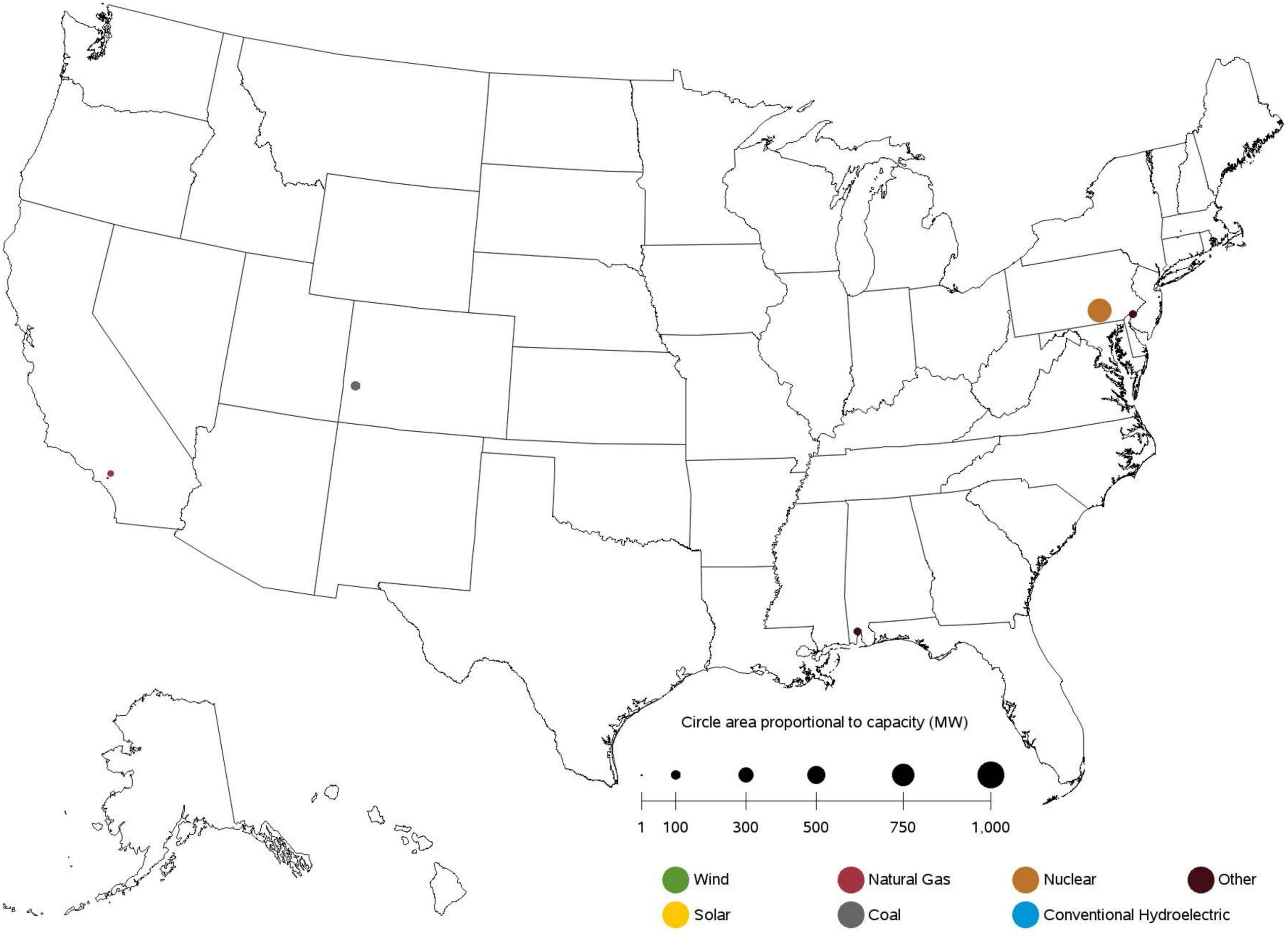
Values for 2018 and prior years are final. Values for 2019 are preliminary.
Time adjusted capacity for month rows is the summer capacity of generators in operation for the entire month; units that began operation during the month or that retired during the month are excluded. Time adjusted capacity for year rows is a time weighted average of the month rows.
Usage factors are a comparison of gross generation with available capacity. See the technical note for an explanation of how usage factors are calculated.
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 September 2019



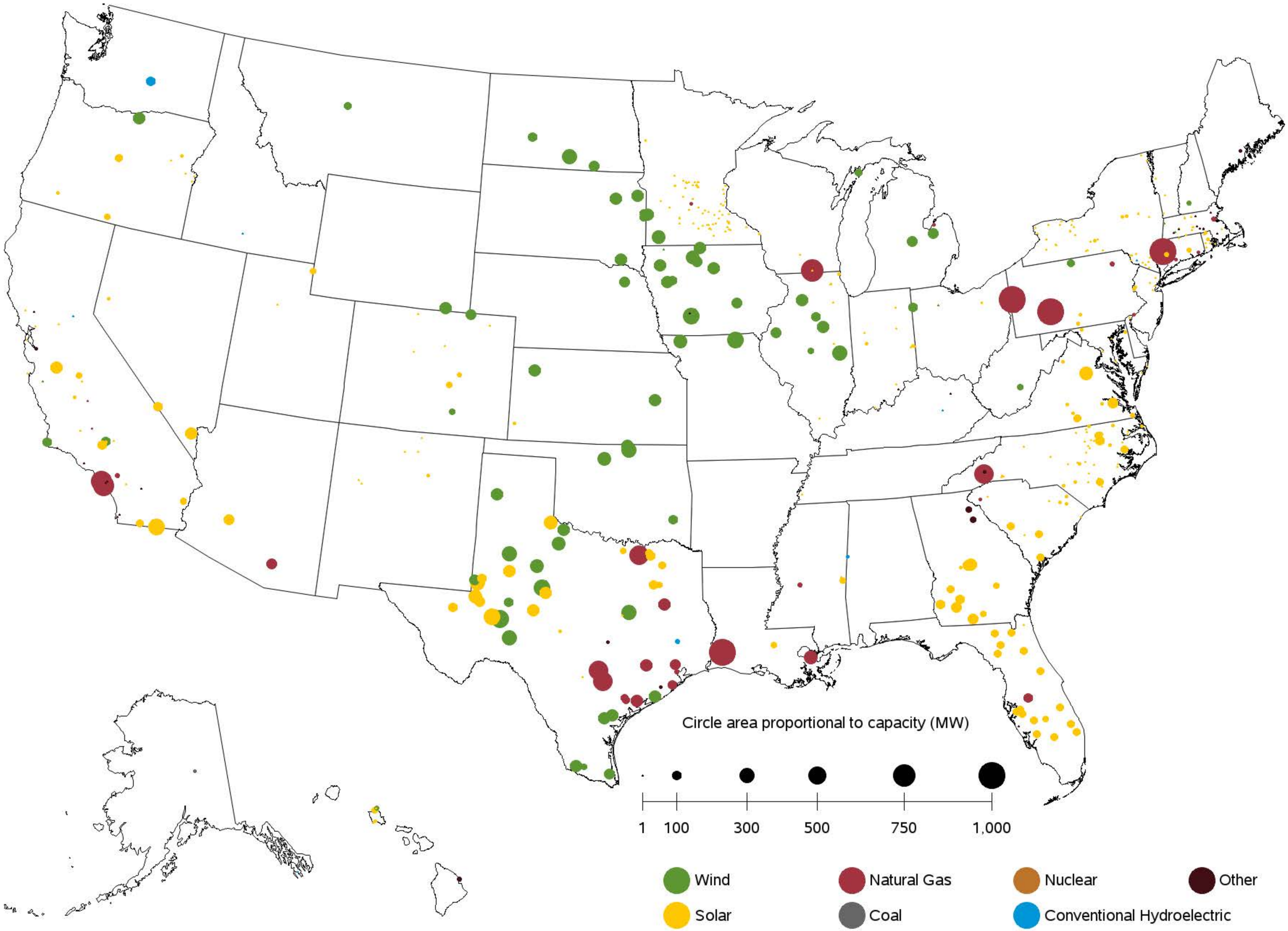
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in September 2019



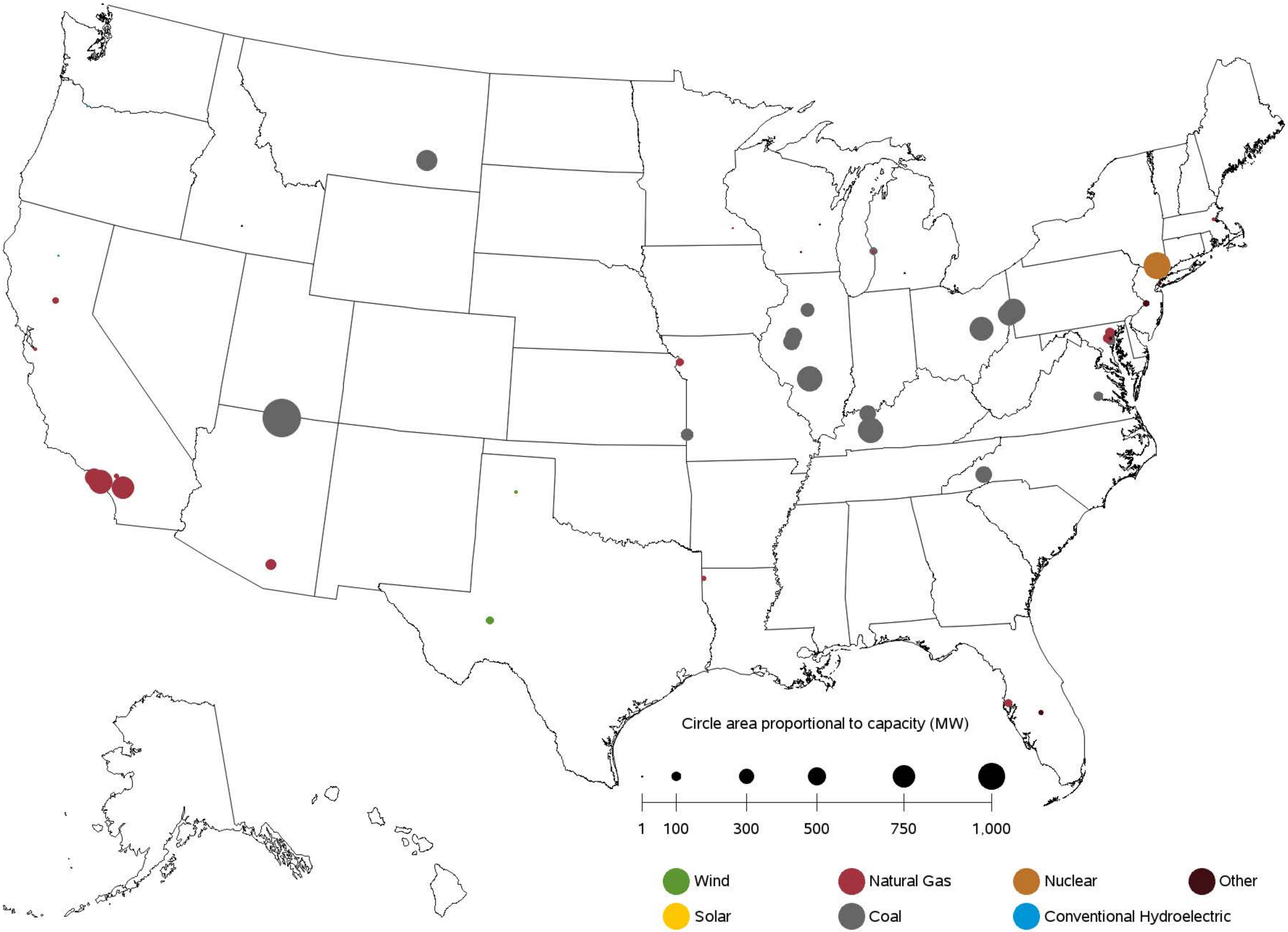
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from October 2019 to September 2020



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 October 2019 to September 2020



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
2018	51,494,627	7,290,070	6,765,975	6,514,422	58,260,602	13,804,492	44,456,110
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
October	3,097,802	455,738	620,775	428,265	3,718,577	884,003	2,834,574
November	3,163,062	878,523	649,802	406,045	3,812,864	1,284,568	2,528,296
December	3,452,742	516,623	646,476	408,156	4,099,218	924,779	3,174,439
Year 2019							
January	4,098,844	942,436	705,708	521,104	4,804,552	1,463,540	3,341,012
February	3,777,272	898,202	774,241	519,458	4,551,513	1,417,660	3,133,853
March	4,200,904	1,961,134	748,858	587,848	4,949,762	2,548,982	2,400,780
April	3,880,049	1,558,941	474,744	409,476	4,354,793	1,968,417	2,386,376
May	4,333,483	1,164,351	389,959	517,695	4,723,442	1,682,046	3,041,396
June	4,731,849	905,149	424,419	620,623	5,156,268	1,525,772	3,630,496
July	5,057,622	1,250,152	584,912	707,229	5,642,534	1,957,381	3,685,153
August	5,266,917	1,036,625	597,828	748,206	5,864,745	1,784,831	4,079,914
Sept	4,741,429	1,095,245	551,397	680,604	5,292,826	1,775,849	3,516,977

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, 2009 - September 2019 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	6,103	8,203	2,128	0	16,434
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	559	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	681	145	0	1,404
August	577	689	209	0	1,475
Sept	527	722	186	0	1,436
October	698	847	191	0	1,736
November	457	593	172	0	1,222
December	494	642	162	0	1,299
Year 2019					
January	447	573	154	0	1,173
February	367	487	146	0	1,000
March	448	650	180	0	1,279
April	465	681	165	0	1,311
May	512	655	189	0	1,355
June	568	692	171	0	1,431
July	618	687	181	0	1,487
August	594	718	175	0	1,487
Sept	586	712	166	0	1,464
Year to Date					
2017	4,750	5,720	1,569	0	12,039
2018	4,454	6,120	1,603	0	12,177
2019	4,605	5,855	1,526	0	11,986
Rolling 12 Months Ending in September					
2018	4,749	7,220	1,781	0	13,750
2019	6,254	7,938	2,051	0	16,243

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, 2009 - September 2019 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	1,265	1,893	405	0	3,564
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	281
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	162	34	0	306
October	137	181	36	0	353
November	102	142	34	0	278
December	112	154	31	0	298
Year 2019					
January	85	134	30	0	249
February	80	109	29	0	218
March	98	156	37	0	291
April	106	177	36	0	319
May	127	132	41	0	299
June	116	156	36	0	308
July	122	140	32	0	294
August	132	174	37	0	343
Sept	113	150	31	0	295
Year to Date					
2017	1,048	1,290	290	0	2,629
2018	914	1,415	304	0	2,634
2019	979	1,328	310	0	2,618
Rolling 12 Months Ending in September					
2018	989	1,674	358	0	3,022
2019	1,330	1,806	411	0	3,547

