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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

Table ES1.A. Total Electric Power Industry Summary Statistics, 2019 and 2018

Net Generation and Consumption of Fuels for August														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	94,176	115,129	-18.2%	71,916	87,359	21,688	27,157	18	23	554	590	0	0
Petroleum Liquids	Utility Scale Facilities	1,084	1,047	3.5%	809	711	224	292	13	9	38	35	0	0
Petroleum Coke	Utility Scale Facilities	687	879	-21.9%	501	686	131	139	0	0	55	54	0	0
Natural Gas	Utility Scale Facilities	176,454	161,650	9.2%	89,675	78,025	77,288	74,104	842	892	8,649	8,630	0	0
Other Gas	Utility Scale Facilities	1,202	1,301	-7.6%	16	24	388	369	0	0	798	909	0	0
Nuclear	Utility Scale Facilities	71,911	72,282	-0.5%	39,218	38,885	32,693	33,398	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	20,792	22,017	-5.6%	19,148	20,050	1,541	1,858	NM	17	87	91	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	34,437	32,629	5.5%	3,791	3,596	27,881	26,264	280	287	2,485	2,483	0	0
... Wind	Utility Scale Facilities	19,867	19,845	0.1%	2,661	2,611	17,188	17,218	11	11	NM	5	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	7,844	6,695	17.2%	616	476	7,160	6,158	61	56	7	5	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,717	3,634	2.3%	336	317	965	900	9	11	2,406	2,406	0	0
... Other Biomass	Utility Scale Facilities	1,602	1,088	47.2%	94	105	1,275	709	168	208	65	66	0	0
... Geothermal	Utility Scale Facilities	1,408	1,367	3.0%	83	88	1,294	1,279	31	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-579	-747	-22.5%	-470	-626	-109	-121	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,199	1,146	4.6%	51	56	644	579	93	90	411	421	0	0
All Energy Sources	Utility Scale Facilities	401,363	407,335	-1.5%	224,655	228,766	162,370	164,038	1,261	1,318	13,077	13,213	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	3,630	3,017	20.3%	0	0	0	0	1,136	993	311	268	2,183	1,756
Estimated Total Solar Photovoltaic	All Facilities	11,061	9,303	18.9%	612	470	6,751	5,754	1,197	1,049	318	273	2,183	1,756
Estimated Total Solar	All Facilities	11,474	9,712	18.1%	616	476	7,160	6,158	1,197	1,049	318	273	2,183	1,756
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	52,512	63,737	-17.6%	39,619	47,866	12,686	15,660	5	7	202	204	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,892	1,870	1.2%	1,448	1,295	383	516	22	24	39	35	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	278	352	-21.2%	203	272	59	66	0	0	15	15	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,308,794	1,208,717	8.3%	687,816	605,610	564,983	545,979	5,152	5,593	50,843	51,534	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,004	1,064	-5.6%	208	181	79	103	37	35	681	745	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	151	143	5.5%	6	4	14	12	23	23	108	104	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	71	77	-6.8%	0	1	8	9	0	0	63	66	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	106,098	105,972	0.1%	4,697	4,079	30,993	29,861	6,666	7,691	63,741	64,340	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	53,517	64,801	-17.4%	39,827	48,047	12,765	15,763	42	42	883	949	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	2,042	2,012	1.5%	1,454	1,298	397	528	45	46	147	140	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	349	429	-18.6%	203	273	68	75	0	0	78	81	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,414,892	1,314,688	7.6%	692,513	609,689	595,976	575,840	11,819	13,285	114,585	115,874	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	111,088	105,047	5.8%	89,229	88,230	21,331	15,818	52	95	476	905	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	27,858	27,798	0.2%	17,323	17,935	8,937	8,278	376	409	1,222	1,175	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	535	797	-32.9%	373	580	8	45	1	2	153	170	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for August									
	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	August 2019	August 2018	Percentage Change	August 2019	August 2018	Percentage Change	August 2019	August 2018	Percentage Change
Residential	149,660	153,497	-2.5%	19,907	20,351	-2.2%	13.30	13.26	0.3%
Commercial	130,136	134,849	-3.5%	14,319	14,874	-3.7%	11.00	11.03	-0.3%
Industrial	86,457	92,189	-6.2%	6,433	6,680	-3.7%	7.44	7.25	2.6%
Transportation	658	680	-3.3%	64	65	-1.2%	9.71	9.50	2.2%
All Sectors	366,910	381,215	-3.8%	40,722	41,970	-3.0%	11.10	11.01	0.8%

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 August														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	665,331	772,543	-13.9%	499,570	581,139	161,284	186,380	187	209	4,290	4,814	0	0
Petroleum Liquids	Utility Scale Facilities	7,807	12,204	-36.0%	5,466	7,216	1,965	4,538	74	98	303	352	0	0
Petroleum Coke	Utility Scale Facilities	5,407	6,169	-12.4%	3,939	4,721	1,001	999	4	4	462	445	0	0
Natural Gas	Utility Scale Facilities	1,050,428	986,060	6.5%	522,924	489,171	457,109	428,685	5,761	5,689	64,634	62,516	0	0
Other Gas	Utility Scale Facilities	9,181	9,177	0.0%	122	148	2,853	2,691	0	0	6,206	6,337	0	0
Nuclear	Utility Scale Facilities	544,114	547,351	-0.6%	290,828	287,244	253,286	260,107	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	198,140	209,100	-5.2%	180,761	192,393	16,459	15,837	156	165	763	705	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	296,264	281,626	5.2%	36,718	33,147	238,700	227,169	2,201	2,166	18,646	19,144	0	0
... Wind	Utility Scale Facilities	194,740	186,620	4.4%	28,607	25,732	165,941	160,708	120	115	72	64	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	51,250	46,042	11.3%	4,543	3,447	46,263	42,175	397	387	46	34	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	26,966	27,820	-3.1%	2,225	2,369	6,697	6,930	64	54	17,980	18,466	0	0
... Other Biomass	Utility Scale Facilities	12,383	10,554	17.3%	712	930	9,792	7,435	1,331	1,609	548	580	0	0
... Geothermal	Utility Scale Facilities	10,926	10,589	3.2%	630	669	10,006	9,920	289	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-3,179	-3,944	-19.4%	-2,472	-3,199	-707	-745	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	8,891	8,670	2.5%	320	372	4,844	4,481	717	682	3,010	3,135	0	0
All Energy Sources	Utility Scale Facilities	2,782,385	2,828,955	-1.6%	1,538,178	1,592,352	1,136,793	1,130,141	9,100	9,013	98,314	97,449	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	24,762	20,793	19.1%	0	0	0	0	7,909	6,907	2,129	1,843	14,724	12,043
Estimated Total Solar Photovoltaic	All Facilities	73,597	64,208	14.6%	4,520	3,406	43,872	39,589	8,306	7,293	2,175	1,876	14,724	12,043
Estimated Total Solar	All Facilities	76,012	66,835	13.7%	4,543	3,447	46,263	42,175	8,306	7,293	2,175	1,876	14,724	12,043
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	371,265	426,552	-13.0%	276,371	318,333	93,323	106,421	53	60	1,518	1,739	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	13,775	21,398	-35.6%	9,971	13,079	3,338	7,759	149	193	317	367	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,168	2,477	-12.5%	1,582	1,886	463	472	1	1	122	117	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	7,694,360	7,303,245	5.4%	3,994,819	3,782,721	3,282,183	3,112,131	35,747	35,663	381,610	372,730	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	8,629	9,372	-7.9%	1,478	1,572	867	911	303	336	5,981	6,554	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,573	1,780	-11.6%	54	85	171	224	300	254	1,049	1,218	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	593	624	-4.8%	10	9	65	61	5	5	513	549	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	823,679	800,332	2.9%	31,474	29,305	229,590	221,995	53,406	55,076	509,208	493,955	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	379,895	435,924	-12.9%	277,849	319,905	94,190	107,331	356	396	7,500	8,292	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	15,348	23,178	-33.8%	10,024	13,163	3,509	7,983	449	447	1,366	1,585	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,762	3,101	-10.9%	1,592	1,895	528	533	7	6	635	666	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,518,039	8,103,577	5.1%	4,026,294	3,812,026	3,511,773	3,334,126	89,154	90,739	890,819	866,686	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through August									
	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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	Percentage Change
Residential	973,386	1,006,166	-3.3%	127,190	129,807	-2.0%	13.07	12.90	1.3%
Commercial	908,937	930,611	-2.3%	96,981	99,611	-2.6%	10.67	10.70	-0.3%
Industrial	637,577	668,884	-4.7%	43,731	46,458	-5.9%	6.86	6.95	-1.3%
Transportation	5,204	5,123	1.6%	507	494	2.7%	9.75	9.65	1.0%
All Sectors	2,525,103	2,610,784	-3.3%	268,409	276,371	-2.9%	10.63	10.59	0.4%

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	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal (1000 tons)	51,071	56,499	38.44	39.16	240	286	374,500	390,191	39.59	39.23
Petroleum Liquids (1000 barrels)	860	1,163	84.72	92.94	121	202	9,253	16,016	83.17	85.06
Petroleum Coke (1000 tons)	258	298	48.66	78.94	6	6	1,340	2,041	61.06	72.97
Natural Gas (1000 Mcf)	1,177,687	1,203,931	2.50	3.38	586	812	7,184,409	7,320,017	3.07	3.54

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal (1000 tons)	38,617	41,889	39.70	40.43	171	192	277,394	287,022	40.96	40.28
Petroleum Liquids (1000 barrels)	643	826	81.54	92.68	89	128	6,965	9,895	82.37	85.14
Petroleum Coke (1000 tons)	235	288	48.82	80.03	5	5	1,315	2,025	61.32	73.17
Natural Gas (1000 Mcf)	584,158	588,293	2.64	3.44	302	431	3,527,945	3,657,982	3.23	3.68

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal (1000 tons)	11,923	13,942	33.87	34.73	57	75	92,326	97,540	34.82	35.39
Petroleum Liquids (1000 barrels)	199	315	95.66	93.84	24	64	2,106	5,879	86.04	85.07
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	526,699	547,533	2.31	3.33	238	332	3,135,655	3,151,770	2.87	3.40

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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)	808	764	3.25	3.52	3	3	6,121	5,898	3.39	3.64

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal (1000 tons)	530	668	49.14	51.76	12	19	4,775	5,624	52.40	51.62
Petroleum Liquids (1000 barrels)	18	22	77.49	89.97	8	10	182	242	80.68	81.74
Petroleum Coke (1000 tons)	23	10	46.99	46.99	1	1	24	16	46.99	46.28
Natural Gas (1000 Mcf)	66,022	67,341	2.45	3.21	43	46	514,688	504,367	3.03	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	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal	979,702	1,076,062	2.00	2.06	240	286	7,216,116	7,453,943	2.05	2.05
Petroleum Liquids	5,115	7,016	14.24	15.41	121	202	55,771	96,386	13.80	14.12
Petroleum Coke	7,308	8,443	1.72	2.79	6	6	38,263	57,658	2.14	2.58
Natural Gas	1,219,038	1,243,192	2.41	3.28	586	812	7,424,343	7,559,766	2.97	3.43
Fossil Fuels	2,211,164	2,334,713	2.25	2.72	728	992	14,734,493	15,167,753	2.54	2.79

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal	741,678	802,045	2.07	2.11	171	192	5,359,828	5,507,138	2.12	2.10
Petroleum Liquids	3,843	5,016	13.64	15.26	89	128	42,204	59,841	13.59	14.07
Petroleum Coke	6,693	8,183	1.72	2.82	5	5	37,605	57,238	2.14	2.59
Natural Gas	604,226	607,246	2.55	3.33	302	431	3,644,062	3,776,240	3.12	3.57
Fossil Fuels	1,356,441	1,422,490	2.31	2.68	402	548	9,083,699	9,400,458	2.57	2.77

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal	227,149	260,087	1.78	1.86	57	75	1,757,561	1,829,699	1.83	1.88
Petroleum Liquids	1,160	1,864	16.40	15.92	24	64	12,450	35,035	14.56	14.25
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	545,846	565,773	2.23	3.22	238	332	3,243,794	3,258,156	2.77	3.29
Fossil Fuels	774,155	827,724	2.10	2.76	277	391	5,013,806	5,122,890	2.43	2.79

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	838	786	3.13	3.42	3	3	6,341	6,076	3.28	3.53
Fossil Fuels	838	786	3.13	3.42	3	3	6,459	6,206	3.27	3.52

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
Coal	10,876	13,930	2.39	2.48	12	19	98,608	116,976	2.54	2.48
Petroleum Liquids	112	135	12.56	14.45	8	10	1,117	1,510	13.14	13.11
Petroleum Coke	615	260	1.75	1.78	1	1	658	420	1.75	1.75
Natural Gas	68,127	69,386	2.38	3.12	43	46	530,146	519,294	2.94	3.14
Fossil Fuels	79,730	83,712	2.39	3.03	46	50	630,528	638,200	2.89	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-August 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	347,032	-5,905	12,973	4,170,912	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	29,507	-390	1,070	338,019	3,011	9,430	9,860
June	101,503	1,066	834	130,808	1,091	69,688	27,597	7,415	30,296	-433	1,104	370,969	3,059	9,957	10,474
July	115,376	988	913	164,722	1,172	72,456	25,100	6,755	22,320	-644	1,111	410,267	3,146	9,521	9,901
August	115,129	1,047	879	161,650	1,301	72,282	22,017	6,695	25,934	-747	1,146	407,335	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
Year to Date															
2017	820,326	7,649	6,200	865,194	8,312	530,540	220,041	36,551	214,933	-4,291	8,813	2,714,266	16,742	50,942	53,293
2018	772,543	12,204	6,169	986,060	9,177	547,351	209,100	46,042	235,583	-3,944	8,670	2,828,955	20,793	64,208	66,835
2019	665,331	7,807	5,407	1,050,428	9,181	544,114	198,140	51,250	245,014	-3,179	8,891	2,782,385	24,762	73,597	76,012
Rolling 12 Months Ending in August															
2018	1,158,052	16,969	8,945	1,417,281	13,334	821,761	289,393	62,777	353,641	-6,148	12,954	4,148,960	28,041	87,274	90,818
2019	1,038,751	11,849	8,218	1,533,094	13,467	803,847	281,564	69,033	356,463	-5,139	13,194	4,124,341	33,508	99,161	102,541