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, 2009 - September 2019

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	1,346,102	126,527	602	0	1,473,231
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	1,343,369	126,955	605	0	1,470,929
February	1,342,510	126,695	606	0	1,469,811
March	1,343,914	126,640	607	0	1,471,161
April	1,344,684	126,489	606	0	1,471,779
May	1,344,960	126,396	604	0	1,471,960
June	1,344,798	126,278	604	0	1,471,680
July	1,345,450	126,221	601	0	1,472,272
August	1,346,380	126,283	598	0	1,473,261
Sept	1,347,298	126,375	599	0	1,474,272
October	1,348,855	126,492	597	0	1,475,944
November	1,349,924	126,702	595	0	1,477,221
December	1,351,082	126,800	596	0	1,478,478
Year 2019					
January	1,347,101	126,497	601	0	1,474,199
February	1,348,081	126,423	600	0	1,475,104
March	1,348,854	126,160	602	0	1,475,616
April	1,347,811	125,773	597	0	1,474,181
May	1,346,893	125,615	596	0	1,473,104
June	1,344,899	125,345	595	0	1,470,839
July	1,344,545	125,238	595	0	1,470,378
August	1,343,253	125,095	594	0	1,468,942
Sept	1,342,243	124,954	591	0	1,467,788
Rolling 12 Months Ending in September					
2018	1,343,110	126,592	606	0	1,470,308
2019	1,346,962	125,925	597	0	1,473,483

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, 2009 - September 2019 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
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
2018	20.73	23.08	19.04	--	21.68
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	--	25.98
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	20.75	22.50	18.18	--	21.30
October	19.59	21.36	18.69	--	20.35
November	22.31	24.00	19.55	--	22.74
December	22.77	24.05	19.33	--	22.97
Year 2019					
January	19.07	23.38	19.78	--	21.26
February	21.85	22.35	20.14	--	21.84
March	21.84	24.03	20.33	--	22.74
April	22.89	25.94	21.91	--	24.35
May	24.71	20.19	21.60	--	22.09
June	20.37	22.61	21.26	--	21.56
July	19.72	20.39	17.90	--	19.80
August	22.22	24.21	21.16	--	23.06
Sept	19.36	21.02	18.93	--	20.12
Year to Date					
2017	22.06	22.56	18.51	--	21.83
2018	20.52	23.13	18.99	--	21.63
2019	21.26	22.68	20.34	--	21.84
Rolling 12 Months Ending in September					
2018	20.83	23.19	20.11	--	21.98
2019	21.27	22.75	20.04	--	21.84

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-September 2019

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,346	0	3,049	0	0	4,947
2008	454	98	1,346	0	3,480	0	0	5,378
2009	454	98	1,346	0	3,600	0	0	5,498
2010	454	98	1,346	0	3,600	0	0	5,498
2011	454	98	1,346	0	3,600	5	0	5,503
2012	454	98	1,346	0	3,600	23	98	5,619
2013	454	98	1,346	0	3,600	26	98	5,622
2014	454	98	1,346	0	3,600	38	99	5,635
2015	454	98	1,346	9	3,604	70	99	5,680
2016	454	98	1,346	33	3,604	145	99	5,779
2017	454	98	1,346	35	3,604	145	99	5,781
2018	454	98	1,346	35	3,606	145	99	5,783
Year 2019								
January	454	98	1,335	33	3,606	145	99	5,769
February	454	98	1,335	33	3,606	145	99	5,769
March	454	98	1,346	33	3,606	145	99	5,780
April	454	98	1,346	33	3,606	145	99	5,780
May	454	98	1,346	33	3,606	145	99	5,780
June	454	98	1,346	33	3,606	145	99	5,780
July	454	98	1,346	33	3,606	145	99	5,780
August	454	98	1,346	33	3,606	145	99	5,780
Sept	454	98	1,346	33	3,606	145	99	5,780

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, September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**7**	**25**	**0**	**2**	**0**	**0**	**14**
Connecticut	0	51	0	2	0	0	41
Maine	21	11	0	13	0	0	19
Massachusetts	0	43	0	4	0	0	30
New Hampshire	0	35	0	0	0	0	36
Rhode Island	0	109	0	10	0	0	0
Vermont	0	124	0	0	0	0	32
Middle Atlantic	**3**	**17**	**22**	**1**	**18**	**0**	**3**
New Jersey	0	52	0	2	0	0	0
New York	0	29	0	2	0	0	2
Pennsylvania	3	19	45	1	27	0	17
East North Central	**1**	**5**	**7**	**1**	**6**	**0**	**15**
Illinois	0	7	0	6	0	0	50
Indiana	5	4	0	2	11	0	125
Michigan	2	7	0	2	0	0	25
Ohio	1	4	12	2	19	0	119
Wisconsin	0	55	0	3	0	0	19
West North Central	**1**	**10**	**0**	**4**	**0**	**0**	**9**
Iowa	0	25	0	5	0	0	36
Kansas	0	10	0	17	0	0	0
Minnesota	5	34	0	7	0	0	28
Missouri	0	9	0	6	0	0	113
Nebraska	4	85	0	25	0	0	27
North Dakota	0	15	0	21	0	0	18
South Dakota	0	144	0	22	0	0	12
South Atlantic	**0**	**13**	**4**	**1**	**0**	**0**	**11**
Delaware	0	94	0	5	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	10	0	1	0	0	67
Georgia	1	37	28	2	0	0	19
Maryland	0	8	0	2	0	0	6
North Carolina	0	37	0	2	0	0	14
South Carolina	2	47	0	2	0	0	27
Virginia	0	29	0	2	0	0	41
West Virginia	1	0	0	5	0	0	22
East South Central	**0**	**2**	**0**	**1**	**106**	**0**	**8**
Alabama	1	21	0	1	330	0	13
Kentucky	0	0	0	2	0	0	13
Mississippi	0	2	0	1	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**18**	**1**	**1**	**8**	**0**	**22**
Arkansas	0	0	0	5	0	0	34
Louisiana	0	189	1	2	13	0	25
Oklahoma	0	2	0	2	0	0	45
Texas	0	27	11	1	5	0	132
Mountain	**1**	**6**	**0**	**1**	**4**	**0**	**5**
Arizona	0	3	0	0	0	0	4
Colorado	0	51	0	2	0	0	17
Idaho	118	0	0	10	0	0	10
Montana	4	79	0	22	0	0	10
Nevada	0	0	0	0	0	0	2
New Mexico	0	26	0	3	0	0	64
Utah	0	3	0	2	0	0	31
Wyoming	3	1	0	11	5	0	30
Pacific Contiguous	**0**	**15**	**0**	**1**	**3**	**0**	**2**
California	0	20	0	1	4	0	5
Oregon	0	0	0	3	0	0	4
Washington	0	30	0	3	0	0	1
Pacific Noncontiguous	**13**	**1**	**0**	**14**	**0**	**0**	**22**
Alaska	39	3	0	14	0	0	23
Hawaii	0	0	0	0	0	0	43
U.S. Total	**0**	**2**	**3**	**0**	**4**	**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 September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**7**	**25**	**0**	**2**	**0**	**0**	**14**
Connecticut	0	51	0	2	0	0	41
Maine	21	11	0	13	0	0	19
Massachusetts	0	43	0	4	0	0	30
New Hampshire	0	35	0	0	0	0	36
Rhode Island	0	109	0	10	0	0	0
Vermont	0	124	0	0	0	0	32
Middle Atlantic	**3**	**17**	**22**	**1**	**18**	**0**	**3**
New Jersey	0	52	0	2	0	0	0
New York	0	29	0	2	0	0	2
Pennsylvania	3	19	45	1	27	0	17
East North Central	**1**	**5**	**7**	**1**	**6**	**0**	**15**
Illinois	0	7	0	6	0	0	50
Indiana	5	4	0	2	11	0	125
Michigan	2	7	0	2	0	0	25
Ohio	1	4	12	2	19	0	119
Wisconsin	0	55	0	3	0	0	19
West North Central	**1**	**10**	**0**	**4**	**0**	**0**	**9**
Iowa	0	25	0	5	0	0	36
Kansas	0	10	0	17	0	0	0
Minnesota	5	34	0	7	0	0	28
Missouri	0	9	0	6	0	0	113
Nebraska	4	85	0	25	0	0	27
North Dakota	0	15	0	21	0	0	18
South Dakota	0	144	0	22	0	0	12
South Atlantic	**0**	**13**	**4**	**1**	**0**	**0**	**11**
Delaware	0	94	0	5	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	10	0	1	0	0	67
Georgia	1	37	28	2	0	0	19
Maryland	0	8	0	2	0	0	6
North Carolina	0	37	0	2	0	0	14
South Carolina	2	47	0	2	0	0	27
Virginia	0	29	0	2	0	0	41
West Virginia	1	0	0	5	0	0	22
East South Central	**0**	**2**	**0**	**1**	**106**	**0**	**8**
Alabama	1	21	0	1	330	0	13
Kentucky	0	0	0	2	0	0	13
Mississippi	0	2	0	1	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**18**	**1**	**1**	**8**	**0**	**22**
Arkansas	0	0	0	5	0	0	34
Louisiana	0	189	1	2	13	0	25
Oklahoma	0	2	0	2	0	0	45
Texas	0	27	11	1	5	0	132
Mountain	**1**	**6**	**0**	**1**	**4**	**0**	**5**
Arizona	0	3	0	0	0	0	4
Colorado	0	51	0	2	0	0	17
Idaho	118	0	0	10	0	0	10
Montana	4	79	0	22	0	0	10
Nevada	0	0	0	0	0	0	2
New Mexico	0	26	0	3	0	0	64
Utah	0	3	0	2	0	0	31
Wyoming	3	1	0	11	5	0	30
Pacific Contiguous	**0**	**15**	**0**	**1**	**3**	**0**	**2**
California	0	20	0	1	4	0	5
Oregon	0	0	0	3	0	0	4
Washington	0	30	0	3	0	0	1
Pacific Noncontiguous	**13**	**1**	**0**	**14**	**0**	**0**	**22**
Alaska	39	3	0	14	0	0	23
Hawaii	0	0	0	0	0	0	43
U.S. Total	**0**	**2**	**3**	**0**	**4**	**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 September 2019 (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**	**6**	**4**	**0**	**0**	**1**
Connecticut	0	0	0	22	8	0	0	1
Maine	0	0	0	55	5	0	0	6
Massachusetts	0	0	0	6	4	0	1	3
New Hampshire	0	0	0	0	11	0	0	2
Rhode Island	0	0	0	29	15	0	0	9
Vermont	0	0	0	18	9	0	0	14
Middle Atlantic	**0**	**0**	**0**	**5**	**3**	**0**	**1**	**0**
New Jersey	0	0	0	6	4	0	0	1
New York	0	0	0	10	4	0	1	1
Pennsylvania	0	0	0	24	4	0	0	1
East North Central	**0**	**0**	**0**	**8**	**2**	**0**	**3**	**1**
Illinois	0	0	0	16	3	0	0	1
Indiana	0	0	0	11	4	0	0	3
Michigan	0	0	0	17	4	0	11	1
Ohio	0	0	0	18	4	0	0	1
Wisconsin	0	0	0	30	6	0	34	1
West North Central	**0**	**0**	**0**	**6**	**2**	**0**	**5**	**1**
Iowa	0	0	0	54	2	0	0	1
Kansas	0	0	0	61	2	0	0	2
Minnesota	0	0	0	6	3	0	4	2
Missouri	0	0	0	20	4	0	0	1
Nebraska	0	0	0	35	4	0	0	3
North Dakota	0	0	0	0	3	0	22	2
South Dakota	0	0	0	139	8	0	0	6
South Atlantic	**0**	**0**	**0**	**1**	**1**	**0**	**0**	**0**
Delaware	0	0	0	28	20	0	0	5
District of Columbia	0	0	0	79	17	0	0	9
Florida	0	0	0	1	2	0	0	0
Georgia	0	0	0	4	4	0	0	1
Maryland	0	0	0	8	7	0	0	1
North Carolina	0	0	0	2	2	0	0	1
South Carolina	0	0	0	7	4	0	0	1
Virginia	0	0	0	6	4	0	0	1
West Virginia	0	0	0	0	10	0	0	1
East South Central	**0**	**0**	**0**	**4**	**4**	**0**	**0**	**0**
Alabama	0	0	0	7	5	0	0	1
Kentucky	0	0	0	20	18	0	0	1
Mississippi	0	0	0	2	4	0	0	1
Tennessee	0	0	0	10	6	0	0	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	3	7	0	0	2
Louisiana	0	0	0	151	8	0	0	1
Oklahoma	0	0	0	29	2	0	0	1
Texas	0	0	0	2	2	0	4	1
Mountain	**0**	**11**	**0**	**1**	**2**	**0**	**2**	**1**
Arizona	0	0	0	2	3	0	0	0
Colorado	0	0	0	5	3	0	0	1
Idaho	0	55	0	7	6	0	0	5
Montana	0	0	0	32	8	0	0	4
Nevada	0	11	0	2	5	0	0	1
New Mexico	0	0	0	5	3	0	0	1
Utah	0	26	0	4	5	0	8	1
Wyoming	0	0	0	0	6	0	0	3
Pacific Contiguous	**0**	**5**	**0**	**1**	**1**	**0**	**1**	**1**
California	0	4	0	1	2	0	2	1
Oregon	0	40	0	8	3	0	0	2
Washington	0	0	0	47	4	0	0	1
Pacific Noncontiguous	**0**	**39**	**0**	**10**	**11**	**0**	**0**	**4**
Alaska	0	0	0	0	25	0	0	10
Hawaii	0	39	0	10	12	0	0	1
U.S. Total	**0**	**6**	**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, September 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**1**	**.**	**0**
Connecticut	0	0	0	.	0
Maine	1	1	0	.	0
Massachusetts	0	0	1	.	0
New Hampshire	0	0	0	.	0
Rhode Island	0	0	0	.	0
Vermont	1	4	26	.	2
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	1	.	0
New York	0	0	0	.	0
Pennsylvania	0	1	0	.	0
East North Central	**4**	**1**	**9**	**.**	**2**
Illinois	6	3	0	.	3
Indiana	11	1	0	.	4
Michigan	5	8	115	.	5
Ohio	8	1	9	.	3
Wisconsin	14	6	17	.	8
West North Central	**1**	**0**	**2**	**.**	**0**
Iowa	2	1	10	.	1
Kansas	4	2	0	.	2
Minnesota	2	2	2	.	1
Missouri	1	0	2	.	0
Nebraska	5	13	10	.	5
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	4	2	12	.	3
District of Columbia	0	0	0	.	0
Florida	3	3	1	.	2
Georgia	116	19	0	.	61
Maryland	1	1	1	.	1
North Carolina	5	1	0	.	3
South Carolina	3	2	0	.	3
Virginia	6	3	4	.	4
West Virginia	0	0	0	.	0
East South Central	**5**	**6**	**0**	**.**	**4**
Alabama	0	0	0	.	0
Kentucky	5	6	0	.	4
Mississippi	10	15	0	.	9
Tennessee	0	0	0	.	0
West South Central	**2**	**1**	**0**	**.**	**1**
Arkansas	12	5	0	.	7
Louisiana	2	1	0	.	2
Oklahoma	14	3	0	.	11
Texas	3	1	2	.	2
Mountain	**0**	**0**	**1**	**.**	**0**
Arizona	0	0	0	.	0
Colorado	1	0	17	.	1
Idaho	1	1	0	.	1
Montana	6	2	0	.	5
Nevada	0	0	0	.	0
New Mexico	2	1	28	.	1
Utah	1	1	0	.	1
Wyoming	11	7	0	.	8
Pacific Contiguous	**0**	**0**	**0**	**.**	**0**
California	0	0	0	.	0
Oregon	1	1	4	.	1
Washington	1	2	16	.	1
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	2	3	0	.	2
Hawaii	0	0	0	.	0
U.S. Total	**0**	**0**	**0**	**.**	**0**