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-August 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	-762	15,967	292,524	703,382	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	-689	1,383	30,444	66,800	3,011	9,430	9,860
June	24,701	6,898	517	3,476	889	629	-699	1,300	27,597	65,308	3,059	9,957	10,474
July	16,445	6,374	380	3,753	909	638	-796	1,370	25,100	54,174	3,146	9,521	9,901
August	19,845	6,286	409	3,634	919	630	-462	1,367	22,017	54,646	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
Year to Date													
2017	162,485	34,200	2,352	27,383	7,762	4,658	2,105	10,541	220,041	471,526	16,742	50,942	53,293
2018	186,620	43,415	2,627	27,820	7,411	4,780	-1,637	10,589	209,100	490,726	20,793	64,208	66,835
2019	194,740	48,835	2,415	26,966	6,720	4,092	1,571	10,926	198,140	494,404	24,762	73,597	76,012
Rolling 12 Months Ending in August													
2018	278,437	59,233	3,544	41,589	11,192	7,073	-627	15,975	289,393	705,811	28,041	87,274	90,818
2019	280,770	65,653	3,379	40,151	10,346	6,447	2,446	16,304	281,564	707,060	33,508	99,161	102,541

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. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.A. Net Generation by Energy Source: Electric Utilities, 2009-August 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
Year to Date												
2017	613,429	5,599	4,644	418,831	101	280,538	201,719	2,169	26,671	-3,587	365	1,550,479
2018	581,139	7,216	4,721	489,171	148	287,244	192,393	3,447	29,700	-3,199	372	1,592,352
2019	499,570	5,466	3,939	522,924	122	290,828	180,761	4,543	32,175	-2,472	320	1,538,178
Rolling 12 Months Ending in August												
2018	861,350	10,184	6,789	694,174	196	431,191	266,350	4,625	45,792	-5,060	560	2,316,152
2019	778,411	8,358	6,035	753,822	125	427,835	255,705	6,013	46,640	-4,058	510	2,279,395

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;
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Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2009-August 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	271,669	-1,119	6,677	1,677,231
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	23,463	-81	526	135,439
June	22,994	268	100	55,384	303	33,251	1,724	6,845	24,019	-95	582	145,376
July	26,647	260	139	73,943	344	34,163	1,700	6,214	16,731	-123	586	160,603
August	27,157	292	139	74,104	369	33,398	1,858	6,158	20,106	-121	579	164,038
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
Year to Date												
2017	201,527	1,700	1,002	379,602	2,618	250,002	17,167	33,994	167,398	-705	4,375	1,058,679
2018	186,380	4,538	999	428,685	2,691	260,107	15,837	42,175	184,993	-745	4,481	1,130,141
2019	161,284	1,965	1,001	457,109	2,853	253,286	16,459	46,263	192,436	-707	4,844	1,136,793
Rolling 12 Months Ending in August												
2018	289,051	6,119	1,477	622,002	4,051	390,570	21,704	57,557	276,558	-1,087	6,633	1,674,635
2019	253,573	2,914	NM	673,840	4,097	376,012	24,434	62,425	279,112	-1,081	7,040	1,683,883

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-August 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
Year to Date															
2017	214	61	5	5,394	0	0	151	360	1,830	0	724	8,740	5,349	5,708	5,708
2018	209	98	4	5,689	0	0	165	387	1,779	0	682	9,013	6,907	7,293	7,293
2019	187	74	4	5,761	0	0	156	397	1,804	0	717	9,100	7,909	8,306	8,306
Rolling 12 Months Ending in August															
2018	324	140	7	8,336	0	0	254	548	2,678	0	1,046	13,333	9,243	9,791	9,791
2019	NM	108	8	8,491	0	0	NM	536	2,713	0	1,045	13,399	10,800	11,336	11,336

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.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
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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-August 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
Year to Date															
2017	5,156	289	548	61,366	5,593	0	1,004	29	19,034	0	3,348	96,367	1,647	1,676	1,676
2018	4,814	352	445	62,516	6,337	0	705	34	19,111	0	3,135	97,449	1,843	1,876	1,876
2019	4,290	303	462	64,634	6,206	0	763	46	18,600	0	3,010	98,314	2,129	2,175	2,175
Rolling 12 Months Ending in August															
2018	7,327	526	673	92,769	9,086	0	1,084	47	28,612	0	4,715	144,840	2,560	2,607	2,607
2019	6,488	468	657	96,941	9,246	0	1,207	60	27,998	0	4,599	147,664	2,922	2,982	2,982

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.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-August 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
Year to Date	
2017	9,746
2018	12,043
2019	14,724
Rolling 12 Months Ending in August	
2018	16,239
2019	19,786

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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	9,381	11,195	-16.2%	198	212	8,771	10,541	132	154	279	288
Connecticut	3,855	3,885	-0.8%	4	9	3,749	3,769	39	45	63	63
Maine	801	964	-17.0%	0	0	613	773	11	13	176	178
Massachusetts	1,987	3,409	-41.7%	61	60	1,832	3,239	71	84	24	25
New Hampshire	1,711	1,749	-2.2%	70	86	1,633	1,655	5	6	3	3
Rhode Island	866	1,049	-17.5%	0	0	846	1,024	6	6	14	19
Vermont	161	139	16.1%	63	58	98	81	0	0	0	0
Middle Atlantic	41,504	41,981	-1.1%	3,391	3,583	37,495	37,768	217	241	401	388
New Jersey	6,872	7,899	-13.0%	14	11	6,734	7,765	53	59	71	64
New York	12,901	13,482	-4.3%	3,374	3,562	9,327	9,685	129	149	71	85
Pennsylvania	21,731	20,599	5.5%	3	10	21,435	20,317	34	33	260	239
East North Central	52,454	57,010	-8.0%	20,441	22,948	30,873	32,899	175	190	965	974
Illinois	15,666	17,433	-10.1%	608	642	14,767	16,471	50	45	241	274
Indiana	8,716	10,341	-15.7%	5,947	7,650	2,339	2,277	28	27	402	388
Michigan	11,109	11,057	0.5%	7,720	8,096	3,206	2,781	60	76	123	105
Ohio	10,747	11,648	-7.7%	1,273	1,355	9,394	10,212	26	28	54	53
Wisconsin	6,215	6,532	-4.8%	4,892	5,204	1,167	1,160	11	14	145	154
West North Central	30,755	31,188	-1.4%	25,767	26,665	4,563	4,116	57	61	368	347
Iowa	5,399	5,216	3.5%	4,313	4,195	862	789	19	20	204	212
Kansas	4,690	4,574	2.5%	3,378	3,323	1,309	1,243	NM	1	NM	7
Minnesota	5,338	5,401	-1.2%	4,271	4,490	940	800	17	20	109	91
Missouri	7,322	8,204	-10.8%	6,782	7,769	520	415	18	18	2	3
Nebraska	3,422	3,310	3.4%	2,989	2,932	396	347	1	2	36	29
North Dakota	3,555	3,559	-0.1%	3,116	3,158	424	395	NM	NM	14	5
South Dakota	1,029	925	11.3%	918	798	111	127	NM	0	0	0
South Atlantic	80,773	80,872	-0.1%	66,543	66,556	12,353	12,482	172	170	1,706	1,664
Delaware	721	813	-11.3%	6	8	589	691	0	0	126	114
District of Columbia	7	5	48.5%	0	0	NM	0	5	5	0	0
Florida	24,432	24,263	0.7%	22,808	22,601	1,178	1,221	5	7	440	433
Georgia	12,813	12,167	5.3%	10,399	10,261	1,944	1,434	1	1	470	471
Maryland	3,825	4,202	-9.0%	415	437	3,298	3,658	108	94	4	14
North Carolina	13,562	12,885	5.3%	11,635	11,234	1,749	1,467	20	31	157	153
South Carolina	9,125	9,814	-7.0%	8,776	9,232	181	433	0	0	167	149
Virginia	10,159	9,469	7.3%	8,008	7,168	1,898	2,051	32	32	222	218
West Virginia	6,129	7,255	-15.5%	4,495	5,616	1,514	1,528	0	0	120	111
East South Central	35,685	35,986	-0.8%	30,223	30,364	4,600	4,787	21	24	841	812
Alabama	13,508	13,840	-2.4%	9,355	9,547	3,723	3,896	0	0	430	397
Kentucky	6,921	7,943	-12.9%	6,850	7,846	20	63	0	0	51	35
Mississippi	7,376	6,675	10.5%	6,398	5,694	810	801	0	0	169	180
Tennessee	7,880	7,529	4.7%	7,621	7,277	47	27	21	24	191	200
West South Central	75,659	73,564	2.8%	27,510	27,814	41,084	38,604	121	103	6,945	7,042
Arkansas	6,322	6,240	1.3%	5,643	6,229	536	-135	5	4	138	142
Louisiana	10,273	9,936	3.4%	6,774	6,412	737	781	17	16	2,746	2,728
Oklahoma	8,894	8,701	2.2%	4,774	4,701	4,044	3,917	0	0	76	83
Texas	50,170	48,686	3.0%	10,319	10,473	35,768	34,042	99	83	3,985	4,089
Mountain	37,222	37,835	-1.6%	29,115	30,559	7,808	6,967	80	45	219	264
Arizona	12,315	12,298	0.1%	10,418	10,646	1,883	1,641	13	11	0	0
Colorado	5,350	5,188	3.1%	4,275	4,065	1,065	1,114	4	3	6	6
Idaho	1,471	1,667	-11.7%	949	1,141	471	500	4	4	47	22
Montana	2,481	2,276	9.0%	795	1,101	1,684	1,173	0	0	2	3
Nevada	4,434	4,485	-1.1%	3,234	3,308	1,118	1,116	43	12	39	49
New Mexico	3,647	3,171	15.0%	2,621	2,306	1,016	845	10	11	0	9
Utah	3,786	4,303	-12.0%	3,372	3,876	365	375	5	3	44	50
Wyoming	3,736	4,446	-16.0%	3,450	4,117	205	204	0	0	81	126
Pacific Contiguous	36,369	36,318	0.1%	20,373	19,155	14,442	15,494	232	267	1,322	1,402
California	21,726	20,972	3.6%	9,286	7,792	11,060	11,701	225	258	1,156	1,221
Oregon	5,144	5,365	-4.1%	3,404	3,435	1,671	1,868	7	6	62	55
Washington	9,499	9,980	-4.8%	7,683	7,928	1,711	1,925	NM	2	104	125
Pacific Noncontiguous	1,561	1,385	12.7%	1,094	910	380	379	55	64	32	33
Alaska	640	507	26.2%	586	450	21	21	NM	24	12	11
Hawaii	922	878	5.0%	508	459	359	358	34	39	20	22
U.S. Total	401,363	407,335	-1.5%	224,655	228,766	162,370	164,038	1,261	1,318	13,077	13,213

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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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	68,140	71,953	-5.3%	1,711	2,085	63,572	67,030	893	923	1,964	1,916
Connecticut	26,447	26,632	-0.7%	57	67	25,701	25,863	265	275	424	427
Maine	6,899	7,479	-7.7%	0	0	5,567	6,171	91	113	1,242	1,194
Massachusetts	16,025	19,013	-15.7%	409	407	14,985	17,973	452	450	179	182
New Hampshire	12,025	12,101	-0.6%	679	1,042	11,282	10,994	44	43	20	21
Rhode Island	5,234	5,299	-1.2%	0	0	5,097	5,167	39	40	98	92
Vermont	1,509	1,431	5.5%	567	568	940	861	2	2	0	0
Middle Atlantic	291,535	285,170	2.2%	23,928	24,591	263,140	256,065	1,528	1,590	2,940	2,924
New Jersey	47,448	51,765	-8.3%	78	56	46,491	50,806	382	441	498	462
New York	88,259	88,818	-0.6%	23,766	24,440	63,032	62,882	887	897	574	599
Pennsylvania	155,828	144,587	7.8%	84	95	153,617	142,378	259	252	1,867	1,862
East North Central	397,491	411,620	-3.4%	149,484	165,236	239,343	237,818	1,237	1,318	7,427	7,248
Illinois	123,256	127,455	-3.3%	3,781	3,798	117,396	121,503	293	277	1,785	1,878
Indiana	70,185	75,949	-7.6%	49,210	57,544	17,766	15,370	178	183	3,031	2,852
Michigan	79,582	80,960	-1.7%	54,279	56,325	23,807	23,169	510	582	986	884
Ohio	81,915	82,900	-1.2%	9,279	13,262	72,009	69,018	161	178	466	442
Wisconsin	42,555	44,356	-4.1%	32,935	34,308	8,365	8,758	95	98	1,160	1,191
West North Central	228,821	237,521	-3.7%	183,312	194,797	42,317	39,557	430	428	2,763	2,738
Iowa	42,915	41,618	3.1%	32,854	32,224	8,427	7,787	150	152	1,483	1,455
Kansas	34,758	34,522	0.7%	22,485	22,995	12,206	11,468	10	10	57	48
Minnesota	39,221	41,475	-5.4%	30,353	32,638	7,859	7,787	136	133	874	918
Missouri	52,332	58,286	-10.2%	48,425	54,628	3,766	3,510	121	118	21	30
Nebraska	24,476	24,954	-1.9%	19,902	21,233	4,339	3,462	11	12	224	247
North Dakota	26,561	28,366	-6.4%	22,048	24,069	4,408	4,255	NM	NM	104	41
South Dakota	8,557	8,299	3.1%	7,245	7,010	1,312	1,288	NM	0	0	0
South Atlantic	550,908	553,413	-0.5%	456,640	454,703	80,223	85,184	1,265	1,155	12,781	12,372
Delaware	3,812	4,401	-13.4%	28	24	2,903	3,708	3	4	878	664
District of Columbia	62	57	7.7%	0	0	10	0	51	57	0	0
Florida	164,277	162,958	0.8%	153,414	151,355	7,448	8,195	43	53	3,372	3,354
Georgia	85,448	85,751	-0.4%	70,805	72,173	11,184	10,038	5	6	3,455	3,534
Maryland	27,377	29,496	-7.2%	3,056	2,555	23,450	26,220	742	547	130	174
North Carolina	88,614	91,046	-2.7%	75,228	79,959	12,045	9,659	175	224	1,166	1,204
South Carolina	68,910	67,224	2.5%	66,397	63,945	1,271	2,106	2	2	1,240	1,172
Virginia	67,758	64,898	4.4%	53,199	49,302	12,680	13,706	244	262	1,635	1,628
West Virginia	44,651	47,582	-6.2%	34,514	35,389	9,233	11,552	0	0	905	641
East South Central	245,680	253,279	-3.0%	209,101	215,193	30,275	31,802	145	152	6,158	6,133
Alabama	95,711	99,580	-3.9%	68,563	71,234	24,009	25,306	0	0	3,139	3,040
Kentucky	48,577	52,691	-7.8%	47,947	51,856	247	493	0	0	382	341
Mississippi	45,156	43,728	3.3%	38,240	36,647	5,702	5,801	0	0	1,215	1,280
Tennessee	56,235	57,281	-1.8%	54,351	55,456	317	201	145	152	1,422	1,472
West South Central	489,389	499,771	-2.1%	164,902	176,572	271,767	271,183	731	634	51,988	51,382
Arkansas	41,771	43,494	-4.0%	37,013	41,435	3,565	883	30	32	1,163	1,143
Louisiana	68,202	69,125	-1.3%	41,500	42,386	5,373	6,536	106	111	21,224	20,091
Oklahoma	56,325	60,169	-6.4%	27,087	29,102	28,693	30,453	0	0	545	614
Texas	323,090	326,982	-1.2%	59,303	63,648	234,136	233,310	596	491	29,056	29,533
Mountain	246,969	244,172	1.1%	190,736	190,982	53,746	50,750	657	362	1,829	2,079
Arizona	76,844	73,882	4.0%	65,698	65,468	11,044	8,309	101	105	0	0
Colorado	37,354	36,978	1.0%	28,883	27,889	8,400	9,021	24	19	48	49
Idaho	11,328	12,493	-9.3%	7,387	8,299	3,528	3,814	32	33	381	347
Montana	18,262	18,280	-0.1%	7,233	8,697	11,009	9,562	0	0	20	20
Nevada	26,818	26,925	-0.4%	18,318	18,671	7,907	7,910	377	88	216	256
New Mexico	23,127	20,623	12.1%	15,773	12,905	7,281	7,633	70	70	4	15
Utah	25,874	24,895	3.9%	22,850	21,771	2,620	2,683	54	46	351	395
Wyoming	27,361	30,097	-9.1%	24,595	27,282	1,957	1,818	0	0	810	996
Pacific Contiguous	252,846	261,371	-3.3%	151,237	160,907	89,652	88,108	1,743	1,957	10,215	10,399
California	139,225	131,916	5.5%	60,375	51,750	68,233	69,193	1,679	1,884	8,938	9,088
Oregon	41,427	44,494	-6.9%	29,362	33,525	11,570	10,526	49	50	447	393
Washington	72,194	84,962	-15.0%	61,500	75,631	9,849	8,389	15	23	830	918
Pacific Noncontiguous	10,605	10,685	-0.7%	7,126	7,288	2,758	2,645	471	493	250	259
Alaska	4,176	4,277	-2.4%	3,746	3,821	151	153	196	231	82	72
Hawaii	6,429	6,408	0.3%	3,380	3,467	2,606	2,492	275	262	168	187
U.S. Total	2,782,385	2,828,955	-1.6%	1,538,178	1,592,352	1,136,793	1,130,141	9,100	9,013	98,314	97,449

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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 1.4.A. Utility Scale Facility Net Generation from Coal by State, by Sector, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	22	40	-46.3%	16	32	4	8	0	0	NM	1
Connecticut	1	3	-64.9%	0	0	1	3	0	0	0	0
Maine	5	6	-14.9%	0	0	3	5	0	0	NM	1
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	16	32	-50.5%	16	32	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,181	4,431	-28.2%	0	0	3,171	4,421	0	0	10	9
New Jersey	84	119	-29.6%	0	0	84	119	0	0	0	0
New York	36	42	-12.3%	0	0	36	42	0	0	0	0
Pennsylvania	3,061	4,270	-28.3%	0	0	3,051	4,261	0	0	10	9
East North Central	19,235	26,284	-26.8%	11,278	15,212	7,788	10,873	6	5	163	194
Illinois	4,193	6,013	-30.3%	307	410	3,754	5,444	1	1	131	159
Indiana	4,993	7,097	-29.6%	4,557	6,603	431	489	5	5	0	0
Michigan	3,378	4,355	-22.4%	3,333	4,316	40	35	0	0	5	4
Ohio	4,037	5,502	-26.6%	474	597	3,563	4,905	0	0	0	0
Wisconsin	2,634	3,317	-20.6%	2,607	3,286	0	0	0	0	26	31
West North Central	15,686	18,378	-14.6%	15,451	18,168	0	0	6	8	229	202
Iowa	2,316	2,852	-18.8%	2,167	2,694	0	0	5	7	144	151
Kansas	1,776	2,066	-14.0%	1,776	2,066	0	0	0	0	0	0
Minnesota	1,581	2,056	-23.1%	1,541	2,033	0	0	0	0	40	22
Missouri	5,275	6,348	-16.9%	5,275	6,348	0	0	0	0	0	0
Nebraska	2,029	2,173	-6.6%	1,993	2,144	0	0	0	0	36	29
North Dakota	2,503	2,626	-4.7%	2,493	2,626	0	0	0	0	9	0
South Dakota	207	256	-19.2%	207	256	0	0	0	0	0	0
South Atlantic	17,339	20,301	-14.6%	15,273	18,133	2,016	2,119	0	2	50	46
Delaware	16	48	-67.3%	0	0	16	48	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,893	3,254	-41.8%	1,887	3,249	0	0	0	0	NM	6
Georgia	2,720	3,195	-14.9%	2,702	3,178	0	0	0	0	NM	16
Maryland	783	776	0.8%	0	0	783	774	0	0	0	2
North Carolina	4,093	3,163	29.4%	4,074	3,141	8	9	0	2	12	11
South Carolina	1,658	1,969	-15.8%	1,657	1,968	0	0	0	0	1	0
Virginia	565	1,112	-49.1%	552	1,059	-1	41	0	0	14	11
West Virginia	5,610	6,784	-17.3%	4,400	5,537	1,210	1,247	0	0	0	0
East South Central	10,360	11,810	-12.3%	10,024	11,456	279	292	0	0	57	61
Alabama	2,559	3,273	-21.8%	2,552	3,270	0	0	0	0	NM	3
Kentucky	5,150	6,059	-15.0%	5,150	6,059	0	0	0	0	0	0
Mississippi	523	496	5.4%	244	203	279	292	0	0	0	0
Tennessee	2,127	1,982	7.4%	2,078	1,923	0	0	0	0	49	59
West South Central	12,740	17,493	-27.2%	6,958	10,161	5,769	7,317	0	0	13	15
Arkansas	2,299	3,075	-25.2%	1,909	2,687	387	386	0	0	4	3
Louisiana	727	1,353	-46.2%	707	1,000	20	353	0	0	0	0
Oklahoma	821	1,681	-51.2%	706	1,494	105	175	0	0	10	12
Texas	8,893	11,384	-21.9%	3,637	4,981	5,256	6,404	0	0	0	0
Mountain	14,235	15,168	-6.1%	12,530	13,972	1,675	1,162	0	0	30	34
Arizona	2,827	3,092	-8.6%	2,827	3,092	0	0	0	0	0	0
Colorado	2,402	2,626	-8.5%	2,402	2,626	0	0	0	0	0	0
Idaho	NM	2	NM	0	0	0	0	0	0	NM	2
Montana	1,497	961	55.8%	26	21	1,471	940	0	0	NM	0
Nevada	308	407	-24.3%	195	285	113	122	0	0	0	0
New Mexico	1,552	1,381	12.4%	1,552	1,381	0	0	0	0	0	0
Utah	2,346	2,753	-14.8%	2,316	2,714	31	39	0	0	0	0
Wyoming	3,299	3,945	-16.4%	3,211	3,852	60	61	0	0	28	32
Pacific Contiguous	1,191	1,046	13.8%	348	195	841	824	0	0	1	27
California	0	25	-100.0%	0	0	0	0	0	0	0	25
Oregon	348	195	78.9%	348	195	0	0	0	0	0	0
Washington	842	826	2.0%	0	0	841	824	0	0	1	2
Pacific Noncontiguous	188	180	4.8%	NM	30	145	141	6	8	0	0
Alaska	61	56	9.5%	NM	30	18	17	6	8	0	0
Hawaii	127	124	2.6%	0	0	127	124	0	0	0	0
U.S. Total	94,176	115,129	-18.2%	71,916	87,359	21,688	27,157	18	23	554	590

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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Notes: See Glossary for definitions. Values 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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	372	825	-54.9%	257	529	98	285	0	0	17	12
Connecticut	61	247	-75.3%	0	0	61	247	0	0	0	0
Maine	55	50	9.3%	0	0	37	38	0	0	17	12
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	257	529	-51.4%	257	529	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	28,003	32,828	-14.7%	0	0	27,918	32,734	0	0	85	94
New Jersey	706	842	-16.1%	0	0	706	842	0	0	0	0
New York	422	565	-25.3%	0	0	422	554	0	0	0	11
Pennsylvania	26,875	31,422	-14.5%	0	0	26,789	31,339	0	0	85	83
East North Central	154,999	183,621	-15.6%	90,597	110,156	63,037	71,965	49	58	1,316	1,442
Illinois	34,057	41,069	-17.1%	2,501	2,701	30,512	37,220	21	29	1,023	1,120
Indiana	42,779	51,566	-17.0%	40,089	48,880	2,661	2,656	28	30	0	0
Michigan	26,634	29,364	-9.3%	26,357	29,007	237	300	0	0	41	57
Ohio	33,167	39,385	-15.8%	3,537	7,592	29,627	31,789	0	0	3	5
Wisconsin	18,363	22,236	-17.4%	18,114	21,976	0	0	0	0	249	260
West North Central	111,432	126,896	-12.2%	109,775	125,232	0	0	52	55	1,606	1,610
Iowa	16,381	18,376	-10.9%	15,288	17,264	0	0	44	49	1,050	1,064
Kansas	11,730	13,867	-15.4%	11,730	13,867	0	0	0	0	0	0
Minnesota	12,773	14,933	-14.5%	12,502	14,633	0	0	2	1	269	299
Missouri	38,527	43,687	-11.8%	38,521	43,681	0	0	6	5	0	0
Nebraska	13,545	15,486	-12.5%	13,321	15,239	0	0	0	0	224	247
North Dakota	16,661	18,721	-11.0%	16,598	18,721	0	0	0	0	63	0
South Dakota	1,815	1,826	-0.6%	1,815	1,826	0	0	0	0	0	0
South Atlantic	110,380	135,536	-18.6%	98,609	117,085	11,342	17,943	27	27	402	482
Delaware	126	250	-49.6%	0	0	126	250	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	13,883	20,200	-31.3%	13,839	20,128	0	0	0	0	45	72
Georgia	17,885	20,275	-11.8%	17,768	20,138	0	0	0	0	117	136
Maryland	3,901	7,690	-49.3%	0	0	3,869	7,647	0	0	32	43
North Carolina	20,607	22,856	-9.8%	20,378	22,666	117	71	23	22	89	98
South Carolina	10,244	13,001	-21.2%	10,237	12,989	0	0	0	0	7	12
Virginia	2,769	6,950	-60.2%	2,542	6,384	110	440	4	5	113	121
West Virginia	40,964	44,314	-7.6%	33,845	34,779	7,119	9,535	0	0	0	0
East South Central	69,246	81,137	-14.7%	66,988	78,650	1,906	1,995	0	0	352	492
Alabama	17,737	23,139	-23.3%	17,703	23,112	0	0	0	0	34	27
Kentucky	36,000	39,141	-8.0%	36,000	39,141	0	0	0	0	0	0
Mississippi	3,441	3,475	-1.0%	1,535	1,480	1,906	1,995	0	0	0	0
Tennessee	12,068	15,383	-21.5%	11,750	14,918	0	0	0	0	318	465
West South Central	90,687	110,988	-18.3%	48,850	61,712	41,731	49,095	0	0	107	181
Arkansas	15,641	19,018	-17.8%	13,149	15,723	2,466	3,266	0	0	27	30
Louisiana	5,373	8,048	-33.2%	4,179	5,218	1,194	2,830	0	0	0	0
Oklahoma	6,228	10,587	-41.2%	5,907	9,376	241	1,059	0	0	80	151
Texas	63,444	73,334	-13.5%	25,614	31,395	37,830	41,939	0	0	0	0
Mountain	93,344	96,440	-3.2%	82,752	87,087	10,348	9,060	0	0	244	293
Arizona	16,848	20,386	-17.4%	16,848	20,386	0	0	0	0	0	0
Colorado	16,532	17,178	-3.8%	16,528	17,170	0	0	0	0	4	7
Idaho	NM	11	NM	0	0	0	0	0	0	NM	11
Montana	9,144	7,803	17.2%	192	139	8,947	7,659	0	0	NM	5
Nevada	1,834	1,417	29.5%	1,175	759	659	658	0	0	0	0
New Mexico	9,750	7,696	26.7%	9,750	7,696	0	0	0	0	0	0
Utah	16,121	16,218	-0.6%	15,849	15,936	272	282	0	0	0	0
Wyoming	23,103	25,732	-10.2%	22,410	25,001	470	461	0	0	223	270
Pacific Contiguous	5,570	3,018	84.6%	1,468	506	3,942	2,304	0	0	161	208
California	145	194	-25.0%	0	0	0	0	0	0	145	194
Oregon	1,468	506	190.0%	1,468	506	0	0	0	0	0	0
Washington	3,957	2,318	70.7%	0	0	3,942	2,304	0	0	15	14
Pacific Noncontiguous	1,298	1,252	3.7%	277	183	962	1,000	59	69	0	0
Alaska	451	366	23.2%	277	183	115	114	59	69	0	0
Hawaii	847	886	-4.4%	0	0	847	886	0	0	0	0
U.S. Total	665,331	772,543	-13.9%	499,570	581,139	161,284	186,380	187	209	4,290	4,814