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

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

Electric Utilities by Census Division and State, September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**49**	**0**	**85**	**0**	**0**	**31**
Connecticut	0	30	0	0	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	100	0	110	0	0	64
New Hampshire	0	28	0	0	0	0	46
Rhode Island	0	0	0	0	0	0	0
Vermont	0	124	0	0	0	0	63
Middle Atlantic	**0**	**44**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	58	0	0	0
New York	0	44	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**3**	**7**	**0**	**2**	**0**	**0**	**16**
Illinois	0	40	0	17	0	0	72
Indiana	6	5	0	5	0	0	125
Michigan	2	7	0	5	0	0	26
Ohio	11	5	0	6	0	0	119
Wisconsin	0	56	0	3	0	0	21
West North Central	**1**	**10**	**0**	**5**	**0**	**0**	**9**
Iowa	0	28	0	5	0	0	36
Kansas	0	10	0	17	0	0	0
Minnesota	5	34	0	7	0	0	38
Missouri	0	9	0	9	0	0	113
Nebraska	4	85	0	25	0	0	27
North Dakota	0	15	0	22	0	0	18
South Dakota	0	145	0	22	0	0	12
South Atlantic	**0**	**17**	**0**	**1**	**0**	**0**	**12**
Delaware	0	0	0	0	0	0	0
Florida	0	11	0	1	0	0	67
Georgia	0	58	0	2	0	0	19
Maryland	0	70	0	0	0	0	0
North Carolina	0	36	0	2	0	0	14
South Carolina	2	53	0	2	0	0	27
Virginia	0	83	0	2	0	0	39
West Virginia	0	0	0	0	0	0	39
East South Central	**0**	**1**	**0**	**1**	**0**	**0**	**8**
Alabama	0	0	0	4	0	0	13
Kentucky	0	0	0	2	0	0	12
Mississippi	0	3	0	2	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**17**	**0**	**2**	**0**	**0**	**35**
Arkansas	0	0	0	5	0	0	38
Louisiana	0	189	0	3	0	0	0
Oklahoma	0	2	0	3	0	0	45
Texas	0	10	0	3	0	0	227
Mountain	**1**	**6**	**0**	**1**	**0**	**0**	**4**
Arizona	0	3	0	1	0	0	4
Colorado	0	51	0	1	0	0	19
Idaho	0	0	0	10	0	0	10
Montana	0	468	0	31	0	0	10
Nevada	0	0	0	1	0	0	0
New Mexico	0	26	0	4	0	0	64
Utah	0	3	0	3	0	0	31
Wyoming	3	1	0	27	0	0	30
Pacific Contiguous	**0**	**19**	**0**	**2**	**0**	**0**	**2**
California	0	21	0	1	0	0	4
Oregon	0	0	0	5	0	0	4
Washington	0	432	0	4	0	0	1
Pacific Noncontiguous	**62**	**1**	**0**	**15**	**0**	**0**	**24**
Alaska	62	4	0	15	0	0	25
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**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, September 2019 (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**	**21**	**9**	**0**	**0**	**15**
Connecticut	0	0	0	0	0	0	0	3
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	30	27	0	0	40
New Hampshire	0	0	0	0	0	0	0	23
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	30	11	0	0	19
Middle Atlantic	**0**	**0**	**0**	**21**	**21**	**0**	**0**	**1**
New Jersey	0	0	0	21	21	0	0	35
New York	0	0	0	0	0	0	0	1
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**12**	**6**	**0**	**21**	**2**
Illinois	0	0	0	41	18	0	0	5
Indiana	0	0	0	18	10	0	0	4
Michigan	0	0	0	13	9	0	0	1
Ohio	0	0	0	68	74	0	0	6
Wisconsin	0	0	0	0	11	0	22	2
West North Central	**0**	**0**	**0**	**44**	**2**	**0**	**7**	**1**
Iowa	0	0	0	69	2	0	0	1
Kansas	0	0	0	138	7	0	0	3
Minnesota	0	0	0	112	7	0	0	2
Missouri	0	0	0	0	35	0	0	1
Nebraska	0	0	0	106	29	0	0	3
North Dakota	0	0	0	0	6	0	22	2
South Dakota	0	0	0	0	14	0	0	7
South Atlantic	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**
Delaware	0	0	0	75	75	0	0	14
Florida	0	0	0	1	0	0	0	0
Georgia	0	0	0	7	7	0	0	1
Maryland	0	0	0	66	66	0	0	0
North Carolina	0	0	0	8	8	0	0	1
South Carolina	0	0	0	126	19	0	0	1
Virginia	0	0	0	16	11	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**19**	**15**	**0**	**0**	**1**
Alabama	0	0	0	34	34	0	0	1
Kentucky	0	0	0	20	16	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	163	163	0	0	1
West South Central	**0**	**0**	**0**	**26**	**9**	**0**	**0**	**1**
Arkansas	0	0	0	152	152	0	0	2
Louisiana	0	0	0	151	151	0	0	1
Oklahoma	0	0	0	29	9	0	0	3
Texas	0	0	0	66	36	0	0	2
Mountain	**0**	**35**	**0**	**6**	**4**	**0**	**16**	**1**
Arizona	0	0	0	7	7	0	0	0
Colorado	0	0	0	82	4	0	0	1
Idaho	0	0	0	0	30	0	0	7
Montana	0	0	0	0	27	0	0	9
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	12	12	0	0	1
Utah	0	35	0	0	35	0	24	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**1**
California	0	0	0	8	5	0	0	2
Oregon	0	0	0	76	4	0	0	3
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**5**
Alaska	0	0	0	0	41	0	0	10
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**8**	**0**	**2**	**2**	**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 September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**49**	**0**	**85**	**0**	**0**	**31**
Connecticut	0	30	0	0	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	100	0	110	0	0	64
New Hampshire	0	28	0	0	0	0	46
Rhode Island	0	0	0	0	0	0	0
Vermont	0	124	0	0	0	0	63
Middle Atlantic	**0**	**44**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	58	0	0	0
New York	0	44	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**3**	**7**	**0**	**2**	**0**	**0**	**16**
Illinois	0	40	0	17	0	0	72
Indiana	6	5	0	5	0	0	125
Michigan	2	7	0	5	0	0	26
Ohio	11	5	0	6	0	0	119
Wisconsin	0	56	0	3	0	0	21
West North Central	**1**	**10**	**0**	**5**	**0**	**0**	**9**
Iowa	0	28	0	5	0	0	36
Kansas	0	10	0	17	0	0	0
Minnesota	5	34	0	7	0	0	38
Missouri	0	9	0	9	0	0	113
Nebraska	4	85	0	25	0	0	27
North Dakota	0	15	0	22	0	0	18
South Dakota	0	145	0	22	0	0	12
South Atlantic	**0**	**17**	**0**	**1**	**0**	**0**	**12**
Delaware	0	0	0	0	0	0	0
Florida	0	11	0	1	0	0	67
Georgia	0	58	0	2	0	0	19
Maryland	0	70	0	0	0	0	0
North Carolina	0	36	0	2	0	0	14
South Carolina	2	53	0	2	0	0	27
Virginia	0	83	0	2	0	0	39
West Virginia	0	0	0	0	0	0	39
East South Central	**0**	**1**	**0**	**1**	**0**	**0**	**8**
Alabama	0	0	0	4	0	0	13
Kentucky	0	0	0	2	0	0	12
Mississippi	0	3	0	2	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**17**	**0**	**2**	**0**	**0**	**35**
Arkansas	0	0	0	5	0	0	38
Louisiana	0	189	0	3	0	0	0
Oklahoma	0	2	0	3	0	0	45
Texas	0	10	0	3	0	0	227
Mountain	**1**	**6**	**0**	**1**	**0**	**0**	**4**
Arizona	0	3	0	1	0	0	4
Colorado	0	51	0	1	0	0	19
Idaho	0	0	0	10	0	0	10
Montana	0	468	0	31	0	0	10
Nevada	0	0	0	1	0	0	0
New Mexico	0	26	0	4	0	0	64
Utah	0	3	0	3	0	0	31
Wyoming	3	1	0	27	0	0	30
Pacific Contiguous	**0**	**19**	**0**	**2**	**0**	**0**	**2**
California	0	21	0	1	0	0	4
Oregon	0	0	0	5	0	0	4
Washington	0	432	0	4	0	0	1
Pacific Noncontiguous	**62**	**1**	**0**	**15**	**0**	**0**	**24**
Alaska	62	4	0	15	0	0	25
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**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.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Electric Utilities by Census Division and State, Year-to-Date through September 2019 (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**	**21**	**9**	**0**	**0**	**15**
Connecticut	0	0	0	0	0	0	0	3
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	30	27	0	0	40
New Hampshire	0	0	0	0	0	0	0	23
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	30	11	0	0	19
Middle Atlantic	**0**	**0**	**0**	**21**	**21**	**0**	**0**	**1**
New Jersey	0	0	0	21	21	0	0	35
New York	0	0	0	0	0	0	0	1
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**12**	**6**	**0**	**21**	**2**
Illinois	0	0	0	41	18	0	0	5
Indiana	0	0	0	18	10	0	0	4
Michigan	0	0	0	13	9	0	0	1
Ohio	0	0	0	68	74	0	0	6
Wisconsin	0	0	0	0	11	0	22	2
West North Central	**0**	**0**	**0**	**44**	**2**	**0**	**7**	**1**
Iowa	0	0	0	69	2	0	0	1
Kansas	0	0	0	138	7	0	0	3
Minnesota	0	0	0	112	7	0	0	2
Missouri	0	0	0	0	35	0	0	1
Nebraska	0	0	0	106	29	0	0	3
North Dakota	0	0	0	0	6	0	22	2
South Dakota	0	0	0	0	14	0	0	7
South Atlantic	**0**	**0**	**0**	**1**	**2**	**0**	**0**	**0**
Delaware	0	0	0	75	75	0	0	14
Florida	0	0	0	1	0	0	0	0
Georgia	0	0	0	7	7	0	0	1
Maryland	0	0	0	66	66	0	0	0
North Carolina	0	0	0	8	8	0	0	1
South Carolina	0	0	0	126	19	0	0	1
Virginia	0	0	0	16	11	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**19**	**15**	**0**	**0**	**1**
Alabama	0	0	0	34	34	0	0	1
Kentucky	0	0	0	20	16	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	163	163	0	0	1
West South Central	**0**	**0**	**0**	**26**	**9**	**0**	**0**	**1**
Arkansas	0	0	0	152	152	0	0	2
Louisiana	0	0	0	151	151	0	0	1
Oklahoma	0	0	0	29	9	0	0	3
Texas	0	0	0	66	36	0	0	2
Mountain	**0**	**35**	**0**	**6**	**4**	**0**	**16**	**1**
Arizona	0	0	0	7	7	0	0	0
Colorado	0	0	0	82	4	0	0	1
Idaho	0	0	0	0	30	0	0	7
Montana	0	0	0	0	27	0	0	9
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	12	12	0	0	1
Utah	0	35	0	0	35	0	24	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**1**
California	0	0	0	8	5	0	0	2
Oregon	0	0	0	76	4	0	0	3
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**21**	**0**	**0**	**5**
Alaska	0	0	0	0	41	0	0	10
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**8**	**0**	**2**	**2**	**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, September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**32**	**0**	**2**	**0**	**0**	**15**
Connecticut	0	59	0	2	0	0	43
Maine	0	2	0	16	0	0	19
Massachusetts	0	55	0	4	0	0	34
New Hampshire	0	962	0	0	0	0	57
Rhode Island	0	109	0	10	0	0	0
Vermont	0	0	0	0	0	0	36
Middle Atlantic	**3**	**19**	**0**	**1**	**0**	**0**	**16**
New Jersey	0	53	0	2	0	0	0
New York	0	42	0	2	0	0	18
Pennsylvania	3	21	0	1	0	0	17
East North Central	**0**	**5**	**13**	**1**	**6**	**0**	**46**
Illinois	0	3	0	7	0	0	67
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	80
Ohio	0	6	13	1	25	0	0
Wisconsin	0	0	0	0	0	0	90
West North Central	**0**	**92**	**0**	**7**	**0**	**0**	**54**
Iowa	0	49	0	244	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	225	0	21	0	0	66
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**22**	**0**	**2**	**0**	**0**	**20**
Delaware	0	94	0	7	0	0	0
Florida	0	133	0	5	0	0	0
Georgia	0	503	0	6	0	0	599
Maryland	0	9	0	3	0	0	6
North Carolina	0	284	0	6	0	0	176
South Carolina	0	0	0	9	0	0	142
Virginia	0	14	0	2	0	0	126
West Virginia	4	0	0	9	0	0	49
East South Central	**0**	**101**	**0**	**0**	**0**	**0**	**295**
Alabama	0	128	0	0	0	0	0
Kentucky	0	0	0	0	0	0	295
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**134**	**0**	**1**	**0**	**0**	**23**
Arkansas	0	0	0	0	0	0	52
Louisiana	0	0	0	6	0	0	25
Oklahoma	0	0	0	0	0	0	0
Texas	0	729	0	1	0	0	0
Mountain	**4**	**23**	**0**	**2**	**0**	**0**	**25**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	11	0	0	50
Idaho	0	0	0	18	0	0	33
Montana	4	24	0	7	0	0	84
Nevada	0	0	0	0	0	0	54
New Mexico	0	0	0	4	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**16**	**0**	**1**	**0**	**0**	**22**
California	0	0	0	1	0	0	26
Oregon	0	0	0	1	0	0	60
Washington	0	19	0	4	0	0	49
Pacific Noncontiguous	**4**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	37	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**3**	**9**	**0**	**3**	**0**	**10**