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	22	31	-28.1%	NM	6	13	23	7	2	NM	1
Connecticut	5	7	-23.2%	0	1	5	6	NM	0	0	0
Maine	2	9	-72.9%	0	0	2	8	0	0	NM	1
Massachusetts	12	11	15.5%	NM	1	5	9	6	1	0	0
New Hampshire	1	4	-78.1%	NM	3	NM	0	0	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	44	73	-39.6%	9	8	33	63	NM	1	2	2
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	25	50	-50.8%	9	8	14	41	NM	0	0	1
Pennsylvania	17	22	-24.3%	0	0	15	21	0	0	1	0
East North Central	34	47	-28.1%	23	26	10	18	0	1	1	3
Illinois	3	5	-41.4%	NM	0	3	5	NM	0	0	0
Indiana	8	14	-42.7%	7	12	0	0	0	0	1	2
Michigan	11	10	2.9%	11	10	0	0	NM	0	NM	0
Ohio	9	15	-39.2%	1	1	7	13	0	0	0	0
Wisconsin	NM	3	NM	NM	2	0	0	NM	0	0	0
West North Central	25	22	12.8%	25	22	NM	0	0	0	0	0
Iowa	8	3	126.4%	7	3	0	0	0	0	0	0
Kansas	5	5	-7.9%	5	5	0	0	0	0	0	0
Minnesota	NM	3	NM	NM	3	NM	0	NM	0	0	0
Missouri	5	6	-17.3%	5	6	0	0	0	0	0	0
Nebraska	NM	1	NM	NM	1	0	0	0	0	0	0
North Dakota	2	3	-41.4%	2	3	0	0	0	0	0	0
South Dakota	2	0	962.0%	2	0	0	0	NM	0	0	0
South Atlantic	177	148	19.3%	146	111	17	22	4	6	10	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	40	49	-16.8%	38	47	0	0	0	0	NM	1
Georgia	11	18	-37.4%	3	8	NM	4	1	0	NM	5
Maryland	7	9	-30.7%	0	1	7	8	0	0	0	0
North Carolina	16	24	-36.1%	14	22	NM	1	NM	0	NM	1
South Carolina	7	11	-32.8%	7	10	0	0	0	0	0	1
Virginia	82	26	221.0%	73	16	5	3	3	5	NM	0
West Virginia	11	10	7.7%	11	6	0	4	0	0	0	0
East South Central	18	23	-18.4%	18	22	NM	0	0	0	NM	1
Alabama	NM	3	NM	0	2	NM	0	0	0	NM	0
Kentucky	5	3	52.5%	5	3	0	0	0	0	0	0
Mississippi	1	4	-76.0%	1	4	0	0	0	0	0	0
Tennessee	11	13	-10.5%	11	12	0	0	0	0	0	0
West South Central	9	8	10.7%	8	5	NM	2	0	0	1	0
Arkansas	2	3	-43.1%	1	1	0	2	0	0	0	0
Louisiana	1	0	182.6%	1	0	0	0	0	0	0	0
Oklahoma	3	2	58.2%	2	2	0	0	0	0	0	0
Texas	3	3	5.4%	3	2	NM	0	0	0	0	0
Mountain	15	16	-2.4%	15	13	1	3	NM	0	0	0
Arizona	4	5	-12.1%	4	5	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	3	NM	NM	0	0	3	0	0	0	0
Nevada	1	2	-45.8%	1	2	0	0	0	0	0	0
New Mexico	2	2	3.1%	2	2	0	0	0	0	0	0
Utah	3	2	47.3%	3	2	1	0	0	0	0	0
Wyoming	4	2	132.1%	4	2	0	0	0	0	0	0
Pacific Contiguous	6	7	-8.5%	4	4	1	1	0	0	NM	1
California	4	4	9.8%	4	3	0	0	0	0	0	0
Oregon	1	NM	NM	1	NM	0	0	0	0	0	0
Washington	1	2	-30.1%	NM	0	1	1	0	0	NM	1
Pacific Noncontiguous	732	673	8.9%	560	495	149	159	1	0	23	19
Alaska	85	68	25.3%	79	63	0	0	0	0	6	5
Hawaii	647	605	7.1%	481	432	149	159	1	0	17	14
U.S. Total	1,084	1,047	3.5%	809	711	224	292	13	9	38	35

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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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	201	1,194	-83.1%	20	168	144	986	27	26	10	14
Connecticut	58	335	-82.7%	3	4	50	328	3	2	2	1
Maine	22	181	-87.8%	0	0	13	167	2	1	7	13
Massachusetts	91	442	-79.5%	9	69	69	363	12	10	1	1
New Hampshire	18	162	-89.1%	7	92	NM	59	9	11	0	0
Rhode Island	12	71	-83.0%	0	0	10	69	2	1	NM	0
Vermont	NM	3	NM	NM	3	0	0	0	0	0	0
Middle Atlantic	626	2,316	-73.0%	181	603	418	1,664	9	21	18	29
New Jersey	56	288	-80.4%	1	1	54	280	1	5	1	1
New York	425	1,549	-72.5%	180	600	227	911	NM	12	12	25
Pennsylvania	145	480	-69.9%	0	2	137	472	2	3	5	3
East North Central	329	377	-12.7%	200	211	119	145	1	4	10	17
Illinois	27	34	-18.4%	4	5	23	29	0	0	0	0
Indiana	88	89	-0.8%	83	75	0	0	NM	0	5	13
Michigan	69	84	-18.1%	66	80	0	0	1	3	2	1
Ohio	113	146	-22.4%	22	27	88	115	0	1	3	2
Wisconsin	32	25	26.2%	25	24	7	1	0	0	0	0
West North Central	220	226	-2.4%	211	208	7	16	2	1	1	1
Iowa	51	48	5.9%	48	46	2	3	0	0	0	0
Kansas	41	39	4.0%	41	39	0	0	0	0	0	0
Minnesota	29	35	-16.6%	23	20	NM	14	2	1	1	1
Missouri	54	70	-22.8%	54	70	0	0	0	0	0	0
Nebraska	13	9	50.8%	13	9	0	0	0	0	0	0
North Dakota	25	22	17.7%	25	21	0	0	0	0	0	0
South Dakota	7	4	97.5%	7	4	0	0	NM	0	0	0
South Atlantic	970	2,726	-64.4%	726	1,894	153	705	26	40	66	87
Delaware	34	197	-83.0%	0	6	33	191	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	235	365	-35.7%	224	340	1	12	0	0	10	13
Georgia	89	194	-54.1%	38	68	6	75	3	4	42	47
Maryland	58	244	-76.1%	0	4	57	237	0	1	1	3
North Carolina	166	552	-69.8%	154	500	5	36	NM	2	7	14
South Carolina	65	295	-77.9%	59	283	1	5	0	0	4	7
Virginia	237	766	-69.0%	166	594	47	135	22	33	2	3
West Virginia	86	113	-24.5%	85	100	1	14	0	0	0	0
East South Central	183	190	-3.9%	174	155	1	25	0	0	8	10
Alabama	13	54	-75.9%	8	24	1	25	0	0	4	5
Kentucky	48	43	11.6%	48	43	0	0	0	0	0	0
Mississippi	11	15	-27.1%	9	11	0	0	0	0	1	3
Tennessee	111	78	41.5%	108	77	0	0	0	0	2	1
West South Central	89	100	-10.9%	65	76	18	18	0	1	6	6
Arkansas	30	27	10.9%	19	20	9	5	0	0	2	2
Louisiana	7	17	-55.8%	7	17	0	0	0	0	0	0
Oklahoma	15	12	21.4%	14	12	0	0	0	0	1	1
Texas	37	44	-16.5%	25	28	9	13	0	1	2	3
Mountain	143	124	15.6%	133	108	10	16	NM	0	0	0
Arizona	43	36	19.8%	43	36	0	0	NM	0	0	0
Colorado	7	8	-9.9%	7	8	0	0	0	0	0	0
Idaho	0	0	336.1%	0	0	0	0	0	0	0	0
Montana	9	14	-33.1%	NM	0	8	14	0	0	0	0
Nevada	9	7	35.4%	7	5	2	2	0	0	0	0
New Mexico	23	11	101.2%	23	11	0	0	0	0	0	0
Utah	25	23	5.9%	24	23	1	1	0	0	0	0
Wyoming	27	25	9.7%	27	25	0	0	0	0	0	0
Pacific Contiguous	49	71	-30.0%	27	26	8	10	1	1	14	34
California	34	56	-38.8%	24	23	2	4	0	0	8	28
Oregon	2	NM	NM	2	NM	0	0	0	0	0	0
Washington	13	12	8.6%	NM	0	7	6	0	0	5	6
Pacific Noncontiguous	4,995	4,878	2.4%	3,730	3,767	1,087	952	7	5	171	154
Alaska	571	529	8.0%	535	497	0	0	4	3	33	29
Hawaii	4,424	4,349	1.7%	3,195	3,270	1,087	952	3	2	139	125
U.S. Total	7,807	12,204	-36.0%	5,466	7,216	1,965	4,538	74	98	303	352

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	13	13	-1.1%	0	0	0	0	0	0	13	13
New Jersey	6	8	-19.0%	0	0	0	0	0	0	6	8
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	5	NM	0	0	0	0	0	0	NM	5
East North Central	173	198	-12.6%	67	86	91	101	0	0	15	11
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	71	84	-15.4%	58	74	0	0	0	0	14	10
Ohio	92	102	-9.7%	0	0	91	101	0	0	1	1
Wisconsin	10	12	-18.1%	10	12	0	0	0	0	0	0
West North Central	2	0	--	0	0	0	0	0	0	2	0
Iowa	2	0	--	0	0	0	0	0	0	2	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	103	212	-51.4%	86	192	0	0	0	0	17	20
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	86	192	-55.2%	86	192	0	0	0	0	0	0
Georgia	17	20	-13.8%	0	0	0	0	0	0	17	20
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	357	419	-14.9%	347	408	0	0	0	0	9	11
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	347	413	-15.9%	347	408	0	0	0	0	0	5
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	9	6	53.9%	0	0	0	0	0	0	9	6
Mountain	40	38	5.0%	0	0	40	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	40	38	5.0%	0	0	40	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	687	879	-21.9%	501	686	131	139	0	0	55	54

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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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	96	93	3.0%	0	0	0	0	0	0	96	93
New Jersey	45	37	21.3%	0	0	0	0	0	0	45	37
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	51	56	-9.1%	0	0	0	0	0	0	51	56
East North Central	1,348	1,563	-13.7%	575	763	680	736	0	0	94	64
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	605	749	-19.3%	514	693	0	0	0	0	91	57
Ohio	683	743	-8.1%	0	0	680	736	0	0	3	7
Wisconsin	61	70	-13.4%	61	70	0	0	0	0	0	0
West North Central	68	40	71.1%	0	0	0	0	4	4	64	36
Iowa	68	40	71.1%	0	0	0	0	4	4	64	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	988	1,215	-18.7%	855	1,104	0	0	0	0	133	110
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	855	1,104	-22.6%	855	1,104	0	0	0	0	0	0
Georgia	133	110	20.3%	0	0	0	0	0	0	133	110
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	2,585	2,995	-13.7%	2,510	2,854	0	0	0	0	75	141
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	2,515	2,950	-14.7%	2,510	2,854	0	0	0	0	6	96
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	70	45	53.8%	0	0	0	0	0	0	70	45
Mountain	321	263	22.0%	0	0	321	263	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	321	263	22.0%	0	0	321	263	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	5,407	6,169	-12.4%	3,939	4,721	1,001	999	4	4	462	445