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, September 2019 (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**	**6**	**4**	**0**	**1**	**1**
Connecticut	0	0	0	22	8	0	0	1
Maine	0	0	0	55	6	0	0	7
Massachusetts	0	0	0	6	4	0	1	3
New Hampshire	0	0	0	0	12	0	0	1
Rhode Island	0	0	0	29	15	0	0	9
Vermont	0	0	0	22	15	0	0	20
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	10	4	0	0	1
Pennsylvania	0	0	0	27	5	0	0	1
East North Central	**0**	**0**	**0**	**10**	**2**	**0**	**15**	**0**
Illinois	0	0	0	17	3	0	0	1
Indiana	0	0	0	14	4	0	0	1
Michigan	0	0	0	34	5	0	20	1
Ohio	0	0	0	19	5	0	0	1
Wisconsin	0	0	0	31	7	0	0	1
West North Central	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**2**
Iowa	0	0	0	72	5	0	0	3
Kansas	0	0	0	65	2	0	0	2
Minnesota	0	0	0	6	4	0	0	4
Missouri	0	0	0	21	4	0	0	2
Nebraska	0	0	0	31	3	0	0	3
North Dakota	0	0	0	0	4	0	0	4
South Dakota	0	0	0	139	10	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Delaware	0	0	0	30	22	0	0	6
District of Columbia	0	0	0	79	79	0	0	79
Florida	0	0	0	6	3	0	1	4
Georgia	0	0	0	4	3	0	0	5
Maryland	0	0	0	8	7	0	0	1
North Carolina	0	0	0	2	2	0	0	3
South Carolina	0	0	0	7	7	0	0	6
Virginia	0	0	0	6	5	0	0	2
West Virginia	0	0	0	0	10	0	0	4
East South Central	**0**	**0**	**0**	**4**	**5**	**0**	**0**	**0**
Alabama	0	0	0	8	11	0	0	0
Kentucky	0	0	0	147	44	0	0	4
Mississippi	0	0	0	2	2	0	0	0
Tennessee	0	0	0	10	10	0	0	9
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	3	6	0	0	1
Louisiana	0	0	0	0	23	0	0	5
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**12**	**0**	**1**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	3	0	0	3
Idaho	0	55	0	7	7	0	0	8
Montana	0	0	0	32	8	0	0	4
Nevada	0	12	0	2	5	0	0	4
New Mexico	0	0	0	6	3	0	0	2
Utah	0	36	0	4	5	0	0	4
Wyoming	0	0	0	0	9	0	0	6
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	5	0	1	2	0	0	1
Oregon	0	40	0	8	4	0	0	2
Washington	0	0	0	47	7	0	0	2
Pacific Noncontiguous	**0**	**39**	**0**	**11**	**15**	**0**	**0**	**4**
Alaska	0	0	0	0	54	0	0	31
Hawaii	0	39	0	11	15	0	0	4
U.S. Total	**0**	**6**	**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.3.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Independent Power Producers by Census Division and State, Year-to-Date through September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**32**	**0**	**2**	**0**	**0**	**15**
Connecticut	0	59	0	2	0	0	43
Maine	0	2	0	16	0	0	19
Massachusetts	0	55	0	4	0	0	34
New Hampshire	0	962	0	0	0	0	57
Rhode Island	0	109	0	10	0	0	0
Vermont	0	0	0	0	0	0	36
Middle Atlantic	**3**	**19**	**0**	**1**	**0**	**0**	**16**
New Jersey	0	53	0	2	0	0	0
New York	0	42	0	2	0	0	18
Pennsylvania	3	21	0	1	0	0	17
East North Central	**0**	**5**	**13**	**1**	**6**	**0**	**46**
Illinois	0	3	0	7	0	0	67
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	80
Ohio	0	6	13	1	25	0	0
Wisconsin	0	0	0	0	0	0	90
West North Central	**0**	**92**	**0**	**7**	**0**	**0**	**54**
Iowa	0	49	0	244	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	225	0	21	0	0	66
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**22**	**0**	**2**	**0**	**0**	**20**
Delaware	0	94	0	7	0	0	0
Florida	0	133	0	5	0	0	0
Georgia	0	503	0	6	0	0	599
Maryland	0	9	0	3	0	0	6
North Carolina	0	284	0	6	0	0	176
South Carolina	0	0	0	9	0	0	142
Virginia	0	14	0	2	0	0	126
West Virginia	4	0	0	9	0	0	49
East South Central	**0**	**101**	**0**	**0**	**0**	**0**	**295**
Alabama	0	128	0	0	0	0	0
Kentucky	0	0	0	0	0	0	295
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**134**	**0**	**1**	**0**	**0**	**23**
Arkansas	0	0	0	0	0	0	52
Louisiana	0	0	0	6	0	0	25
Oklahoma	0	0	0	0	0	0	0
Texas	0	729	0	1	0	0	0
Mountain	**4**	**23**	**0**	**2**	**0**	**0**	**25**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	11	0	0	50
Idaho	0	0	0	18	0	0	33
Montana	4	24	0	7	0	0	84
Nevada	0	0	0	0	0	0	54
New Mexico	0	0	0	4	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**16**	**0**	**1**	**0**	**0**	**22**
California	0	0	0	1	0	0	26
Oregon	0	0	0	1	0	0	60
Washington	0	19	0	4	0	0	49
Pacific Noncontiguous	**4**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	37	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**3**	**9**	**0**	**3**	**0**	**10**

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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 September 2019 (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**	**6**	**4**	**0**	**1**	**1**
Connecticut	0	0	0	22	8	0	0	1
Maine	0	0	0	55	6	0	0	7
Massachusetts	0	0	0	6	4	0	1	3
New Hampshire	0	0	0	0	12	0	0	1
Rhode Island	0	0	0	29	15	0	0	9
Vermont	0	0	0	22	15	0	0	20
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**0**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	10	4	0	0	1
Pennsylvania	0	0	0	27	5	0	0	1
East North Central	**0**	**0**	**0**	**10**	**2**	**0**	**15**	**0**
Illinois	0	0	0	17	3	0	0	1
Indiana	0	0	0	14	4	0	0	1
Michigan	0	0	0	34	5	0	20	1
Ohio	0	0	0	19	5	0	0	1
Wisconsin	0	0	0	31	7	0	0	1
West North Central	**0**	**0**	**0**	**6**	**2**	**0**	**0**	**2**
Iowa	0	0	0	72	5	0	0	3
Kansas	0	0	0	65	2	0	0	2
Minnesota	0	0	0	6	4	0	0	4
Missouri	0	0	0	21	4	0	0	2
Nebraska	0	0	0	31	3	0	0	3
North Dakota	0	0	0	0	4	0	0	4
South Dakota	0	0	0	139	10	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Delaware	0	0	0	30	22	0	0	6
District of Columbia	0	0	0	79	79	0	0	79
Florida	0	0	0	6	3	0	1	4
Georgia	0	0	0	4	3	0	0	5
Maryland	0	0	0	8	7	0	0	1
North Carolina	0	0	0	2	2	0	0	3
South Carolina	0	0	0	7	7	0	0	6
Virginia	0	0	0	6	5	0	0	2
West Virginia	0	0	0	0	10	0	0	4
East South Central	**0**	**0**	**0**	**4**	**5**	**0**	**0**	**0**
Alabama	0	0	0	8	11	0	0	0
Kentucky	0	0	0	147	44	0	0	4
Mississippi	0	0	0	2	2	0	0	0
Tennessee	0	0	0	10	10	0	0	9
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	3	6	0	0	1
Louisiana	0	0	0	0	23	0	0	5
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**12**	**0**	**1**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	3	0	0	3
Idaho	0	55	0	7	7	0	0	8
Montana	0	0	0	32	8	0	0	4
Nevada	0	12	0	2	5	0	0	4
New Mexico	0	0	0	6	3	0	0	2
Utah	0	36	0	4	5	0	0	4
Wyoming	0	0	0	0	9	0	0	6
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	5	0	1	2	0	0	1
Oregon	0	40	0	8	4	0	0	2
Washington	0	0	0	47	7	0	0	2
Pacific Noncontiguous	**0**	**39**	**0**	**11**	**15**	**0**	**0**	**4**
Alaska	0	0	0	0	54	0	0	31
Hawaii	0	39	0	11	15	0	0	4
U.S. Total	**0**	**6**	**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.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**34**	**0**	**12**	**0**	**0**	**0**
Connecticut	0	723	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	87	0	19	0	0	0
New Hampshire	0	5	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**	**91**	**0**	**13**	**0**	**0**	**0**
New Jersey	0	0	0	23	0	0	0
New York	0	100	0	16	0	0	0
Pennsylvania	0	47	0	0	0	0	0
East North Central	**18**	**36**	**0**	**7**	**0**	**0**	**0**
Illinois	62	73	0	25	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	242	0	10	0	0	0
Ohio	0	0	0	3	0	0	0
Wisconsin	0	608	0	17	0	0	0
West North Central	**0**	**33**	**0**	**3**	**0**	**0**	**0**
Iowa	0	0	0	7	0	0	0
Minnesota	0	42	0	10	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	1,031	0	0	0	0	0
South Atlantic	**0**	**5**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	6	0	0	0	0	0
Maryland	0	0	0	4	0	0	0
North Carolina	0	875	0	55	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**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**	**15**	**0**	**0**	**0**
Arkansas	0	0	0	104	0	0	0
Louisiana	0	0	0	24	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	17	0	0	0
Mountain	**0**	**805**	**0**	**7**	**0**	**0**	**0**
Arizona	0	805	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	28	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**50**	**0**	**2**	**0**	**0**	**425**
California	0	58	0	2	0	0	425
Oregon	0	0	0	18	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**50**	**4**	**0**	**0**	**0**	**0**	**72**
Alaska	50	36	0	0	0	0	72
Hawaii	0	0	0	0	0	0	0
U.S. Total	**16**	**8**	**0**	**4**	**0**	**0**	**55**

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, September 2019 (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**	**80**	**11**	**0**	**0**	**10**
Connecticut	0	0	0	192	192	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	86	43	0	0	18
New Hampshire	0	0	0	0	0	0	0	1
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**16**	**4**	**0**	**3**	**6**
New Jersey	0	0	0	17	8	0	0	7
New York	0	0	0	64	6	0	6	11
Pennsylvania	0	0	0	81	6	0	0	2
East North Central	**0**	**0**	**0**	**56**	**14**	**0**	**0**	**6**
Illinois	0	0	0	101	111	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	128	6	0	0	8
Ohio	0	0	0	114	26	0	0	3
Wisconsin	0	0	0	96	30	0	0	15
West North Central	**0**	**0**	**0**	**0**	**17**	**0**	**36**	**6**
Iowa	0	0	0	0	20	0	0	5
Kansas	0	0	0	0	164	0	0	164
Minnesota	0	0	0	0	56	0	36	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	243	0	0	243
South Dakota	0	0	0	0	0	0	0	1,031
South Atlantic	**0**	**0**	**0**	**17**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	65	31	0	0	20
Georgia	0	0	0	121	121	0	0	21
Maryland	0	0	0	61	31	0	0	4
North Carolina	0	0	0	18	18	0	0	22
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	181	5	0	0	2
East South Central	**0**	**0**	**0**	**90**	**90**	**0**	**0**	**21**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	90	90	0	0	21
West South Central	**0**	**0**	**0**	**30**	**15**	**0**	**0**	**14**
Arkansas	0	0	0	0	0	0	0	65
Louisiana	0	0	0	0	0	0	0	24
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	138	21	0	0	16
Mountain	**0**	**0**	**0**	**20**	**4**	**0**	**0**	**4**
Arizona	0	0	0	53	53	0	0	5
Colorado	0	0	0	55	54	0	0	21
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	24	3	0	0	3
New Mexico	0	0	0	0	310	0	0	29
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**16**	**6**	**0**	**0**	**3**
California	0	0	0	16	7	0	0	3
Oregon	0	0	0	0	35	0	0	17
Washington	0	0	0	0	75	0	0	74
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Alaska	0	0	0	0	0	0	0	37
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**8**	**3**	**0**	**2**	**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.4.B. Relative Standard Error for Net Generation by Fuel Type:

Commercial Sector by Census Division and State, Year-to-Date through September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**34**	**0**	**12**	**0**	**0**	**0**
Connecticut	0	723	0	18	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	87	0	19	0	0	0
New Hampshire	0	5	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**	**91**	**0**	**13**	**0**	**0**	**0**
New Jersey	0	0	0	23	0	0	0
New York	0	100	0	16	0	0	0
Pennsylvania	0	47	0	0	0	0	0
East North Central	**18**	**36**	**0**	**7**	**0**	**0**	**0**
Illinois	62	73	0	25	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	242	0	10	0	0	0
Ohio	0	0	0	3	0	0	0
Wisconsin	0	608	0	17	0	0	0
West North Central	**0**	**33**	**0**	**3**	**0**	**0**	**0**
Iowa	0	0	0	7	0	0	0
Minnesota	0	42	0	10	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	1,031	0	0	0	0	0
South Atlantic	**0**	**5**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	6	0	0	0	0	0
Maryland	0	0	0	4	0	0	0
North Carolina	0	875	0	55	0	0	0
South Carolina	0	0	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**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**	**15**	**0**	**0**	**0**
Arkansas	0	0	0	104	0	0	0
Louisiana	0	0	0	24	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	17	0	0	0
Mountain	**0**	**805**	**0**	**7**	**0**	**0**	**0**
Arizona	0	805	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	28	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**50**	**0**	**2**	**0**	**0**	**425**
California	0	58	0	2	0	0	425
Oregon	0	0	0	18	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**50**	**4**	**0**	**0**	**0**	**0**	**72**
Alaska	50	36	0	0	0	0	72
Hawaii	0	0	0	0	0	0	0
U.S. Total	**16**	**8**	**0**	**4**	**0**	**0**	**55**