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	5,327	6,902	-22.8%	NM	56	5,030	6,536	109	133	155	177
Connecticut	2,140	2,191	-2.3%	3	5	2,035	2,078	39	45	63	63
Maine	184	410	-55.1%	0	0	130	339	3	3	52	68
Massachusetts	1,629	2,705	-39.8%	NM	39	1,515	2,562	61	78	23	25
New Hampshire	547	579	-5.4%	0	12	543	563	1	1	3	3
Rhode Island	827	1,018	-18.8%	0	0	808	993	5	6	14	19
Vermont	0	0	173.5%	0	0	0	0	0	0	0	0
Middle Atlantic	20,618	19,888	3.7%	1,230	1,522	19,030	17,965	115	142	244	259
New Jersey	4,221	4,683	-9.9%	NM	22	4,150	4,602	12	21	39	39
New York	5,887	6,699	-12.1%	1,209	1,500	4,535	5,023	92	110	51	65
Pennsylvania	10,510	8,506	23.6%	0	0	10,345	8,339	11	11	154	155
East North Central	16,583	13,855	19.7%	6,147	4,751	9,947	8,648	149	153	341	302
Illinois	2,342	2,161	8.4%	286	218	1,947	1,836	48	44	61	63
Indiana	3,102	2,634	17.8%	1,337	981	1,587	1,503	19	19	159	131
Michigan	3,873	2,898	33.6%	1,702	1,134	2,073	1,679	51	54	46	30
Ohio	4,946	4,218	17.2%	785	739	4,121	3,438	25	27	16	15
Wisconsin	2,321	1,943	19.4%	2,038	1,679	218	192	6	10	59	63
West North Central	4,917	3,100	58.6%	4,255	2,638	569	358	32	30	62	74
Iowa	1,179	658	79.2%	1,118	592	NM	0	10	8	50	57
Kansas	573	233	145.6%	571	227	0	0	0	0	NM	7
Minnesota	1,479	1,148	28.8%	1,250	981	214	150	7	10	7	7
Missouri	960	715	34.2%	590	494	354	207	14	12	2	3
Nebraska	309	115	167.8%	308	115	0	0	1	0	0	0
North Dakota	174	101	72.8%	173	100	0	0	0	0	1	1
South Dakota	243	129	88.2%	243	129	0	0	0	0	0	0
South Atlantic	40,655	37,057	9.7%	33,226	29,747	6,846	6,796	114	104	470	411
Delaware	670	724	-7.5%	6	7	562	633	0	0	102	84
District of Columbia	0	0	17.4%	0	0	0	0	0	0	0	0
Florida	18,698	17,427	7.3%	17,699	16,406	849	877	1	2	149	141
Georgia	6,298	5,052	24.7%	4,591	3,817	1,651	1,182	0	0	56	53
Maryland	1,522	1,697	-10.3%	414	435	999	1,164	104	92	4	7
North Carolina	4,150	4,307	-3.6%	3,282	3,600	847	689	NM	9	14	9
South Carolina	2,624	2,478	5.9%	2,549	2,132	66	337	0	0	9	9
Virginia	6,410	5,189	23.5%	4,645	3,336	1,688	1,790	1	0	76	63
West Virginia	282	183	54.2%	40	14	182	123	0	0	60	46
East South Central	14,760	13,935	5.9%	10,321	9,309	4,190	4,380	21	23	229	223
Alabama	6,015	5,765	4.3%	2,232	1,813	3,669	3,842	0	0	115	110
Kentucky	1,369	1,461	-6.3%	1,331	1,386	19	61	0	0	19	13
Mississippi	5,643	5,142	9.8%	5,107	4,619	500	476	0	0	36	47
Tennessee	1,733	1,568	10.5%	1,651	1,491	2	1	21	23	59	53
West South Central	45,813	39,735	15.3%	17,163	13,853	22,420	19,713	115	96	6,115	6,073
Arkansas	2,435	2,153	13.1%	2,289	2,005	117	117	NM	4	27	27
Louisiana	7,264	6,017	20.7%	4,332	3,507	618	335	17	16	2,298	2,158
Oklahoma	5,940	4,763	24.7%	3,897	2,954	2,004	1,764	0	0	38	45
Texas	30,174	26,802	12.6%	6,645	5,387	19,682	17,497	95	75	3,752	3,843
Mountain	13,534	12,579	7.6%	10,947	10,248	2,437	2,145	35	31	115	155
Arizona	5,413	5,011	8.0%	4,070	3,883	1,331	1,119	12	10	0	0
Colorado	1,880	1,574	19.5%	1,597	1,293	282	279	0	0	2	2
Idaho	517	381	35.5%	308	202	196	171	3	3	10	5
Montana	76	58	30.7%	58	38	18	20	0	0	NM	0
Nevada	3,094	3,117	-0.7%	2,859	2,870	190	192	6	6	38	49
New Mexico	1,447	1,260	14.8%	1,023	882	414	358	9	11	0	9
Utah	1,010	1,096	-7.9%	971	1,052	6	6	5	2	28	35
Wyoming	98	82	19.8%	63	28	0	0	0	0	35	54
Pacific Contiguous	13,871	14,351	-3.3%	5,986	5,659	6,820	7,563	152	179	914	950
California	9,784	10,278	-4.8%	3,546	3,257	5,187	5,909	147	174	903	938
Oregon	2,228	2,209	0.9%	1,157	1,157	1,060	1,043	4	4	7	5
Washington	1,859	1,864	-0.3%	1,282	1,245	573	611	0	1	4	7
Pacific Noncontiguous	375	247	51.6%	369	242	0	0	0	0	6	6
Alaska	375	247	51.6%	369	242	0	0	0	0	6	6
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	176,454	161,650	9.2%	89,675	78,025	77,288	74,104	842	892	8,649	8,630

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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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	33,355	34,280	-2.7%	134	180	31,495	32,366	723	732	1,003	1,002
Connecticut	14,055	12,664	11.0%	23	38	13,348	11,929	262	272	422	426
Maine	1,115	1,573	-29.1%	0	0	806	1,266	20	20	288	286
Massachusetts	11,026	13,100	-15.8%	107	114	10,344	12,407	400	401	175	177
New Hampshire	2,266	1,978	14.5%	4	27	2,235	1,925	8	5	20	21
Rhode Island	4,892	4,965	-1.5%	0	0	4,762	4,840	32	33	98	92
Vermont	1	1	24.6%	1	0	0	0	1	1	0	0
Middle Atlantic	124,956	109,753	13.9%	7,132	7,527	115,346	99,716	765	832	1,713	1,677
New Jersey	27,056	25,949	4.3%	103	108	26,593	25,433	88	134	272	273
New York	33,447	33,935	-1.4%	7,026	7,414	25,434	25,517	588	604	399	399
Pennsylvania	64,453	49,870	29.2%	2	6	63,319	48,765	89	94	1,042	1,005
East North Central	105,151	92,369	13.8%	35,582	32,495	65,986	56,531	993	993	2,590	2,350
Illinois	12,892	12,170	5.9%	1,169	986	11,044	10,500	266	242	413	442
Indiana	20,790	18,306	13.6%	8,596	8,149	10,870	8,996	122	125	1,202	1,035
Michigan	22,816	22,202	2.8%	7,636	7,785	14,372	13,717	412	409	396	290
Ohio	34,563	28,271	22.3%	5,536	5,487	28,729	22,485	151	168	147	131
Wisconsin	14,090	11,421	23.4%	12,644	10,089	971	833	41	48	433	451
West North Central	22,986	21,293	7.9%	19,650	18,166	2,618	2,415	232	217	487	494
Iowa	5,591	5,196	7.6%	5,183	4,789	NM	5	72	69	330	333
Kansas	2,445	2,271	7.6%	2,391	2,225	0	0	0	0	54	47
Minnesota	7,190	6,567	9.5%	6,245	5,555	799	861	68	71	78	80
Missouri	5,169	4,944	4.6%	3,248	3,291	1,814	1,549	88	75	19	28
Nebraska	899	683	31.6%	895	680	0	0	4	3	0	0
North Dakota	812	734	10.7%	807	727	0	0	0	0	6	7
South Dakota	881	898	-2.0%	881	898	0	0	0	0	0	0
South Atlantic	260,109	238,302	9.2%	214,805	195,243	41,077	39,588	810	632	3,417	2,839
Delaware	3,446	3,713	-7.2%	23	14	2,684	3,206	0	0	739	493
District of Columbia	15	19	-21.5%	0	0	0	0	15	19	0	0
Florida	121,771	113,715	7.1%	116,020	107,502	4,663	5,179	13	19	1,076	1,014
Georgia	38,241	35,342	8.2%	28,597	26,838	9,222	8,111	0	0	422	393
Maryland	10,624	8,838	20.2%	3,050	2,546	6,810	5,703	716	528	48	61
North Carolina	28,056	28,715	-2.3%	22,231	24,663	5,665	3,911	57	58	103	84
South Carolina	16,278	13,314	22.3%	15,756	11,819	441	1,413	0	0	80	82
Virginia	40,490	33,782	19.9%	28,980	21,736	10,968	11,547	9	8	533	492
West Virginia	1,188	864	37.5%	148	126	625	518	0	0	416	220
East South Central	91,865	93,682	-1.9%	62,443	62,929	27,437	28,945	142	149	1,843	1,660
Alabama	38,340	39,544	-3.0%	13,838	13,812	23,625	24,894	0	0	876	838
Kentucky	9,424	9,956	-5.3%	9,036	9,351	234	479	0	0	154	126
Mississippi	32,906	35,663	-7.7%	29,044	31,794	3,565	3,560	0	0	297	309
Tennessee	11,195	8,519	31.4%	10,524	7,971	12	11	142	149	517	387
West South Central	261,500	252,409	3.6%	91,128	86,193	124,068	121,274	675	571	45,629	44,371
Arkansas	13,689	15,577	-12.1%	12,584	14,472	866	875	24	29	215	201
Louisiana	48,216	42,157	14.4%	26,984	23,151	3,350	2,794	106	111	17,777	16,101
Oklahoma	29,990	28,958	3.6%	18,888	17,353	10,837	11,365	0	0	264	240
Texas	169,606	165,716	2.3%	32,672	31,216	109,016	106,240	545	431	27,374	27,829
Mountain	75,877	67,812	11.9%	61,110	55,029	13,542	11,473	277	270	947	1,041
Arizona	29,484	22,706	29.9%	22,104	18,017	7,288	4,593	92	96	0	0
Colorado	11,570	11,209	3.2%	9,883	9,511	1,672	1,685	1	0	14	13
Idaho	2,238	1,836	21.9%	1,267	793	866	960	26	26	80	57
Montana	359	280	28.2%	255	225	102	53	0	0	2	2
Nevada	17,096	18,172	-5.9%	15,415	16,477	1,424	1,399	44	43	214	254
New Mexico	7,904	7,715	2.4%	5,690	4,900	2,141	2,732	67	68	4	15
Utah	6,574	5,324	23.5%	6,229	4,962	48	49	47	37	250	276
Wyoming	652	569	14.5%	267	144	1	1	0	0	384	424
Pacific Contiguous	72,608	74,131	-2.1%	28,969	29,423	35,539	36,377	1,144	1,292	6,957	7,039
California	51,471	56,634	-9.1%	17,295	19,391	26,216	29,068	1,107	1,248	6,854	6,927
Oregon	12,866	10,501	22.5%	6,338	5,665	6,448	4,759	30	30	51	47
Washington	8,271	6,996	18.2%	5,337	4,366	2,876	2,550	7	14	52	66
Pacific Noncontiguous	2,021	2,028	-0.4%	1,973	1,987	0	0	0	0	48	41
Alaska	2,021	2,028	-0.4%	1,973	1,987	0	0	0	0	48	41
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,050,428	986,060	6.5%	522,924	489,171	457,109	428,685	5,761	5,689	64,634	62,516

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-August 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

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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	64	47	35.2%	0	0	0	1	0	0	64	46
New Jersey	19	17	10.0%	0	0	0	0	0	0	19	17
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	45	30	49.5%	0	0	0	1	0	0	45	29
East North Central	453	483	-6.2%	16	24	200	198	0	0	236	261
Illinois	24	27	-12.0%	0	0	0	0	0	0	24	27
Indiana	203	220	-7.6%	0	0	0	0	0	0	203	220
Michigan	166	161	3.3%	16	24	150	137	0	0	0	0
Ohio	60	75	-20.2%	0	0	51	61	0	0	10	15
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	-4.4%	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	-4.4%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	27	33	-17.9%	0	0	0	0	0	0	27	33
Delaware	23	29	-21.1%	0	0	0	0	0	0	23	29
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-98.3%	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	4	3	27.0%	0	0	0	0	0	0	4	3
East South Central	NM	2	NM	0	0	0	0	0	0	NM	2
Alabama	NM	1	NM	0	0	0	0	0	0	NM	1
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	-5.7%	0	0	0	0	0	0	1	1
West South Central	482	522	-7.6%	0	0	150	120	0	0	333	402
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	222	295	-24.7%	0	0	0	0	0	0	222	295
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	260	227	14.7%	0	0	150	120	0	0	110	107
Mountain	14	34	-57.6%	0	0	1	1	0	0	13	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	-7.5%	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	325.5%	0	0	0	0	0	0	2	1
Wyoming	11	32	-66.3%	0	0	0	0	0	0	11	32
Pacific Contiguous	156	171	-9.1%	0	0	36	48	0	0	119	123
California	119	123	-3.3%	0	0	0	0	0	0	119	123
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	36	48	-24.1%	0	0	36	48	0	0	0	0
Pacific Noncontiguous	0	5	-95.2%	0	0	0	0	0	0	0	5
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	5	-95.2%	0	0	0	0	0	0	0	5
U.S. Total	1,202	1,301	-7.6%	16	24	388	369	0	0	798	909