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 September 2019 (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**	**80**	**11**	**0**	**0**	**10**
Connecticut	0	0	0	192	192	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	86	43	0	0	18
New Hampshire	0	0	0	0	0	0	0	1
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**16**	**4**	**0**	**3**	**6**
New Jersey	0	0	0	17	8	0	0	7
New York	0	0	0	64	6	0	6	11
Pennsylvania	0	0	0	81	6	0	0	2
East North Central	**0**	**0**	**0**	**56**	**14**	**0**	**0**	**6**
Illinois	0	0	0	101	111	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	128	6	0	0	8
Ohio	0	0	0	114	26	0	0	3
Wisconsin	0	0	0	96	30	0	0	15
West North Central	**0**	**0**	**0**	**0**	**17**	**0**	**36**	**6**
Iowa	0	0	0	0	20	0	0	5
Kansas	0	0	0	0	164	0	0	164
Minnesota	0	0	0	0	56	0	36	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	243	0	0	243
South Dakota	0	0	0	0	0	0	0	1,031
South Atlantic	**0**	**0**	**0**	**17**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	65	31	0	0	20
Georgia	0	0	0	121	121	0	0	21
Maryland	0	0	0	61	31	0	0	4
North Carolina	0	0	0	18	18	0	0	22
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	181	5	0	0	2
East South Central	**0**	**0**	**0**	**90**	**90**	**0**	**0**	**21**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	90	90	0	0	21
West South Central	**0**	**0**	**0**	**30**	**15**	**0**	**0**	**14**
Arkansas	0	0	0	0	0	0	0	65
Louisiana	0	0	0	0	0	0	0	24
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	138	21	0	0	16
Mountain	**0**	**0**	**0**	**20**	**4**	**0**	**0**	**4**
Arizona	0	0	0	53	53	0	0	5
Colorado	0	0	0	55	54	0	0	21
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	24	3	0	0	3
New Mexico	0	0	0	0	310	0	0	29
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**16**	**6**	**0**	**0**	**3**
California	0	0	0	16	7	0	0	3
Oregon	0	0	0	0	35	0	0	17
Washington	0	0	0	0	75	0	0	74
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**
Alaska	0	0	0	0	0	0	0	37
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**8**	**3**	**0**	**2**	**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.5.A. Relative Standard Error for Net Generation by Fuel Type: Industrial Sector by Census Division and State, September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**124**	**53**	**0**	**10**	**0**	**0**	**100**
Connecticut	0	0	0	11	0	0	0
Maine	124	57	0	25	0	0	100
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	4,809	0	36	0	0	0
Middle Atlantic	**32**	**16**	**22**	**8**	**18**	**0**	**56**
New Jersey	0	0	0	9	0	0	0
New York	0	11	0	8	0	0	56
Pennsylvania	32	24	45	11	27	0	0
East North Central	**6**	**6**	**0**	**7**	**9**	**0**	**34**
Illinois	5	0	0	14	0	0	0
Indiana	0	2	0	9	11	0	0
Michigan	58	22	0	20	0	0	165
Ohio	0	0	0	18	0	0	0
Wisconsin	27	0	0	19	0	0	34
West North Central	**3**	**0**	**0**	**9**	**0**	**0**	**0**
Iowa	2	0	0	11	0	0	0
Kansas	0	0	0	70	0	0	0
Minnesota	21	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	52	0	0	0	0	0	0
South Atlantic	**46**	**26**	**28**	**4**	**0**	**0**	**32**
Delaware	0	0	0	0	0	0	0
Florida	134	49	0	11	0	0	0
Georgia	110	36	28	14	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	35	84	0	17	0	0	575
South Carolina	0	0	0	0	0	0	0
Virginia	0	627	0	10	0	0	0
West Virginia	0	0	0	0	0	0	32
East South Central	**32**	**42**	**0**	**7**	**106**	**0**	**0**
Alabama	181	59	0	14	330	0	0
Kentucky	0	0	0	12	0	0	0
Mississippi	0	0	0	20	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**8**	**18**	**1**	**11**	**0**	**0**
Arkansas	0	0	0	14	0	0	0
Louisiana	0	0	34	2	13	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	65	11	2	12	0	0
Mountain	**18**	**0**	**0**	**6**	**4**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	118	0	0	31	0	0	0
Montana	263	0	0	808	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	18	0	0	10	5	0	0
Pacific Contiguous	**0**	**63**	**0**	**1**	**4**	**0**	**0**
California	0	0	0	1	4	0	0
Oregon	0	0	0	63	0	0	0
Washington	0	63	0	65	0	0	0
Pacific Noncontiguous	**0**	**3**	**0**	**0**	**0**	**0**	**84**
Alaska	0	12	0	0	0	0	0
Hawaii	0	0	0	0	0	0	84
U.S. Total	**6**	**6**	**10**	**1**	**6**	**0**	**23**

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, September 2019 (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**	**32**	**11**	**0**	**0**	**7**
Connecticut	0	0	0	555	555	0	0	11
Maine	0	0	0	0	11	0	0	10
Massachusetts	0	0	0	0	133	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	36
Middle Atlantic	**0**	**0**	**0**	**52**	**10**	**0**	**0**	**6**
New Jersey	0	0	0	78	78	0	0	5
New York	0	0	0	0	23	0	0	8
Pennsylvania	0	0	0	69	11	0	0	8
East North Central	**0**	**0**	**0**	**0**	**9**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	32	0	0	7
Michigan	0	0	0	0	16	0	0	11
Ohio	0	0	0	0	16	0	0	9
Wisconsin	0	0	0	0	14	0	64	10
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	62
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	0	0	0	31
South Atlantic	**0**	**0**	**0**	**100**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	76	0	0	1
Florida	0	0	0	111	10	0	0	5
Georgia	0	0	0	0	6	0	0	8
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	8	0	0	7
South Carolina	0	0	0	146	4	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	14
East South Central	**0**	**0**	**0**	**76**	**4**	**0**	**0**	**4**
Alabama	0	0	0	0	6	0	0	7
Kentucky	0	0	0	0	25	0	0	17
Mississippi	0	0	0	0	5	0	0	6
Tennessee	0	0	0	76	8	0	0	4
West South Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**1**
Arkansas	0	0	0	0	8	0	0	7
Louisiana	0	0	0	0	8	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	15	0	4	2
Mountain	**0**	**0**	**0**	**94**	**4**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	146	4	0	0	12
Montana	0	0	0	0	0	0	0	43
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	7
Pacific Contiguous	**0**	**0**	**0**	**43**	**9**	**0**	**3**	**2**
California	0	0	0	43	14	0	3	1
Oregon	0	0	0	0	17	0	0	16
Washington	0	0	0	0	13	0	0	13
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**190**	**0**	**0**	**7**
Alaska	0	0	0	0	190	0	0	6
Hawaii	0	0	0	0	0	0	0	10
U.S. Total	**0**	**0**	**0**	**27**	**3**	**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 September 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**124**	**53**	**0**	**10**	**0**	**0**	**100**
Connecticut	0	0	0	11	0	0	0
Maine	124	57	0	25	0	0	100
Massachusetts	0	0	0	8	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	4,809	0	36	0	0	0
Middle Atlantic	**32**	**16**	**22**	**8**	**18**	**0**	**56**
New Jersey	0	0	0	9	0	0	0
New York	0	11	0	8	0	0	56
Pennsylvania	32	24	45	11	27	0	0
East North Central	**6**	**6**	**0**	**7**	**9**	**0**	**34**
Illinois	5	0	0	14	0	0	0
Indiana	0	2	0	9	11	0	0
Michigan	58	22	0	20	0	0	165
Ohio	0	0	0	18	0	0	0
Wisconsin	27	0	0	19	0	0	34
West North Central	**3**	**0**	**0**	**9**	**0**	**0**	**0**
Iowa	2	0	0	11	0	0	0
Kansas	0	0	0	70	0	0	0
Minnesota	21	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	52	0	0	0	0	0	0
South Atlantic	**46**	**26**	**28**	**4**	**0**	**0**	**32**
Delaware	0	0	0	0	0	0	0
Florida	134	49	0	11	0	0	0
Georgia	110	36	28	14	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	35	84	0	17	0	0	575
South Carolina	0	0	0	0	0	0	0
Virginia	0	627	0	10	0	0	0
West Virginia	0	0	0	0	0	0	32
East South Central	**32**	**42**	**0**	**7**	**106**	**0**	**0**
Alabama	181	59	0	14	330	0	0
Kentucky	0	0	0	12	0	0	0
Mississippi	0	0	0	20	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**8**	**18**	**1**	**11**	**0**	**0**
Arkansas	0	0	0	14	0	0	0
Louisiana	0	0	34	2	13	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	65	11	2	12	0	0
Mountain	**18**	**0**	**0**	**6**	**4**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	118	0	0	31	0	0	0
Montana	263	0	0	808	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	18	0	0	10	5	0	0
Pacific Contiguous	**0**	**63**	**0**	**1**	**4**	**0**	**0**
California	0	0	0	1	4	0	0
Oregon	0	0	0	63	0	0	0
Washington	0	63	0	65	0	0	0
Pacific Noncontiguous	**0**	**3**	**0**	**0**	**0**	**0**	**84**
Alaska	0	12	0	0	0	0	0
Hawaii	0	0	0	0	0	0	84
U.S. Total	**6**	**6**	**10**	**1**	**6**	**0**	**23**

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 September 2019 (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**	**32**	**11**	**0**	**0**	**7**
Connecticut	0	0	0	555	555	0	0	11
Maine	0	0	0	0	11	0	0	10
Massachusetts	0	0	0	0	133	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	36
Middle Atlantic	**0**	**0**	**0**	**52**	**10**	**0**	**0**	**6**
New Jersey	0	0	0	78	78	0	0	5
New York	0	0	0	0	23	0	0	8
Pennsylvania	0	0	0	69	11	0	0	8
East North Central	**0**	**0**	**0**	**0**	**9**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	32	0	0	7
Michigan	0	0	0	0	16	0	0	11
Ohio	0	0	0	0	16	0	0	9
Wisconsin	0	0	0	0	14	0	64	10
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	62
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	0	0	0	31
South Atlantic	**0**	**0**	**0**	**100**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	76	0	0	1
Florida	0	0	0	111	10	0	0	5
Georgia	0	0	0	0	6	0	0	8
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	8	0	0	7
South Carolina	0	0	0	146	4	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	14
East South Central	**0**	**0**	**0**	**76**	**4**	**0**	**0**	**4**
Alabama	0	0	0	0	6	0	0	7
Kentucky	0	0	0	0	25	0	0	17
Mississippi	0	0	0	0	5	0	0	6
Tennessee	0	0	0	76	8	0	0	4
West South Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**1**
Arkansas	0	0	0	0	8	0	0	7
Louisiana	0	0	0	0	8	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	15	0	4	2
Mountain	**0**	**0**	**0**	**94**	**4**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	146	4	0	0	12
Montana	0	0	0	0	0	0	0	43
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	7
Pacific Contiguous	**0**	**0**	**0**	**43**	**9**	**0**	**3**	**2**
California	0	0	0	43	14	0	3	1
Oregon	0	0	0	0	17	0	0	16
Washington	0	0	0	0	13	0	0	13
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**190**	**0**	**0**	**7**
Alaska	0	0	0	0	190	0	0	6
Hawaii	0	0	0	0	0	0	0	10
U.S. Total	**0**	**0**	**0**	**27**	**3**	**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, September 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**3**	**0**	**1**
Connecticut	1	1	3	0	1
Maine	1	1	3	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	5	8	8	0	4
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	1	1	1	0	1
Indiana	2	3	2	0	1
Michigan	1	2	3	0	1
Ohio	1	1	1	0	1
Wisconsin	1	4	7	0	3
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	8	6	0	4
Kansas	3	2	8	0	2
Minnesota	2	5	8	0	3
Missouri	2	3	7	0	2
Nebraska	2	8	10	0	4
North Dakota	2	5	10	0	5
South Dakota	3	10	14	0	5
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	2	2	6	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	6	0	1
Georgia	2	1	4	0	1
Maryland	1	1	2	0	0
North Carolina	2	1	4	0	1
South Carolina	2	1	3	0	2
Virginia	1	1	5	0	1
West Virginia	1	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	3	0	1
Kentucky	2	4	3	0	2
Mississippi	3	2	6	0	2
Tennessee	1	3	5	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	3	2	5	0	2
Louisiana	2	1	2	0	1
Oklahoma	2	1	5	0	2
Texas	2	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	2	5	7	0	3
Idaho	1	5	4	0	2
Montana	3	8	5	0	4
Nevada	1	2	1	0	1
New Mexico	3	7	7	0	4
Utah	2	5	3	0	2
Wyoming	3	9	5	0	4
Pacific Contiguous	**0**	**1**	**3**	**0**	**1**
California	0	1	2	0	1
Oregon	1	5	10	0	3
Washington	1	5	8	0	3
Pacific Noncontiguous	**1**	**5**	**5**	**0**	**2**
Alaska	3	12	20	0	7
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 September 2019

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**	**1**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	1	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	0
Indiana	1	2	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	4	0	3
Kansas	1	1	5	0	2
Minnesota	1	4	6	0	2
Missouri	1	2	5	0	1
Nebraska	1	6	8	0	3
North Dakota	1	4	7	0	3
South Dakota	1	7	10	0	4
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	2	5	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	1	3	0	1
South Carolina	1	1	2	0	1
Virginia	0	0	3	0	1
West Virginia	0	1	0	0	0
East South Central	**0**	**1**	**1**	**0**	**1**
Alabama	1	1	2	0	1
Kentucky	1	3	2	0	1
Mississippi	1	1	4	0	1
Tennessee	1	3	4	0	1
West South Central	**1**	**1**	**1**	**0**	**0**
Arkansas	1	1	3	0	1
Louisiana	1	1	1	0	1
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	2
Montana	1	6	5	0	3
Nevada	0	1	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	7	0	2
Washington	0	4	6	0	2
Pacific Noncontiguous	**1**	**4**	**4**	**0**	**2**
Alaska	1	8	14	0	5
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**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, September 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**2**	**1**	**1**	**0**	**1**
Connecticut	7	1	1	0	3
Maine	1	1	3	0	1
Massachusetts	1	1	3	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	4	7	6	0	4
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	1	1	1	0	1
Indiana	2	3	2	0	1
Michigan	1	1	5	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	8	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	6	0	3
Kansas	3	2	7	0	2
Minnesota	2	3	10	0	3
Missouri	2	3	5	0	2
Nebraska	2	6	12	0	4
North Dakota	2	4	9	0	4
South Dakota	3	7	16	0	4
South Atlantic	**1**	**1**	**2**	**0**	**1**
Delaware	3	3	8	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	6	0	1
Georgia	2	2	4	0	1
Maryland	1	1	1	0	0
North Carolina	2	1	3	0	1
South Carolina	2	2	3	0	2
Virginia	2	1	5	0	1
West Virginia	1	2	0	0	1
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	2	3	0	1
Kentucky	2	4	3	0	2
Mississippi	3	3	6	0	2
Tennessee	1	3	5	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	3	3	4	0	2
Louisiana	2	2	2	0	1
Oklahoma	3	2	5	0	2
Texas	2	1	2	0	1
Mountain	**1**	**2**	**3**	**0**	**1**
Arizona	1	3	6	0	1
Colorado	3	5	8	0	3
Idaho	2	4	5	0	2
Montana	3	6	9	0	4
Nevada	1	2	1	0	1
New Mexico	5	8	12	0	5
Utah	4	6	4	0	3
Wyoming	3	7	6	0	4
Pacific Contiguous	**0**	**1**	**2**	**0**	**0**
California	0	1	1	0	0
Oregon	1	3	12	0	3
Washington	1	3	10	0	2
Pacific Noncontiguous	**1**	**3**	**3**	**0**	**1**
Alaska	3	8	17	0	5
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 September 2019

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

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Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, September 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**2**	**0**	**1**	**0**	**1**
Connecticut	7	0	2	0	3
Maine	0	0	1	0	0
Massachusetts	1	0	3	0	1
New Hampshire	1	0	1	0	0
Rhode Island	0	0	0	0	0
Vermont	3	2	3	0	2
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	0	0	0
New York	0	0	0	0	0
Pennsylvania	0	0	0	0	0
East North Central	**0**	**0**	**1**	**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	2	0	1
Kansas	2	2	4	0	2
Minnesota	1	2	3	0	1
Missouri	1	1	2	0	1
Nebraska	1	2	4	0	1
North Dakota	1	1	2	0	1
South Dakota	2	3	4	0	2
South Atlantic	**1**	**0**	**1**	**0**	**0**
Delaware	2	1	3	0	1
District of Columbia	0	0	0	0	0
Florida	1	1	3	0	0
Georgia	1	1	2	0	1
Maryland	0	0	1	0	0
North Carolina	1	1	2	0	1
South Carolina	1	1	2	0	1
Virginia	1	1	2	0	1
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	1	0	1
West South Central	**1**	**1**	**1**	**0**	**0**
Arkansas	2	2	2	0	1
Louisiana	1	1	1	0	1
Oklahoma	2	2	3	0	1
Texas	1	1	1	0	1
Mountain	**1**	**1**	**1**	**0**	**0**
Arizona	1	1	2	0	1
Colorado	3	2	3	0	2
Idaho	1	1	1	0	1
Montana	2	3	4	0	1
Nevada	1	1	0	0	0
New Mexico	4	3	6	0	2
Utah	3	2	2	0	2
Wyoming	2	2	2	0	1
Pacific Contiguous	**0**	**1**	**1**	**0**	**0**
California	0	0	1	0	0
Oregon	1	1	3	0	1
Washington	1	2	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 September 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**0**	**1**
Connecticut	4	1	3	0	2
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	2	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	0	1	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	2	4	0	1
Ohio	0	1	1	0	0
Wisconsin	1	3	7	0	2
West North Central	**0**	**2**	**4**	**0**	**1**
Iowa	1	7	6	0	3
Kansas	1	2	6	0	2
Minnesota	1	4	8	0	3
Missouri	1	3	6	0	1
Nebraska	1	7	11	0	4
North Dakota	1	4	9	0	4
South Dakota	1	8	14	0	4
South Atlantic	**0**	**0**	**2**	**0**	**0**
Delaware	1	3	6	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	0	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	4	3	0	2
Mississippi	1	2	5	0	2
Tennessee	1	4	5	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	1	2	4	0	2
Louisiana	1	1	2	0	1
Oklahoma	1	2	5	0	1
Texas	1	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	4	0	2
Montana	1	7	7	0	3
Nevada	0	2	1	0	1
New Mexico	2	8	10	0	4
Utah	1	5	3	0	2
Wyoming	1	7	5	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	2	0	0
Oregon	1	4	10	0	3
Washington	1	4	8	0	2
Pacific Noncontiguous	**1**	**4**	**4**	**0**	**2**
Alaska	2	9	17	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 2019

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
2019	1	01/06/2019 1:00 AM	01/06/2019 12:00 PM	11 Hours, 0 Minutes	Puget Sound Energy	WECC	Washington: King County, Thurston County, Pierce County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	230000
2019	1	01/06/2019 3:00 AM	01/09/2019 7:00 AM	76 Hours, 0 Minutes	Peak Reliability	WECC	Washington:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	230	230000
2019	1	01/06/2019 5:56 PM	01/06/2019 9:52 PM	3 Hours, 56 Minutes	Sacramento Municipal Util Dist	WECC	California: Sacramento County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	300	90382
2019	1	01/10/2019 12:19 PM	01/10/2019 12:48 PM	0 Hours, 29 Minutes	Western Area Power Administration - Upper Great Plains Region	WECC	Montana: Valley 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).-System Operations	11	2
2019	1	01/12/2019 11:30 AM	. .	. Hours, . Minutes	Southwest Power Pool, Inc.	SERC	Missouri: Nebraska:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	116600
2019	1	01/12/2019 11:30 AM	01/13/2019 10:00 PM	34 Hours, 30 Minutes	Kansas City Power & Light Co	SPP RE	Missouri: Jackson County; Kansas: Johnson County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	112530
2019	1	01/13/2019 5:30 AM	01/15/2019 5:00 PM	59 Hours, 30 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	133200	Unknown
2019	1	01/16/2019 5:26 PM	01/17/2019 12:19 PM	18 Hours, 53 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	190	126700
2019	1	01/18/2019 9:54 PM	01/19/2019 12:19 AM	2 Hours, 25 Minutes	Nebraska Public Power District	MRO	Nebraska:	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	8	Unknown
2019	1	01/23/2019 7:26 AM	01/23/2019 5:05 PM	9 Hours, 39 Minutes	Western Area Power Administration	WECC	Colorado: Larimer 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).-System Operations	0	0
2019	1	01/29/2019 6:34 PM	01/29/2019 6:36 PM	0 Hours, 2 Minutes	Entergy Transmission Control Center - North	SERC	Louisiana: Washington Parish;	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	Unknown	Unknown
2019	1	01/30/2019 4:23 AM	02/02/2019 9:00 AM	76 Hours, 37 Minutes	Prairie Power, Inc.	SERC	Illinois: Scott County;	Fuel supply emergencies that could impact electric power system adequacy or reliability.-Fuel Supply Deficiency	Unknown	Unknown
2019	1	01/30/2019 7:00 AM	01/30/2019 8:08 AM	1 Hours, 8 Minutes	Prairie Power, Inc.	SERC	Illinois: Pike County;	Fuel supply emergencies that could impact electric power system adequacy or reliability.-Severe Weather	Unknown	Unknown
2019	1	01/30/2019 9:30 AM	01/31/2019 6:00 PM	32 Hours, 30 Minutes	Detroit Edison Co	RF	Michigan:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-Severe Weather	Unknown	Unknown
2019	2	02/05/2019 6:17 PM	02/05/2019 8:26 PM	2 Hours, 9 Minutes	Pacific Gas & Electric Co	WECC	California	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	42	33200
2019	2	02/07/2019 7:39 AM	02/07/2019 7:40 AM	0 Hours, 1 Minutes	Entergy Transmission Control Center - North	SERC	Arkansas	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	3	3370
2019	2	02/07/2019 8:55 AM	02/09/2019 4:30 PM	55 Hours, 35 Minutes	Consumers Energy Co	RF	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	233000
2019	2	02/08/2019 6:30 PM	. .	. Hours, . Minutes	Puget Sound Energy	WECC	Washington	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50940
2019	2	02/13/2019 2:48 AM	02/15/2019 12:28 AM	45 Hours, 40 Minutes	Pacific Gas & Electric Co	WECC	California	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	182	121000
2019	2	02/23/2019 2:05 PM	. .	. Hours, . Minutes	American Electric Power - (RFC Reliability Region)	SERC	Virginia	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	Unknown	Unknown
2019	2	02/24/2019 11:21 AM	02/26/2019 5:29 PM	54 Hours, 8 Minutes	American Electric Power - (RFC Reliability Region)	RF	Ohio, Virginia, West Virginia	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	118781
2019	2	02/24/2019 12:31 PM	02/24/2019 2:57 PM	2 Hours, 26 Minutes	Ohio Edison Co	RF	Ohio	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	157274

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

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
2019	2	02/24/2019 2:33 PM	02/24/2019 6:03 PM	3 Hours, 30 Minutes	Monongahela Power Co	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	94048
2019	2	02/24/2019 6:00 PM	02/25/2019 10:00 PM	28 Hours, 0 Minutes	Duquesne Light Co	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	132000
2019	2	02/24/2019 6:47 PM	02/25/2019 1:55 PM	19 Hours, 8 Minutes	West Penn Power Company	RF	Pennsylvania	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	137216
2019	2	02/24/2019 8:02 PM	02/25/2019 2:30 PM	18 Hours, 28 Minutes	Consumers Energy Co	RF	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	115000
2019	2	02/25/2019 7:45 AM	02/25/2019 6:40 PM	10 Hours, 55 Minutes	ISO New England	NPCC	Massachusetts	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
2019	2	02/25/2019 1:35 PM	02/26/2019 2:50 AM	13 Hours, 15 Minutes	ISO New England	NPCC	Connecticut, Massachusetts, New Hampshire, Maine, Vermont, Rhode Island	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	72332
2019	2	02/27/2019 11:25 AM	02/27/2019 5:39 PM	6 Hours, 14 Minutes	MidAmerican Energy Co	MRO	Iowa	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
2019	3	03/13/2019 5:50 AM	03/13/2019 10:30 AM	4 Hours, 40 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Midland County, Ector County, Tarrant County, Dallas County, Wichita County, Brown County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	154124
2019	3	03/13/2019 11:29 AM	03/14/2019 9:11 PM	33 Hours, 42 Minutes	Public Service Company of Colorado	WECC	Colorado: Jefferson County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	58	58379
2019	3	03/13/2019 3:00 PM	03/14/2019 12:00 AM	9 Hours, 0 Minutes	Southwest Power Pool, Inc.	TRE	Texas: Kansas: Oklahoma:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	Unknown	66000
2019	3	03/13/2019 3:51 PM	03/16/2019 6:00 PM	74 Hours, 9 Minutes	Southwestern Public Service	TRE	Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	50	54290
2019	4	04/03/2019 5:15 AM	04/03/2019 12:39 PM	7 Hours, 24 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
2019	4	04/04/2019 10:13 AM	04/04/2019 12:08 PM	1 Hours, 55 Minutes	Bonneville Power Administration	WECC	Montana:	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
2019	4	04/07/2019 1:46 PM	04/08/2019 5:50 PM	28 Hours, 4 Minutes	CenterPoint Energy	TRE	Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	537	231956
2019	4	04/11/2019 7:48 PM	04/11/2019 8:00 PM	0 Hours, 12 Minutes	Bonneville Power Administration	WECC	Oregon: Washington:	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
2019	4	04/12/2019 11:20 AM	04/12/2019 12:46 PM	1 Hours, 26 Minutes	Xcel Energy	MRO	Minnesota: Martin 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
2019	4	04/13/2019 6:15 PM	04/13/2019 11:15 PM	5 Hours, 0 Minutes	Entergy Corp	SERC	Mississippi: Arkansas: Texas: Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	60467
2019	4	04/15/2019 4:35 AM	04/15/2019 2:40 PM	10 Hours, 5 Minutes	Dominion Virginia Power	SERC	Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	75290
2019	4	04/18/2019 7:55 PM	04/19/2019 5:29 PM	21 Hours, 34 Minutes	Southern Company	SERC	Alabama: Mississippi: Georgia: Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	116	34695
2019	4	04/18/2019 8:08 PM	04/19/2019 11:00 AM	14 Hours, 52 Minutes	Public Service Company of Colorado	WECC	Colorado: Clear Creek 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
2019	4	04/25/2019 6:03 PM	04/25/2019 6:32 PM	0 Hours, 29 Minutes	Salt River Project	WECC	Arizona: Maricopa County;	Firm load shedding of 100 Megawatts or more implemented under emergency operational policy.-Generation Inadequacy	150	51366
2019	4	04/26/2019 1:00 AM	04/26/2019 1:27 PM	12 Hours, 27 Minutes	FirstEnergy Corp	RF	Pennsylvania:	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	7	5830

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

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
2019	4	04/26/2019 3:16 PM	04/26/2019 3:17 PM	0 Hours, 1 Minutes	ISO New England	NPCC	Massachusetts: Hampden County[13];	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
2019	4	04/26/2019 5:46 PM	04/27/2019 11:49 AM	18 Hours, 3 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	54071
2019	4	04/28/2019 10:43 AM	04/29/2019 2:06 AM	15 Hours, 23 Minutes	FirstEnergy Corp	RF	Ohio:	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
2019	5	05/08/2019 9:22 AM	05/08/2019 9:56 AM	0 Hours, 34 Minutes	PJM Interconnection	RF	Pennsylvania: Mercer 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	29	1
2019	5	05/08/2019 3:50 PM	05/13/2019 12:00 AM	104 Hours, 10 Minutes	Southwest Power Pool, Inc.	SPP RE	Louisiana: Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Distribution Interruption	Unknown	65844
2019	5	05/09/2019 5:55 PM	05/11/2019 8:50 PM	50 Hours, 55 Minutes	CenterPoint Energy	TRE	Texas: Harris County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	691	238015
2019	5	05/09/2019 7:06 PM	05/10/2019 2:57 AM	7 Hours, 51 Minutes	CenterPoint Energy Houston Electric, LLC	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).-Severe Weather/Transmission Interruption	0	0
2019	5	05/10/2019 2:00 AM	05/10/2019 12:15 PM	10 Hours, 15 Minutes	Entergy Corp	TRE	Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	61008
2019	5	05/18/2019 3:45 PM	05/20/2019 4:00 AM	36 Hours, 15 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Ector County, Midland County, Tarrant County, Dallas County, Stephens County, Anderson County, McLennan County, Ellis County, Hunt County, Young County, Bell County, Limestone County, Collin County, Rockwall County, Henderson County, Parker County, Falls County, Freestone County, Kaufman County, Grayson County, Smith County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	68000
2019	5	05/23/2019 1:11 AM	05/23/2019 12:00 PM	10 Hours, 49 Minutes	Northern Indiana Pub Serv Co	RF	Indiana:	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
2019	5	05/23/2019 4:55 PM	05/23/2019 11:40 PM	6 Hours, 45 Minutes	Dominion Energy VA	SERC	Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	100000
2019	5	05/24/2019 9:47 PM	05/24/2019 11:58 PM	2 Hours, 11 Minutes	Pacific Gas & Electric Co	WECC	California:	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	20	10961
2019	5	05/27/2019 10:07 PM	05/28/2019 3:00 AM	4 Hours, 53 Minutes	Dayton Power & Light Co	RF	Ohio: Montgomery County, Darke County, Mercer County, Miami County, Greene County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	347	70000
2019	6	06/02/2019 6:19 PM	06/02/2019 8:43 PM	2 Hours, 24 Minutes	Pacific Gas & Electric Co	WECC	California:	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/Transmission Interruption	Unknown	Unknown
2019	6	06/06/2019 6:09 PM	06/06/2019 6:35 PM	0 Hours, 26 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	55017
2019	6	06/07/2019 2:43 PM	06/07/2019 4:20 PM	1 Hours, 37 Minutes	American Electric Power - Texas	TRE	Texas: Pecos 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	8	1
2019	6	06/08/2019 3:50 PM	06/08/2019 7:40 PM	3 Hours, 50 Minutes	Southwestern Public Service	TRE	Texas: Potter 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