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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	506	509	-0.6%	0	0	0	1	0	0	506	507
New Jersey	141	141	0.0%	0	0	0	0	0	0	141	141
New York	2	0	--	0	0	0	0	0	0	2	0
Pennsylvania	363	367	-1.3%	0	0	0	1	0	0	363	366
East North Central	3,455	3,383	2.1%	122	148	1,498	1,427	0	0	1,834	1,808
Illinois	166	132	25.9%	0	0	0	0	0	0	166	132
Indiana	1,562	1,575	-0.9%	0	0	0	0	0	0	1,562	1,575
Michigan	1,218	1,150	5.9%	122	148	1,096	1,002	0	0	0	0
Ohio	508	525	-3.2%	0	0	403	425	0	0	106	101
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	34	33	0.5%	0	0	0	0	0	0	34	33
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	34	33	0.5%	0	0	0	0	0	0	34	33
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	161	182	-11.5%	0	0	0	0	0	0	161	182
Delaware	132	163	-19.3%	0	0	0	0	0	0	132	163
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	4	-97.0%	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	29	15	90.8%	0	0	0	0	0	0	29	15
East South Central	11	10	10.8%	0	0	0	0	0	0	11	10
Alabama	NM	3	NM	0	0	0	0	0	0	NM	3
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	8	7	14.3%	0	0	0	0	0	0	8	7
West South Central	3,627	3,456	4.9%	0	0	1,149	968	0	0	2,477	2,488
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,715	1,723	-0.5%	0	0	0	0	0	0	1,715	1,723
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	1,912	1,733	10.3%	0	0	1,149	968	0	0	763	765
Mountain	172	254	-32.4%	0	0	6	8	0	0	166	246
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	6	8	-24.1%	0	0	6	8	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	11	3	217.2%	0	0	0	0	0	0	11	3
Wyoming	155	243	-36.2%	0	0	0	0	0	0	155	243
Pacific Contiguous	1,213	1,310	-7.4%	0	0	200	287	0	0	1,013	1,023
California	1,013	1,023	-1.0%	0	0	0	0	0	0	1,013	1,023
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	200	287	-30.5%	0	0	200	287	0	0	0	0
Pacific Noncontiguous	4	39	-90.0%	0	0	0	0	0	0	4	39
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	4	39	-90.0%	0	0	0	0	0	0	4	39
U.S. Total	9,181	9,177	0.0%	122	148	2,853	2,691	0	0	6,206	6,337

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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 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	2,462	2,847	-13.5%	0	0	2,462	2,847	0	0	0	0
Connecticut	1,536	1,528	0.5%	0	0	1,536	1,528	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	391	-100.0%	0	0	0	391	0	0	0	0
New Hampshire	926	928	-0.2%	0	0	926	928	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	13,605	13,576	0.2%	0	0	13,605	13,576	0	0	0	0
New Jersey	2,298	2,849	-19.3%	0	0	2,298	2,849	0	0	0	0
New York	3,916	3,718	5.3%	0	0	3,916	3,718	0	0	0	0
Pennsylvania	7,390	7,009	5.4%	0	0	7,390	7,009	0	0	0	0
East North Central	13,670	14,062	-2.8%	2,464	2,439	11,206	11,624	0	0	0	0
Illinois	8,351	8,579	-2.7%	0	0	8,351	8,579	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	3,040	3,025	0.5%	2,464	2,439	576	586	0	0	0	0
Ohio	1,421	1,576	-9.8%	0	0	1,421	1,576	0	0	0	0
Wisconsin	858	883	-2.8%	0	0	858	883	0	0	0	0
West North Central	4,086	4,009	1.9%	3,640	3,597	446	412	0	0	0	0
Iowa	446	412	8.2%	0	0	446	412	0	0	0	0
Kansas	893	888	0.6%	893	888	0	0	0	0	0	0
Minnesota	1,266	1,246	1.6%	1,266	1,246	0	0	0	0	0	0
Missouri	902	888	1.6%	902	888	0	0	0	0	0	0
Nebraska	579	575	0.7%	579	575	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	18,052	18,180	-0.7%	16,767	16,897	1,284	1,283	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	2,735	2,449	11.7%	2,735	2,449	0	0	0	0	0	0
Georgia	3,020	3,041	-0.7%	3,020	3,041	0	0	0	0	0	0
Maryland	1,284	1,283	0.1%	0	0	1,284	1,283	0	0	0	0
North Carolina	3,839	3,846	-0.2%	3,839	3,846	0	0	0	0	0	0
South Carolina	4,504	4,904	-8.1%	4,504	4,904	0	0	0	0	0	0
Virginia	2,669	2,657	0.5%	2,669	2,657	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	8,300	7,747	7.1%	8,300	7,747	0	0	0	0	0	0
Alabama	3,991	3,700	7.8%	3,991	3,700	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	1,046	868	20.6%	1,046	868	0	0	0	0	0	0
Tennessee	3,263	3,180	2.6%	3,263	3,180	0	0	0	0	0	0
West South Central	6,429	6,468	-0.6%	2,739	2,812	3,690	3,656	0	0	0	0
Arkansas	1,353	1,316	2.8%	1,353	1,316	0	0	0	0	0	0
Louisiana	1,386	1,496	-7.3%	1,386	1,496	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,690	3,656	0.9%	0	0	3,690	3,656	0	0	0	0
Mountain	2,782	2,923	-4.9%	2,782	2,923	0	0	0	0	0	0
Arizona	2,782	2,923	-4.9%	2,782	2,923	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	2,526	2,470	2.3%	2,526	2,470	0	0	0	0	0	0
California	1,678	1,621	3.5%	1,678	1,621	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	848	849	-0.1%	848	849	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	71,911	72,282	-0.5%	39,218	38,885	32,693	33,398	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 1.9.B. Utility Scale Facility Net Generation from Nuclear Energy

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	20,330	22,248	-8.6%	0	0	20,330	22,248	0	0	0	0
Connecticut	10,881	12,149	-10.4%	0	0	10,881	12,149	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	2,177	2,808	-22.5%	0	0	2,177	2,808	0	0	0	0
New Hampshire	7,272	7,290	-0.2%	0	0	7,272	7,290	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	103,854	106,981	-2.9%	0	0	103,854	106,981	0	0	0	0
New Jersey	17,713	22,832	-22.4%	0	0	17,713	22,832	0	0	0	0
New York	29,110	28,546	2.0%	0	0	29,110	28,546	0	0	0	0
Pennsylvania	57,031	55,604	2.6%	0	0	57,031	55,604	0	0	0	0
East North Central	105,990	106,164	-0.2%	17,690	16,789	88,299	89,375	0	0	0	0
Illinois	66,532	65,729	1.2%	0	0	66,532	65,729	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	22,189	21,403	3.7%	17,690	16,789	4,499	4,614	0	0	0	0
Ohio	10,772	12,018	-10.4%	0	0	10,772	12,018	0	0	0	0
Wisconsin	6,496	7,014	-7.4%	0	0	6,496	7,014	0	0	0	0
West North Central	30,139	30,481	-1.1%	26,679	27,033	3,460	3,448	0	0	0	0
Iowa	3,460	3,448	0.3%	0	0	3,460	3,448	0	0	0	0
Kansas	7,089	5,593	26.7%	7,089	5,593	0	0	0	0	0	0
Minnesota	9,375	10,055	-6.8%	9,375	10,055	0	0	0	0	0	0
Missouri	5,607	7,065	-20.6%	5,607	7,065	0	0	0	0	0	0
Nebraska	4,608	4,319	6.7%	4,608	4,319	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	137,633	137,924	-0.2%	127,848	128,160	9,785	9,764	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	19,520	20,372	-4.2%	19,520	20,372	0	0	0	0	0	0
Georgia	21,799	22,959	-5.1%	21,799	22,959	0	0	0	0	0	0
Maryland	9,785	9,764	0.2%	0	0	9,785	9,764	0	0	0	0
North Carolina	27,741	28,074	-1.2%	27,741	28,074	0	0	0	0	0	0
South Carolina	38,580	37,252	3.6%	38,580	37,252	0	0	0	0	0	0
Virginia	20,208	19,502	3.6%	20,208	19,502	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	62,215	55,334	12.4%	62,215	55,334	0	0	0	0	0	0
Alabama	29,117	26,581	9.5%	29,117	26,581	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	7,652	3,362	127.6%	7,652	3,362	0	0	0	0	0	0
Tennessee	25,446	25,391	0.2%	25,446	25,391	0	0	0	0	0	0
West South Central	44,517	48,471	-8.2%	16,959	20,180	27,558	28,291	0	0	0	0
Arkansas	9,141	9,035	1.2%	9,141	9,035	0	0	0	0	0	0
Louisiana	7,819	11,145	-29.8%	7,819	11,145	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	27,558	28,291	-2.6%	0	0	27,558	28,291	0	0	0	0
Mountain	21,910	21,514	1.8%	21,910	21,514	0	0	0	0	0	0
Arizona	21,910	21,514	1.8%	21,910	21,514	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	17,526	18,233	-3.9%	17,526	18,233	0	0	0	0	0	0
California	12,044	11,870	1.5%	12,044	11,870	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	5,482	6,364	-13.8%	5,482	6,364	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	544,114	547,351	-0.6%	290,828	287,244	253,286	260,107	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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	460	415	11.0%	65	58	388	350	0	0	NM	6
Connecticut	36	31	16.0%	0	3	35	28	0	0	0	0
Maine	219	179	22.7%	0	0	212	173	0	0	NM	6
Massachusetts	75	62	19.6%	NM	15	58	47	0	0	0	0
New Hampshire	55	74	-25.6%	28	20	NM	54	0	0	0	0
Rhode Island	0	0	-67.1%	0	0	0	0	0	0	0	0
Vermont	75	68	10.1%	NM	21	56	48	0	0	0	0
Middle Atlantic	2,758	2,833	-2.7%	2,197	2,109	557	720	0	0	NM	3
New Jersey	0	4	-100.0%	0	0	0	4	0	0	0	0
New York	2,475	2,475	0.0%	2,194	2,099	277	372	0	0	NM	3
Pennsylvania	282	354	-20.2%	3	10	280	344	0	0	0	0
East North Central	278	335	-17.1%	245	298	NM	26	0	0	NM	11
Illinois	13	12	7.1%	NM	6	NM	6	0	0	0	0
Indiana	NM	17	NM	NM	17	0	0	0	0	0	0
Michigan	97	119	-18.5%	89	110	NM	9	0	0	NM	1
Ohio	NM	19	NM	NM	17	0	1	0	0	0	0
Wisconsin	150	169	-10.9%	133	148	NM	9	0	0	NM	11
West North Central	845	779	8.5%	822	757	NM	16	0	0	7	5
Iowa	55	53	4.4%	NM	52	1	1	0	0	0	0
Kansas	1	2	-42.5%	0	0	1	2	0	0	0	0
Minnesota	66	60	9.3%	NM	41	NM	13	0	0	7	5
Missouri	NM	46	NM	NM	46	0	0	0	0	0	0
Nebraska	87	79	10.5%	87	79	0	0	0	0	0	0
North Dakota	209	181	15.1%	209	181	0	0	0	0	0	0
South Dakota	422	357	18.1%	422	357	0	0	0	0	0	0
South Atlantic	983	1,710	-42.5%	813	1,309	112	337	1	1	57	62
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	21	NM	NM	21	0	0	0	0	0	0
Georgia	173	231	-25.0%	171	230	NM	1	0	0	1	1
Maryland	71	274	-74.1%	0	0	71	274	0	0	0	0
North Carolina	388	588	-33.9%	384	583	NM	4	1	1	NM	0
South Carolina	124	269	-53.8%	121	263	NM	7	0	0	0	0
Virginia	80	161	-50.6%	77	155	NM	6	0	0	0	0
West Virginia	131	166	-20.7%	45	58	31	45	0	0	56	62
East South Central	1,608	1,884	-14.7%	1,607	1,884	NM	1	0	0	0	0
Alabama	578	758	-23.8%	578	758	0	0	0	0	0	0
Kentucky	346	378	-8.5%	345	377	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	684	748	-8.6%	684	748	0	0	0	0	0	0
West South Central	272	541	-49.6%	173	446	100	94	0	0	0	0
Arkansas	93	224	-58.2%	89	219	NM	5	0	0	0	0
Louisiana	92	86	7.5%	0	0	92	86	0	0	0	0
Oklahoma	71	148	-52.2%	71	148	0	0	0	0	0	0
Texas	NM	83	NM	NM	79	3	4	0	0	0	0
Mountain	2,467	3,202	-23.0%	2,377	3,083	87	117	2	2	0	0
Arizona	631	657	-4.0%	631	657	0	0	0	0	0	0
Colorado	136	166	-18.2%	116	145	NM	19	2	2	0	0
Idaho	685	1,003	-31.7%	632	926	NM	77	0	0	0	0
Montana	706	1,038	-32.0%	698	1,026	NM	12	0	0	0	0
Nevada	177	150	18.1%	172	144	NM	7	0	0	0	0
New Mexico	NM	14	NM	NM	14	0	0	0	0	0	0
Utah	NM	84	NM	NM	84	0	0	0	0	0	0
Wyoming	NM	90	NM	NM	88	2	2	0	0	0	0
Pacific Contiguous	11,010	10,190	8.1%	10,754	9,995	255	194	NM	0	0	0
California	3,958	2,844	39.2%	3,744	2,693	214	151	NM	0	0	0
Oregon	1,767	1,943	-9.0%	1,752	1,926	NM	17	0	0	0	0
Washington	5,285	5,403	-2.2%	5,259	5,376	NM	27	0	0	0	0
Pacific Noncontiguous	112	129	-13.3%	95	110	2	4	NM	13	NM	3
Alaska	106	121	-12.7%	94	108	0	0	NM	13	0	0
Hawaii	NM	8	NM	1	2	2	4	0	0	NM	3
U.S. Total	20,792	22,017	-5.6%	19,148	20,050	1,541	1,858	NM	17	87	91