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

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
2019	6	06/09/2019 2:45 PM	06/13/2019 10:30 PM	103 Hours, 45 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Collin County, Dallas County, Denton County, Palo Pinto County, Tarrant County, Ellis County, Williamson County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	558000
2019	6	06/12/2019 2:56 PM	06/12/2019 3:50 PM	0 Hours, 54 Minutes	Imperial Irrigation District	WECC	California: Imperial County, Riverside County;	Firm load shedding of 100 Megawatts or more implemented under emergency operational policy.-Generation Inadequacy	982	30907
2019	6	06/16/2019 2:00 AM	06/17/2019 11:59 PM	45 Hours, 59 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Tarrant County, Collin County, Denton County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	340000
2019	6	06/16/2019 3:25 AM	. .	. Hours, . Minutes	American Electric Power - (SPP Reliability Region)	SPP RE	Oklahoma:	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	Unknown	Unknown
2019	6	06/19/2019 10:30 PM	06/20/2019 7:00 PM	20 Hours, 30 Minutes	Entergy Corp	SPP RE	Arkansas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	82045
2019	6	06/20/2019 4:11 PM	06/21/2019 12:45 PM	20 Hours, 34 Minutes	Dominion Energy VA	SERC	Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	60000
2019	6	06/21/2019 7:15 PM	. .	. Hours, . Minutes	Tennessee Valley Authority	SERC	Kentucky: Tennessee:	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	Unknown	50000
2019	6	06/22/2019 8:46 PM	06/23/2019 12:30 AM	3 Hours, 44 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	115	34637
2019	6	06/23/2019 5:13 AM	06/23/2019 10:58 AM	5 Hours, 45 Minutes	Entergy - Transmission Operations Engineering	SPP RE	Arkansas:	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	47	16199
2019	6	06/23/2019 10:00 PM	06/25/2019 11:00 PM	49 Hours, 0 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Dallas County, Denton County, Ellis County, Collin County, Ellis County, Hood County, Johnson County, Kaufman County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	265000
2019	6	06/24/2019 5:30 AM	06/24/2019 8:45 AM	3 Hours, 15 Minutes	Entergy Corp	SPP RE	Arkansas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	56451
2019	6	06/26/2019 1:58 PM	06/26/2019 2:03 PM	0 Hours, 5 Minutes	Montana-Dakota Utilities Co	MRO	North Dakota: Williams 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	53	0
2019	6	06/28/2019 2:25 PM	. .	. Hours, . Minutes	Bonneville Power Administration	WECC	Idaho: Nez Perce 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
2019	6	06/30/2019 3:15 PM	06/30/2019 4:15 PM	1 Hours, 0 Minutes	Long Island Power Authority	NPCC	New York: Nassau County, Suffolk County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	3189	52498
2019	6	06/30/2019 3:30 PM	06/30/2019 8:30 PM	5 Hours, 0 Minutes	ComEd	SERC	Illinois: Cook County, DeKalb County, DuPage County, Grundy County, Iroquois County, Ford County, Lake County, Kendall County, Kankakee County, Kane County, Ogle County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	100000
2019	7	07/10/2019 12:10 PM	07/12/2019 12:30 PM	48 Hours, 20 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas: Collin County, Dallas County, Denton County, Hood County, Johnson County, Tarrant County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	57000
2019	7	07/11/2019 11:08 AM	07/11/2019 11:13 AM	0 Hours, 5 Minutes	Southwestern Public Service	TRE	Texas: Lynn 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	26	2043
2019	7	07/13/2019 7:15 AM	07/14/2019 5:00 PM	33 Hours, 45 Minutes	Entergy Corp	SERC	Louisiana:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	55730
2019	7	07/13/2019 6:47 PM	07/13/2019 11:37 PM	4 Hours, 50 Minutes	NYISO	NPCC	New York: New York County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident-Transmission Interruption	452	72669

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

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
2019	7	07/13/2019 11:55 PM	07/14/2019 1:00 PM	13 Hours, 5 Minutes	Cleco Power LLC	SERC	Louisiana: Acadia Parish, Avoyelles Parish, Catahoula Parish, Evangeline Parish, Grant Parish, Iberia Parish, LaSalle Parish, Natchitoches Parish, Rapides Parish, Sabine Parish, St. Landry Parish, St. Martin Parish, St. Mary Parish, St. Tammany Parish, Allen Parish, Beauregard Parish, Calcasieu Parish, Vermilion Parish, De Soto Parish, Jefferson Davis Parish, Red River Parish, Tangipahoa Parish, V	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	63000
2019	7	07/19/2019 7:00 PM	07/21/2019 8:00 PM	49 Hours, 0 Minutes	Detroit Edison Co	RF	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	400000
2019	7	07/20/2019 3:00 AM	07/22/2019 7:00 AM	52 Hours, 0 Minutes	Consumers Energy Co	RF	Michigan: Kent County, Newaygo County, Mecosta County, Montcalm County, Isabella County, Ionia County, Allegan County, Barry County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	160000
2019	7	07/20/2019 11:55 AM	07/23/2019 12:00 AM	60 Hours, 5 Minutes	WEC Energy Group (WEPCO, WPSC, UMERC, WEP-MIUP)	RF	Wisconsin: Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	200	50000
2019	7	07/21/2019 11:00 PM	07/22/2019 8:54 PM	21 Hours, 54 Minutes	Consolidated Edison Co-NY Inc	NPCC	New York: Kings County, New York County, Queens County, Bronx County, Westchester County, Richmond County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	60	45000
2019	7	07/22/2019 4:00 PM	07/24/2019 11:00 PM	55 Hours, 0 Minutes	PECO Energy Co	RF	Pennsylvania: Bucks County, Delaware County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	165000
2019	7	07/22/2019 5:50 PM	07/25/2019 1:15 PM	67 Hours, 25 Minutes	Public Service Electric & Gas	RF	New Jersey: Gloucester County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	49	95600
2019	7	07/23/2019 3:39 PM	07/23/2019 7:00 PM	3 Hours, 21 Minutes	ISO New England	NPCC	Massachusetts:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	54	54535
2019	7	07/23/2019 11:55 PM	07/23/2019 11:56 PM	0 Hours, 1 Minutes	Nebraska Public Power District	MRO	Nebraska:	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
2019	7	07/23/2019 11:55 PM	07/24/2019 5:22 AM	5 Hours, 27 Minutes	Western Area Power Administration - Upper Great Plains Region	MRO	Nebraska: Scotts Bluff 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
2019	7	07/30/2019 8:45 AM	07/30/2019 9:45 AM	1 Hours, 0 Minutes	City of Alexandria	SERC	Louisiana:	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	Unknown	13720
2019	8	08/02/2019 1:49 AM	08/02/2019 1:55 AM	0 Hours, 6 Minutes	Northern States Power Co	MRO	Minnesota: Chisago 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
2019	8	08/05/2019 5:23 PM	08/06/2019 12:02 AM	6 Hours, 39 Minutes	Bonneville Power Administration	WECC	Oregon: Umatilla 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	66	Unknown
2019	8	08/08/2019 4:16 PM	08/08/2019 10:41 PM	6 Hours, 25 Minutes	American Electric Power - (RFC Reliability Region)	RF	Ohio:	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	Unknown	5600
2019	8	08/13/2019 10:00 AM	08/13/2019 11:00 AM	1 Hours, 0 Minutes	Rio Bravo Rocklin	WECC	California: Placer County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident.-Vandalism	0	0
2019	8	08/13/2019 3:10 PM	08/13/2019 5:30 PM	2 Hours, 20 Minutes	ERCOT	TRE	Texas: Williamson County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-Severe Weather	Unknown	Unknown
2019	8	08/15/2019 8:30 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	150	Unknown
2019	8	08/15/2019 3:11 PM	08/15/2019 6:00 PM	2 Hours, 49 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-Severe Weather	Unknown	Unknown
2019	8	08/15/2019 11:03 PM	08/16/2019 12:37 AM	1 Hours, 34 Minutes	Pacific Gas & Electric Co	WECC	California: Marin County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Distribution Interruption	80	61318

Table B.1 Major Disturbances and Unusual Occurrences, Year-to-Date 2019

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
2019	8	08/18/2019 3:59 PM	08/18/2019 11:00 PM	7 Hours, 1 Minutes	Southwest Power Pool, Inc.	SPP RE	Louisiana: Texas:	Firm load shedding of 100 Megawatts or more implemented under emergency operational policy.-Transmission Interruption	271	86373
2019	8	08/18/2019 4:30 PM	08/18/2019 10:00 PM	5 Hours, 30 Minutes	East Texas Electric Coop, Inc	TRE	Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Transmission Interruption/Distribution Interruption	259	61000
2019	8	08/18/2019 4:47 PM	08/18/2019 11:00 PM	6 Hours, 13 Minutes	American Electric Power - (SPP Reliability Region)	TRE	Texas:	Uncontrolled loss of 300 Megawatts or more of firm system loads for 15 minutes or more from a single incident-Distribution Interruption	752	86373
2019	8	08/26/2019 9:09 AM	08/26/2019 1:34 PM	4 Hours, 25 Minutes	Great River Energy	MRO	North Dakota:	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
2019	8	08/26/2019 7:00 PM	08/27/2019 3:00 AM	8 Hours, 0 Minutes	Southwest Power Pool, Inc.	SPP RE	Oklahoma:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	Unknown	95000
2019	8	08/26/2019 7:00 PM	08/29/2019 1:00 PM	66 Hours, 0 Minutes	Oklahoma Gas & Electric Co	SPP RE	Oklahoma:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	103779
2019	9	09/04/2019 2:30 PM	09/06/2019 6:00 PM	51 Hours, 30 Minutes	ERCOT	TRE	Texas:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-Severe Weather	Unknown	Unknown
2019	9	09/05/2019 4:15 AM	09/05/2019 3:17 PM	11 Hours, 2 Minutes	Dominion Energy South Carolina	SERC	South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	172278
2019	9	09/05/2019 10:00 PM	09/06/2019 12:00 PM	14 Hours, 0 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	3	2000
2019	9	09/05/2019 10:36 PM	09/06/2019 4:00 PM	17 Hours, 24 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	116000
2019	9	09/06/2019 8:20 AM	. .	. Hours, . Minutes	Dominion Energy VA	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	77000
2019	9	09/10/2019 9:22 PM	09/10/2019 9:23 PM	0 Hours, 1 Minutes	Pacificorp	WECC	Wyoming: Sweetwater 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	885	0
2019	9	09/11/2019 10:35 PM	09/11/2019 11:59 PM	1 Hours, 24 Minutes	Consumers Energy Co	RF	Michigan: Ionia County, Kent County, Barry County, Montcalm County, Allegan County, Ottawa County, Newaygo County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	54000
2019	9	09/19/2019 5:55 AM	09/19/2019 2:30 PM	8 Hours, 35 Minutes	Tucson Electric Power	WECC	Arizona: Pima County;	Fuel supply emergencies that could impact electric power system adequacy or reliability.-Fuel Supply Deficiency	0	0
2019	9	09/25/2019 3:47 AM	09/25/2019 3:40 PM	11 Hours, 53 Minutes	Pacific Gas & Electric Co	WECC	California: Napa County, Nevada County, Placer County, Plumas County, Sonoma County, Butte County, Yuba County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	25	69524
2019	9	09/29/2019 7:38 AM	. .	. Hours, . Minutes	Pacific Gas & Electric Co	WECC	California: Alameda County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Distribution Interruption	Unknown	50072

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, 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.2 Major Disturbances and Unusual Occurrences, 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.2 Major Disturbances and Unusual Occurrences, 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.2 Major Disturbances and Unusual Occurrences, 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.2 Major Disturbances and Unusual Occurrences, 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
2018	11	11/03/2018 5:20 PM	11/04/2018 2:30 PM	21 Hours, 10 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Vermont: Maine: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	62000
2018	11	11/06/2018 9:49 AM	11/09/2018 2:05 PM	76 Hours, 16 Minutes	Tennessee Valley Authority	SERC	Tennessee:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	61000
2018	11	11/08/2018 7:16 AM	11/28/2018 4:32 PM	489 Hours, 16 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/Transmission Interruption	32	11844
2018	11	11/10/2018 5:02 PM	11/14/2018 3:00 PM	93 Hours, 58 Minutes	WPSC	MRO	Wisconsin:	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2018	11	11/15/2018 3:23 AM	11/15/2018 5:35 PM	14 Hours, 12 Minutes	LG&E KU	SERC	Kentucky:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	150000
2018	11	11/15/2018 5:28 AM	11/15/2018 8:35 AM	3 Hours, 7 Minutes	Duke Energy Midwest	RF	Indiana:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	55000
2018	11	11/15/2018 5:38 AM	11/16/2018 6:00 AM	24 Hours, 22 Minutes	Duke Energy Midwest	SERC	Kentucky: Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	104000
2018	11	11/15/2018 10:50 AM	11/17/2018 1:12 PM	50 Hours, 22 Minutes	American Electric Power - (RFC Reliability Region)	RF	Virginia: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50600

Table B.2 Major Disturbances and Unusual Occurrences, 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	11	11/25/2018 10:30 PM	11/28/2018 8:17 PM	69 Hours, 47 Minutes	ComEd	SERC	Illinois: Will County, DuPage County, Kane County, McHenry County, Winnebago County, Ogle County, DeKalb County, Lee County, Grundy County, Lake County, Cook County, Livingston County, Stephenson County, LaSalle County, Kankakee County, Kendall County, Boone County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	313448
2018	11	11/27/2018 8:00 AM	11/28/2018 4:50 PM	32 Hours, 50 Minutes	ISO New England	NPCC	Maine: New Hampshire: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	32000
2018	12	12/03/2018 3:15 AM	12/03/2018 3:44 AM	0 Hours, 29 Minutes	ERCOT	TRE	Texas:	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	16	Unknown
2018	12	12/09/2018 12:23 AM	12/09/2018 11:54 AM	11 Hours, 31 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	137	41126
2018	12	12/09/2018 3:35 AM	12/10/2018 11:45 PM	44 Hours, 10 Minutes	Duke Energy Carolinas	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	Unknown	50000
2018	12	12/09/2018 8:41 AM	12/09/2018 6:00 PM	9 Hours, 19 Minutes	Duke Energy Progress	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	70000
2018	12	12/14/2018 4:00 PM	12/17/2018 2:00 AM	58 Hours, 0 Minutes	Puget Sound Energy	WECC	Washington: King County, Kitsap County, Island County, Pierce County, Thurston County, Whatcom County, Skagit County, Kittitas County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	150000
2018	12	12/14/2018 6:00 PM	. .	. Hours, . Minutes	Snohomish County PUD No. 1	WECC	Washington: Snohomish County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	200	60000
2018	12	12/20/2018 9:30 AM	12/20/2018 5:00 PM	7 Hours, 30 Minutes	Puget Sound Energy	WECC	Washington: Skagit County, Snohomish County, King County, Kitsap County, Island County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	165000
2018	12	12/27/2018 9:12 PM	12/27/2018 9:16 PM	0 Hours, 4 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).-Transmission Interruption	Unknown	Unknown

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

Table C.1 Average Heat Content of Fossil-Fuel Receipts, September 2019

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	24.70	6.24	--	1.03
Connecticut	--	--	--	1.03
Maine	24.70	6.25	--	1.03
Massachusetts	--	5.81	--	1.03
New Hampshire	--	5.80	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	23.70	6.26	--	1.03
New Jersey	26.69	--	--	1.03
New York	--	6.29	--	1.03
Pennsylvania	23.65	6.03	--	1.04
East North Central	20.35	5.80	27.71	1.05
Illinois	17.76	5.78	--	1.02
Indiana	22.21	5.77	--	1.06
Michigan	18.74	5.92	27.74	1.06
Ohio	25.10	5.79	--	1.06
Wisconsin	18.08	5.80	27.57	1.03
West North Central	16.74	5.79	28.92	1.07
Iowa	17.65	5.79	28.92	1.09
Kansas	17.07	5.77	--	1.02
Minnesota	17.72	5.80	--	1.09
Missouri	17.82	5.79	--	1.05
Nebraska	16.98	--	--	1.06
North Dakota	12.93	5.85	--	1.00
South Dakota	16.48	--	--	--
South Atlantic	23.75	6.01	28.39	1.03
Delaware	--	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.92	5.81	28.39	1.02
Georgia	20.14	5.95	--	1.03
Maryland	25.28	5.82	--	1.04
North Carolina	25.07	5.81	--	1.03
South Carolina	24.75	5.79	--	1.03
Virginia	25.28	6.24	--	1.04
West Virginia	25.14	5.84	--	1.07
East South Central	20.57	5.75	--	1.03
Alabama	18.71	5.50	--	1.03
Kentucky	21.58	5.80	--	1.03
Mississippi	15.15	5.80	--	1.03
Tennessee	23.36	5.77	--	1.01
West South Central	16.30	5.91	29.61	1.03
Arkansas	17.52	5.90	--	1.03
Louisiana	16.08	--	29.61	1.03
Oklahoma	17.11	5.95	--	1.04
Texas	15.94	5.80	--	1.02
Mountain	18.45	5.70	--	1.05
Arizona	18.12	5.35	--	1.03
Colorado	18.51	5.67	--	1.13
Idaho	--	--	--	1.00
Montana	16.63	--	--	1.04
Nevada	20.42	5.84	--	1.05
New Mexico	18.59	5.66	--	1.03
Utah	21.61	5.88	--	1.05
Wyoming	17.56	5.82	--	1.05
Pacific Contiguous	17.19	6.00	--	1.04
California	22.90	--	--	1.03
Oregon	17.97	--	--	1.05
Washington	16.82	6.00	--	1.10
Pacific Noncontiguous	18.11	6.10	--	1.00
Alaska	14.77	5.60	--	1.00
Hawaii	19.44	6.10	--	--
U.S. Total	19.16	6.07	28.93	1.03

'Coal' includes anthracite, bituminous, subbituminous, lignite, waste coal, synthetic coal, and coal-derived synthesis gas.
'Petroleum Liquids' include distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
'Petroleum Coke' includes petroleum coke and synthesis gas derived from petroleum coke.
'Natural Gas' includes a small amount of supplemental gaseous fuels.
Notes: See Glossary for definitions. Values are preliminary. Data represents weighted values.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table C.2. Comparison of Preliminary Monthly Data Versus Final Monthly Data at the U.S. Level, 2016 through 2018

	Mean Absolute Value of Percent Change Total (All Sectors)		
Item	**2016**	**2017**	**2018**
Net Generation			
Coal	0.09%	0.17%	0.12%
Petroleum Liquids	3.08%	3.76%	2.56%
Petroleum Coke	1.46%	5.79%	5.97%
Natural Gas	0.30%	1.93%	1.09%
Other Gases	3.76%	11.64%	10.59%
Hydroelectric	0.76%	2.47%	2.37%
Nuclear	0.05%	0.00%	0.00%
Other	0.76%	2.50%	1.66%
Total	**0.08%**	**0.63%**	**0.20%**
Consumption of Fossil Fuels for Electricity Generation			
Coal	0.11%	0.13%	0.17%
Petroleum Liquids	5.81%	4.01%	5.23%
Petroleum Coke	0.87%	4.95%	10.63%
Natural Gas	2.26%	1.08%	0.79%
Fuel Stocks for Electric Power Sector			
Coal	0.72%	0.18%	0.09%
Petroleum Liquids	3.19%	1.97%	5.34%
Petroleum Coke	0.27%	14.42%	2.29%
Retail Sales			
Residential	0.26%	0.31%	0.34%
Commercial	0.55%	0.28%	0.37%
Industrial	4.31%	4.00%	5.12%
Transportation	0.06%	0.12%	0.95%
Total	**1.40%**	**1.12%**	**1.55%**
Revenue			
Residential	0.28%	0.26%	0.21%
Commercial	1.21%	0.28%	0.49%
Industrial	4.54%	3.52%	4.88%
Transportation	1.53%	0.21%	1.63%
Total	**1.34%**	**0.57%**	**1.06%**
Average Retail Price			
Residential	0.05%	0.21%	0.16%
Commercial	0.65%	0.20%	0.16%
Industrial	0.24%	0.51%	0.35%
Transportation	1.57%	0.20%	0.80%
Total	**0.10%**	**0.53%**	**0.48%**
Receipt of Fossil Fuels			
Coal	1.92%	1.30%	0.33%
Petroleum Liquids	1.16%	3.18%	11.02%
Petroleum Coke	0.01%	0.00%	0.00%
Natural Gas	0.21%	19.49%	8.23%
Cost of Fossil Fuels			
Coal	0.12%	0.83%	0.24%
Petroleum Liquids	0.26%	0.34%	1.04%
Petroleum Coke	0.12%	0.00%	0.00%
Natural Gas	0.12%	0.47%	0.54%

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, 2016 through 2018

	2016			2017			2018		
Item	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	1,240,108	1,239,149	-0.08%	1,207,901	1,205,835	-0.17%	1,146,393	1,145,962	-0.04%
Petroleum Liquids	12,675	13,008	2.63%	12,583	12,414	-1.34%	15,742	16,245	3.19%
Petroleum Coke	11,232	11,197	-0.31%	8,508	8,976	5.50%	8,830	8,981	1.71%
Natural Gas	1,380,295	1,378,307	-0.14%	1,272,864	1,296,415	1.85%	1,468,013	1,468,727	0.05%
Other Gases	13,000	12,807	-1.48%	14,159	12,469	-11.94%	12,191	13,463	10.43%
Hydroelectric	259,143	261,126	0.77%	293,550	293,839	0.10%	285,819	286,619	0.28%
Nuclear	805,327	805,694	0.05%	804,950	804,950	0.00%	807,078	807,084	0.00%
Other	357,299	355,387	-0.54%	400,289	399,373	-0.23%	433,744	427,317	-1.48%
Total	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,271**	**0.48%**	**4,177,810**	**4,174,398**	**-0.08%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	678,005	677,371	-0.09%	663,479	663,911	0.07%	635,833	636,213	0.06%
Petroleum Liquids (1,000 barrels)	21,225	22,405	5.56%	21,935	21,696	-1.09%	27,245	28,614	5.02%
Petroleum Coke (1,000 tons)	4,275	4,253	-0.52%	3,349	3,490	4.21%	3,311	3,623	9.40%
Natural Gas (1,000 Mcf)	10,400,189	10,170,110	-2.21%	9,440,777	9,507,760	0.71%	10,855,155	10,831,005	-0.22%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	163,946	162,009	-1.18%	137,155	137,687	0.39%	102,786	103,043	0.25%
Petroleum Liquids (1,000 barrels)	30,880	31,839	3.11%	28,723	29,294	1.99%	25,082	27,337	8.99%
Petroleum Coke (1,000 tons)	872	845	-3.10%	1,113	864	-22.42%	541	539	-0.27%
Retail Sales (Million kWh)									
Residential	1,407,394	1,411,058	0.26%	1,378,819	1,378,648	-0.01%	1,464,373	1,469,096	0.32%
Commercial	1,359,617	1,367,191	0.56%	1,349,208	1,352,888	0.27%	1,376,741	1,381,761	0.36%
Industrial	936,269	976,715	4.32%	946,443	984,298	4.00%	953,076	1,001,597	5.09%
Transportation	7,499	7,497	-0.03%	7,524	7,523	-0.02%	7,738	7,665	-0.94%
Total	**3,710,779**	**3,762,462**	**1.39%**	**3,681,995**	**3,723,356**	**1.12%**	**3,801,928**	**3,860,119**	**1.53%**
Revenue (Million Dollars)									
Residential	176,585	177,077	0.28%	177,860	177,661	-0.11%	188,742	189,033	0.15%
Commercial	140,937	142,643	1.21%	144,108	144,242	0.09%	146,696	147,426	0.50%
Industrial	63,201	66,068	4.54%	65,394	67,691	3.51%	66,090	69,296	4.85%
Transportation	711	722	1.53%	727	728	0.15%	756	744	-1.65%
Total	**381,435**	**386,509**	**1.33%**	**388,089**	**390,322**	**0.58%**	**402,283**	**406,498**	**1.05%**
Average Retail Price (Cents/kWh)									
Residential	12.55	12.55	0.02%	12.90	12.89	-0.10%	12.89	12.87	-0.17%
Commercial	10.37	10.43	0.65%	10.68	10.66	-0.18%	10.66	10.67	0.13%
Industrial	6.75	6.76	0.21%	6.91	6.88	-0.47%	6.93	6.92	-0.23%
Transportation	9.48	9.63	1.55%	9.67	9.68	0.17%	9.77	9.70	-0.71%
Total	**10.28**	**10.27**	**-0.06%**	**10.54**	**10.48**	**-0.54%**	**10.58**	**10.53**	**-0.48%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	638,564	650,770	1.91%	634,118	642,364	1.30%	594,683	596,215	0.26%
Petroleum Liquids (1,000 barrels)	16,610	16,807	1.18%	15,619	16,127	3.25%	19,717	22,290	13.05%
Petroleum Coke (1,000 tons)	4,166	4,166	0.01%	3,309	3,309	0.00%	3,010	3,010	0.00%
Natural Gas (1,000 Mcf)	10,258,688	10,271,180	0.12%	8,050,520	9,628,733	19.60%	10,039,232	10,885,764	8.43%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.12	2.11	-0.15%	2.08	2.06	-0.87%	2.06	2.06	-0.22%
Petroleum Liquids (1,000 barrels)	9.36	9.39	0.28%	11.82	11.86	0.36%	14.24	14.40	1.16%
Petroleum Coke (1,000 tons)	1.65	1.65	0.15%	2.13	2.13	0.00%	2.54	2.54	0.00%
Natural Gas (1,000 Mcf)	2.88	2.87	-0.06%	3.39	3.37	-0.55%	3.55	3.55	0.03%

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 2018 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

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 ith utility's 2013 (or the last published year) solar PV capacity

$y_{i_{2015,m}}$ is the ith 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

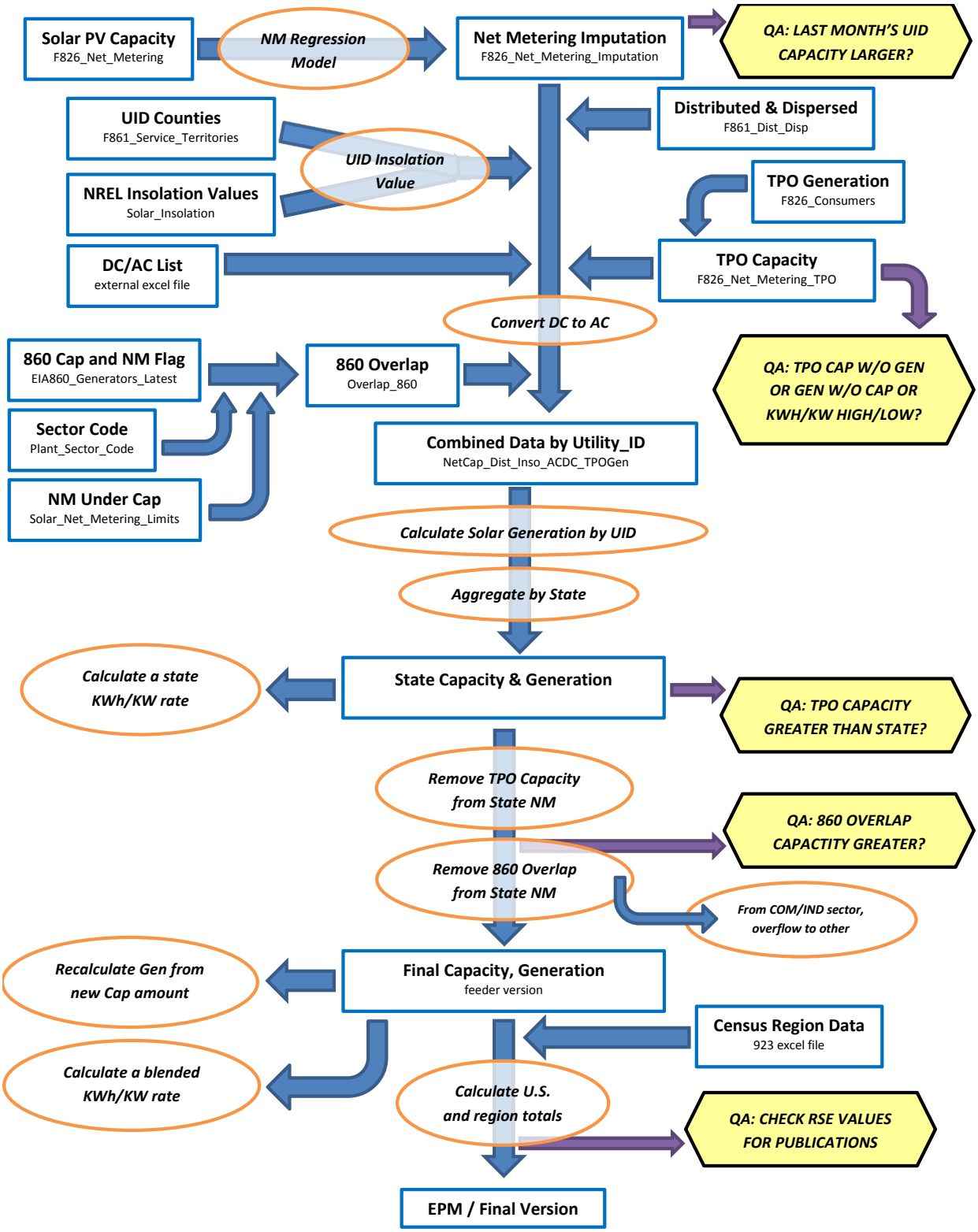
TMY3 (1991-2005) Weather Stations by MSA

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.

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.