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

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

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	5,101	4,899	4.1%	743	694	4,279	4,128	4	3	76	74
Connecticut	368	355	3.7%	28	23	340	332	0	0	0	0
Maine	2,186	2,111	3.5%	0	0	2,111	2,037	0	0	76	74
Massachusetts	761	733	3.8%	188	173	569	557	4	3	0	0
New Hampshire	924	876	5.5%	246	240	678	636	0	0	0	0
Rhode Island	3	2	13.8%	0	0	3	2	0	0	0	0
Vermont	858	821	4.6%	280	258	578	563	0	0	0	0
Middle Atlantic	22,688	22,590	0.4%	16,856	16,808	5,784	5,736	5	4	43	42
New Jersey	24	23	1.5%	0	0	24	23	0	0	0	0
New York	19,816	19,735	0.4%	16,774	16,720	2,994	2,970	5	4	43	42
Pennsylvania	2,848	2,831	0.6%	82	88	2,766	2,743	0	0	0	0
East North Central	2,766	2,893	-4.4%	2,458	2,568	226	227	1	1	81	97
Illinois	88	94	-5.7%	31	38	56	56	1	1	0	0
Indiana	151	142	6.3%	151	142	0	0	0	0	0	0
Michigan	921	1,001	-8.0%	844	918	70	76	0	0	NM	6
Ohio	194	156	25.0%	172	145	22	11	0	0	0	0
Wisconsin	1,411	1,501	-6.0%	1,259	1,326	77	84	0	0	75	91
West North Central	8,607	8,113	6.1%	8,385	7,897	157	160	0	0	65	56
Iowa	524	549	-4.6%	519	545	6	4	0	0	0	0
Kansas	12	16	-24.5%	0	0	12	16	0	0	0	0
Minnesota	626	627	-0.2%	421	431	139	141	0	0	65	56
Missouri	627	490	27.9%	627	490	0	0	0	0	0	0
Nebraska	828	821	0.9%	828	821	0	0	0	0	0	0
North Dakota	1,978	1,889	4.7%	1,978	1,889	0	0	0	0	0	0
South Dakota	4,012	3,721	7.8%	4,012	3,721	0	0	0	0	0	0
South Atlantic	13,600	11,893	14.4%	10,843	9,321	2,271	2,149	14	9	473	414
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	155	137	13.3%	155	137	0	0	0	0	0	0
Georgia	2,605	2,309	12.8%	2,585	2,294	NM	7	0	0	7	8
Maryland	1,788	1,711	4.5%	0	0	1,788	1,711	0	0	0	0
North Carolina	4,499	3,809	18.1%	4,442	3,768	39	34	12	7	NM	0
South Carolina	2,138	1,782	20.0%	2,084	1,728	52	52	2	1	0	0
Virginia	1,181	1,056	11.9%	1,140	1,010	41	46	0	0	0	0
West Virginia	1,234	1,089	13.3%	436	385	338	299	0	0	460	405
East South Central	17,572	18,405	-4.5%	17,565	18,397	NM	8	0	0	0	0
Alabama	7,875	7,683	2.5%	7,875	7,683	0	0	0	0	0	0
Kentucky	2,759	3,198	-13.7%	2,752	3,190	NM	8	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	6,937	7,524	-7.8%	6,937	7,524	0	0	0	0	0	0
West South Central	5,106	5,361	-4.8%	4,262	4,440	843	920	NM	1	0	0
Arkansas	2,106	2,187	-3.7%	2,071	2,155	35	33	0	0	0	0
Louisiana	779	862	-9.7%	0	0	779	862	0	0	0	0
Oklahoma	1,392	1,487	-6.4%	1,392	1,487	0	0	0	0	0	0
Texas	829	824	0.6%	799	798	28	24	NM	1	0	0
Mountain	21,676	25,531	-15.1%	20,879	24,590	787	931	9	10	0	0
Arizona	4,281	4,984	-14.1%	4,281	4,984	0	0	0	0	0	0
Colorado	1,188	1,346	-11.8%	1,033	1,181	145	155	9	10	0	0
Idaho	6,515	8,003	-18.6%	6,008	7,388	508	615	0	0	0	0
Montana	6,718	8,278	-18.8%	6,638	8,180	80	98	0	0	0	0
Nevada	1,715	1,431	19.8%	1,677	1,381	38	50	0	0	0	0
New Mexico	99	109	-8.4%	99	109	0	0	0	0	0	0
Utah	563	672	-16.2%	554	667	9	5	0	0	0	0
Wyoming	595	709	-16.0%	588	702	7	7	0	0	0	0
Pacific Contiguous	99,971	108,131	-7.5%	97,865	106,572	2,093	1,549	NM	10	0	0
California	31,210	19,917	56.7%	29,497	18,848	1,699	1,059	NM	10	0	0
Oregon	20,783	26,479	-21.5%	20,635	26,295	148	184	0	0	0	0
Washington	47,979	61,734	-22.3%	47,733	61,429	245	305	0	0	0	0
Pacific Noncontiguous	1,054	1,285	-18.0%	906	1,104	13	29	109	128	25	23
Alaska	1,007	1,216	-17.2%	899	1,088	0	0	109	128	0	0
Hawaii	46	69	-32.9%	7	16	13	29	0	0	25	23
U.S. Total	198,140	209,100	-5.2%	180,761	192,393	16,459	15,837	156	165	763	705

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	962	859	11.9%	83	61	763	693	11	14	104	90
Connecticut	86	80	7.7%	0	0	85	79	NM	0	NM	0
Maine	360	329	9.7%	0	0	253	234	4	5	104	90
Massachusetts	231	220	5.2%	13	5	214	210	3	4	NM	0
New Hampshire	161	130	23.8%	26	19	131	107	4	4	0	0
Rhode Island	38	31	21.8%	0	0	37	31	0	0	0	0
Vermont	86	70	22.2%	43	37	43	33	0	0	0	0
Middle Atlantic	1,111	1,064	4.5%	8	8	988	940	55	59	60	56
New Jersey	199	193	3.1%	8	8	164	157	26	27	NM	1
New York	511	465	9.8%	0	0	478	430	17	20	16	15
Pennsylvania	402	406	-0.9%	0	0	346	353	12	12	44	40
East North Central	2,045	1,783	14.7%	297	228	1,600	1,406	13	18	135	130
Illinois	715	611	17.0%	9	8	705	602	NM	1	0	0
Indiana	368	328	12.2%	41	37	320	284	2	2	5	5
Michigan	556	502	10.9%	145	106	351	326	4	11	56	58
Ohio	170	140	21.1%	NM	1	141	118	1	1	26	20
Wisconsin	235	202	16.5%	99	76	83	75	5	4	48	47
West North Central	5,149	4,871	5.7%	1,555	1,476	3,518	3,317	16	20	60	57
Iowa	1,394	1,237	12.7%	967	853	415	375	4	4	8	4
Kansas	1,442	1,379	4.5%	132	138	1,308	1,241	NM	1	0	0
Minnesota	909	849	7.0%	154	165	697	624	6	7	52	53
Missouri	173	218	-20.7%	3	4	166	208	4	6	0	0
Nebraska	417	367	13.8%	20	18	396	347	1	1	0	0
North Dakota	658	638	3.1%	234	243	424	395	NM	NM	0	0
South Dakota	156	182	-14.5%	45	55	111	127	0	0	0	0
South Atlantic	3,396	3,165	7.3%	588	473	1,847	1,710	38	44	923	937
Delaware	10	10	0.3%	NM	1	8	8	0	0	NM	1
District of Columbia	7	4	51.1%	0	0	NM	0	5	4	0	0
Florida	710	628	13.2%	348	238	196	215	3	5	163	169
Georgia	686	647	6.1%	31	30	291	248	NM	0	363	369
Maryland	122	131	-6.4%	NM	1	118	123	4	2	0	5
North Carolina	1,028	912	12.7%	42	42	862	738	12	18	111	114
South Carolina	292	256	13.9%	28	32	111	88	0	0	153	136
Virginia	451	467	-3.5%	137	130	168	180	13	14	132	143
West Virginia	91	110	-17.4%	0	0	91	110	0	0	0	0
East South Central	700	654	7.0%	15	15	131	114	NM	0	553	524
Alabama	363	340	6.8%	3	3	53	53	0	0	307	284
Kentucky	44	34	29.2%	12	12	1	1	0	0	32	21
Mississippi	164	166	-1.1%	0	0	31	33	0	0	133	133
Tennessee	128	114	12.5%	NM	0	45	27	NM	0	82	87
West South Central	9,475	8,274	14.5%	130	141	8,947	7,688	6	7	392	438
Arkansas	137	-532	-125.8%	NM	0	28	-644	2	0	107	112
Louisiana	187	218	-14.3%	NM	0	7	7	0	0	180	211
Oklahoma	2,070	2,115	-2.1%	109	117	1,934	1,972	0	0	27	26
Texas	7,081	6,473	9.4%	21	24	6,979	6,353	4	7	77	89
Mountain	4,056	3,819	6.2%	442	319	3,540	3,476	42	12	32	12
Arizona	627	593	5.7%	73	70	552	522	NM	1	0	0
Colorado	943	841	12.2%	178	24	763	815	NM	1	0	0
Idaho	263	275	-4.3%	NM	13	222	252	1	1	29	9
Montana	136	152	-10.9%	NM	16	121	134	0	0	2	2
Nevada	851	806	5.6%	4	4	809	795	37	7	0	0
New Mexico	636	514	23.6%	34	27	602	487	NM	0	0	0
Utah	348	350	-0.6%	20	19	328	330	0	1	0	0
Wyoming	253	288	-12.1%	111	147	142	141	0	0	0	0
Pacific Contiguous	7,427	8,027	-7.5%	658	858	6,463	6,843	80	87	226	238
California	6,011	6,031	-0.3%	221	247	5,642	5,629	76	84	72	71
Oregon	796	1,014	-21.5%	147	157	591	805	2	2	56	50
Washington	620	982	-36.9%	291	455	230	410	NM	1	98	116
Pacific Noncontiguous	117	114	2.0%	14	15	84	76	19	23	NM	0
Alaska	13	15	-13.8%	NM	7	NM	4	4	3	NM	0
Hawaii	104	100	4.4%	8	8	81	72	15	20	0	0
U.S. Total	34,437	32,629	5.5%	3,791	3,596	27,881	26,264	280	287	2,485	2,483

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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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	7,827	7,664	2.1%	558	514	6,396	6,306	101	117	772	726
Connecticut	638	573	11.2%	2	2	635	570	NM	1	NM	0
Maine	3,286	3,313	-0.8%	0	0	2,487	2,544	31	47	768	722
Massachusetts	1,675	1,676	-0.1%	105	51	1,530	1,585	35	36	NM	4
New Hampshire	1,253	1,234	1.5%	165	154	1,060	1,053	28	27	0	0
Rhode Island	327	261	25.3%	0	0	322	256	5	5	0	0
Vermont	648	606	7.0%	285	306	362	298	1	1	0	0
Middle Atlantic	9,848	9,490	3.8%	54	58	8,938	8,513	413	444	443	475
New Jersey	1,386	1,398	-0.9%	54	58	1,142	1,132	186	205	4	4
New York	4,629	4,209	10.0%	0	0	4,377	3,942	134	145	118	122
Pennsylvania	3,833	3,883	-1.3%	0	0	3,419	3,439	93	95	322	349
East North Central	23,370	21,181	10.3%	2,755	2,593	19,432	17,353	125	166	1,058	1,069
Illinois	9,317	8,057	15.6%	76	69	9,236	7,982	NM	6	0	0
Indiana	4,579	4,076	12.3%	290	297	4,236	3,717	12	15	40	47
Michigan	5,500	5,337	3.1%	1,557	1,403	3,461	3,385	44	87	437	462
Ohio	1,905	1,652	15.3%	14	13	1,687	1,443	10	9	195	187
Wisconsin	2,070	2,059	0.5%	818	810	813	827	53	50	385	372
West North Central	54,712	50,121	9.2%	18,135	16,099	35,983	33,424	123	129	471	469
Iowa	16,839	13,961	20.6%	11,816	9,580	4,955	4,328	30	31	39	22
Kansas	13,439	12,733	5.5%	1,234	1,271	12,194	11,453	10	10	0	-2
Minnesota	8,992	8,984	0.1%	1,693	1,822	6,823	6,678	47	38	429	446
Missouri	2,001	2,025	-1.2%	20	25	1,952	1,961	28	38	1	2
Nebraska	4,583	3,636	26.0%	237	164	4,339	3,462	7	10	0	0
North Dakota	7,015	6,933	1.2%	2,604	2,676	4,408	4,255	NM	NM	NM	1
South Dakota	1,843	1,850	-0.4%	531	561	1,312	1,288	0	0	0	0
South Atlantic	25,447	24,376	4.4%	4,481	3,603	13,766	13,351	278	344	6,921	7,078
Delaware	75	78	-4.7%	4	4	60	62	3	4	7	8
District of Columbia	47	38	22.0%	0	0	10	0	37	38	0	0
Florida	5,744	5,076	13.2%	2,802	1,771	1,646	1,973	30	34	1,266	1,297
Georgia	4,833	4,833	0.0%	218	205	1,943	1,845	2	2	2,671	2,781
Maryland	1,008	1,026	-1.7%	6	6	928	935	26	18	49	67
North Carolina	7,181	6,680	7.5%	282	289	5,999	5,393	83	135	817	863
South Carolina	2,171	1,961	10.7%	272	282	774	630	0	0	1,125	1,049
Virginia	3,234	3,489	-7.3%	897	1,045	1,252	1,319	98	114	987	1,012
West Virginia	1,155	1,194	-3.3%	0	0	1,155	1,194	0	0	0	0
East South Central	4,974	4,900	1.5%	108	113	924	830	3	3	3,940	3,955
Alabama	2,625	2,576	1.9%	21	22	383	387	0	0	2,221	2,166
Kentucky	319	312	2.0%	84	91	6	6	0	0	228	215
Mississippi	1,148	1,214	-5.4%	0	0	230	246	0	0	917	967
Tennessee	883	799	10.5%	NM	0	304	190	3	3	573	606
West South Central	80,654	75,259	7.2%	1,144	1,174	76,340	70,537	55	62	3,115	3,485
Arkansas	1,113	-2,385	-146.7%	NM	1	189	-3,295	5	4	917	905
Louisiana	1,465	1,752	-16.4%	NM	1	50	49	0	0	1,413	1,701
Oklahoma	18,759	19,179	-2.2%	950	961	17,614	17,998	0	0	196	219
Texas	59,317	56,714	4.6%	192	211	58,487	55,785	50	59	589	660
Mountain	33,159	31,882	4.0%	3,999	2,761	28,528	28,787	371	82	261	253
Arizona	4,253	4,221	0.8%	485	494	3,759	3,717	9	10	0	0
Colorado	8,147	7,396	10.2%	1,561	218	6,571	7,167	13	9	2	2
Idaho	2,517	2,599	-3.1%	113	119	2,154	2,239	6	7	244	235
Montana	1,510	1,433	5.4%	146	153	1,350	1,266	0	0	14	14
Nevada	6,149	5,879	4.6%	29	30	5,785	5,802	334	45	2	2
New Mexico	5,352	5,092	5.1%	211	189	5,139	4,901	NM	2	0	0
Utah	2,449	2,503	-2.2%	152	148	2,290	2,346	6	9	0	0
Wyoming	2,782	2,760	0.8%	1,303	1,411	1,479	1,349	0	0	0	0
Pacific Contiguous	55,295	55,796	-0.9%	5,348	6,106	47,698	47,403	585	654	1,664	1,633
California	42,761	41,638	2.7%	1,485	1,608	40,208	38,950	558	626	510	454
Oregon	6,289	6,977	-9.9%	920	1,056	4,955	5,555	19	19	396	346
Washington	6,244	7,181	-13.0%	2,943	3,442	2,536	2,898	8	8	757	833
Pacific Noncontiguous	978	954	2.5%	135	125	695	664	146	163	2	2
Alaska	128	139	-8.1%	66	68	36	39	24	30	2	2
Hawaii	850	815	4.3%	69	57	659	625	122	133	0	0
U.S. Total	296,264	281,626	5.2%	36,718	33,147	238,700	227,169	2,201	2,166	18,646	19,144

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	-42	-49	-13.3%	0	0	-42	-49	0	0	0	0
Connecticut	0	2	-82.8%	0	0	0	2	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-43	-51	-15.7%	0	0	-43	-51	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	-119	-136	-12.5%	-53	-64	-66	-73	0	0	0	0
New Jersey	-14	-19	-27.0%	-14	-19	0	0	0	0	0	0
New York	-39	-45	-13.1%	-39	-45	0	0	0	0	0	0
Pennsylvania	-66	-73	-8.3%	0	0	-66	-73	0	0	0	0
East North Central	-98	-117	-16.6%	-98	-117	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	-98	-117	-16.6%	-98	-117	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	2	-17	-110.0%	2	-17	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	2	-17	-110.0%	2	-17	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	-356	-306	16.2%	-356	-306	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	-120	-44	171.8%	-120	-44	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	-89	-77	16.0%	-89	-77	0	0	0	0	0	0
Virginia	-146	-185	-20.9%	-146	-185	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-68	-77	-12.1%	-68	-77	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	-68	-77	-12.1%	-68	-77	0	0	0	0	0	0
West South Central	-8	-12	-31.7%	-8	-12	0	0	0	0	0	0
Arkansas	2	1	122.0%	2	1	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-11	-13	-18.7%	-11	-13	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	14	-7	-290.2%	14	-7	0	0	0	0	0	0
Arizona	32	16	94.1%	32	16	0	0	0	0	0	0
Colorado	-18	-24	-23.2%	-18	-24	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	97	-25	-482.8%	97	-25	0	0	0	0	0	0
California	95	-28	-441.2%	95	-28	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	3	-23.6%	2	3	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	-579	-747	-22.5%	-470	-626	-109	-121	0	0	0	0

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 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 1.12.B. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	-303	-309	-2.0%	0	0	-303	-309	0	0	0	0
Connecticut	2	-2	-231.0%	0	0	2	-2	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-305	-307	-0.6%	0	0	-305	-307	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	-700	-841	-16.8%	-295	-405	-404	-436	0	0	0	0
New Jersey	-81	-111	-27.1%	-81	-111	0	0	0	0	0	0
New York	-214	-294	-27.0%	-214	-294	0	0	0	0	0	0
Pennsylvania	-404	-436	-7.3%	0	0	-404	-436	0	0	0	0
East North Central	-508	-498	2.0%	-508	-498	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	-508	-498	2.0%	-508	-498	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	348	5	NM	348	5	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	348	5	NM	348	5	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	-1,526	-1,707	-10.6%	-1,526	-1,707	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	-200	-330	-39.4%	-200	-330	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	-593	-408	45.2%	-593	-408	0	0	0	0	0	0
Virginia	-734	-969	-24.3%	-734	-969	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-417	-425	-2.0%	-417	-425	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	-417	-425	-2.0%	-417	-425	0	0	0	0	0	0
West South Central	-16	-58	-73.1%	-16	-58	0	0	0	0	0	0
Arkansas	49	30	63.3%	49	30	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-65	-88	-26.9%	-65	-88	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-103	-163	-36.9%	-103	-163	0	0	0	0	0	0
Arizona	27	36	-26.3%	27	36	0	0	0	0	0	0
Colorado	-130	-200	-35.0%	-130	-200	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	53	-14.5%	45	53	0	0	0	0	0	0
California	41	22	87.3%	41	22	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	4	31	-87.5%	4	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	-3,179	-3,944	-19.4%	-2,472	-3,199	-707	-745	0	0	0	0

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

Table 1.13.A. Utility Scale Facility Net Generation from Other Energy Sources by State, by Sector, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	169	150	12.6%	0	0	153	133	5	5	11	12
Connecticut	52	44	17.4%	0	0	52	44	0	0	0	0
Maine	30	32	-7.5%	0	0	14	15	5	5	11	12
Massachusetts	83	71	17.0%	0	0	83	71	0	0	0	0
New Hampshire	5	3	43.6%	0	0	5	3	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	229	192	19.1%	0	0	178	154	45	38	6	0
New Jersey	56	45	24.4%	0	0	35	33	15	12	6	0
New York	89	78	14.8%	0	0	70	59	20	19	0	0
Pennsylvania	84	70	20.4%	0	0	73	61	11	8	0	0
East North Central	82	80	1.5%	2	1	8	6	7	12	65	61
Illinois	24	24	-0.5%	0	0	-1	-2	0	0	25	26
Indiana	37	31	17.2%	0	0	0	0	2	2	35	30
Michigan	15	20	-25.5%	0	0	9	8	5	10	1	1
Ohio	1	1	15.3%	0	0	0	0	0	0	1	2
Wisconsin	5	4	21.6%	2	1	0	0	0	0	3	2
West North Central	40	43	-7.3%	18	24	14	13	4	3	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	-0.7%	0	0	0	0	0	0	0	0
Minnesota	34	37	-8.2%	13	19	14	13	4	3	4	3
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	5	-0.6%	5	5	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	398	373	6.6%	0	0	232	215	15	13	152	146
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	254	244	4.2%	0	0	133	128	0	0	121	116
Georgia	8	8	5.0%	0	0	0	0	0	0	8	8
Maryland	36	31	16.9%	0	0	36	31	0	0	0	0
North Carolina	47	45	5.9%	0	0	29	26	0	0	18	19
South Carolina	4	4	-0.8%	0	0	1	1	0	0	4	4
Virginia	48	43	13.2%	0	0	34	30	15	13	0	0
West Virginia	0	-1	-55.5%	0	0	0	-1	0	0	0	0
East South Central	6	8	-24.4%	6	8	0	0	0	0	0	0
Alabama	0	0	-100.0%	0	0	0	0	0	0	0	0
Kentucky	6	8	-20.8%	6	8	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	-99.1%	0	0	0	0	0	0	0	0
West South Central	89	117	-24.0%	0	0	7	13	0	0	82	104
Arkansas	0	0	-124.4%	0	0	0	0	0	0	0	0
Louisiana	46	59	-21.7%	0	0	0	0	0	0	46	59
Oklahoma	1	6	-91.4%	0	0	0	6	0	0	1	1
Texas	43	52	-17.5%	0	0	7	8	0	0	35	44
Mountain	64	64	0.5%	8	8	26	25	0	0	30	31
Arizona	0	0	0.8%	0	0	0	0	0	0	0	0
Colorado	6	4	27.3%	0	0	2	1	0	0	4	4
Idaho	6	5	4.6%	0	0	0	0	0	0	6	5
Montana	24	24	0.3%	0	0	24	24	0	0	0	0
Nevada	3	3	-14.9%	3	3	0	0	0	0	0	0
New Mexico	0	0	31.6%	0	0	0	0	0	0	0	0
Utah	19	19	2.2%	6	4	0	0	0	0	13	14
Wyoming	7	8	-13.6%	0	0	0	0	0	0	7	8
Pacific Contiguous	86	81	5.3%	-1	-2	26	20	0	0	61	63
California	76	74	3.5%	-1	-1	17	13	0	0	61	63
Oregon	4	3	25.9%	0	0	4	3	0	0	0	0
Washington	5	4	20.8%	0	0	5	4	0	0	0	0
Pacific Noncontiguous	36	36	0.0%	18	17	0	0	18	19	0	0
Alaska	0	0	11.4%	0	0	0	0	0	0	0	0
Hawaii	37	37	0.0%	18	18	0	0	18	19	0	0
U.S. Total	1,199	1,146	4.6%	51	56	644	579	93	90	411	421

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

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

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	1,257	1,151	9.2%	0	0	1,134	1,019	38	45	86	87
Connecticut	384	309	24.2%	0	0	384	309	0	0	0	0
Maine	237	250	-5.5%	0	0	113	118	38	45	86	87
Massachusetts	601	560	7.2%	0	0	601	561	0	0	0	0
New Hampshire	36	31	15.4%	0	0	36	31	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	1,658	1,450	14.3%	0	0	1,287	1,154	335	290	36	6
New Jersey	401	366	9.5%	0	0	259	263	107	97	36	6
New York	622	574	8.5%	0	0	469	441	154	132	0	0
Pennsylvania	635	510	24.4%	0	0	560	450	75	60	0	0
East North Central	591	566	4.4%	13	10	65	59	68	96	445	401
Illinois	176	170	3.5%	0	0	-7	-13	0	0	183	183
Indiana	237	195	21.4%	0	0	0	0	15	14	222	181
Michigan	138	168	-17.6%	0	0	72	75	52	82	14	11
Ohio	9	5	95.5%	-1	-2	0	-2	0	0	10	9
Wisconsin	31	29	7.4%	14	12	0	0	0	0	17	17
West North Central	275	312	-11.7%	129	158	93	93	18	22	36	39
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	3	3	-0.3%	0	0	0	0	0	0	3	3
Minnesota	236	273	-13.6%	93	122	93	93	18	22	32	35
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	36	34	5.0%	36	34	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,147	2,966	6.1%	-1	0	1,829	1,684	111	103	1,208	1,179
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,113	1,985	6.4%	-1	0	1,138	1,031	0	0	975	954
Georgia	64	57	11.3%	0	0	0	0	0	0	64	57
Maryland	212	223	-4.5%	0	0	212	223	0	0	0	0
North Carolina	364	360	0.9%	0	0	219	214	0	0	145	146
South Carolina	27	26	1.5%	0	0	3	5	0	0	24	21
Virginia	372	323	15.3%	0	0	261	220	111	103	0	0
West Virginia	-4	-9	-49.9%	0	0	-4	-9	0	0	0	0
East South Central	30	46	-34.0%	27	40	0	0	0	0	4	6
Alabama	0	0	-100.0%	0	0	0	0	0	0	0	0
Kentucky	27	40	-33.7%	27	40	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	4	6	-36.3%	0	0	0	0	0	0	4	6
West South Central	639	789	-19.0%	0	0	60	79	0	0	579	710
Arkansas	3	5	-44.6%	0	0	0	0	0	0	3	5
Louisiana	314	470	-33.2%	0	0	0	0	0	0	314	470
Oklahoma	5	34	-85.9%	0	0	1	31	0	0	4	4
Texas	317	280	13.5%	0	0	59	49	0	0	258	231
Mountain	471	514	-8.4%	56	55	204	213	0	0	211	246
Arizona	-3	-1	97.2%	0	0	-3	-1	0	0	0	0
Colorado	39	40	-2.7%	0	0	11	13	0	0	28	27
Idaho	45	44	2.4%	0	0	0	0	0	0	45	44
Montana	195	201	-2.9%	0	0	195	201	0	0	0	0
Nevada	15	20	-24.4%	15	20	0	0	0	0	0	0
New Mexico	-1	0	42.2%	-1	0	0	0	0	0	0	0
Utah	132	151	-12.7%	42	36	0	0	0	0	90	116
Wyoming	47	59	-19.7%	0	0	0	0	0	0	47	59
Pacific Contiguous	568	628	-9.7%	-10	-12	172	179	0	0	406	462
California	504	562	-10.4%	-10	-11	108	112	0	0	406	462
Oregon	20	27	-27.4%	0	0	20	28	0	0	0	0
Washington	44	39	12.5%	0	-1	44	40	0	0	0	0
Pacific Noncontiguous	255	248	2.8%	106	121	0	-1	150	128	0	0
Alaska	-2	-2	13.2%	-2	-2	0	0	0	0	0	0
Hawaii	258	250	2.9%	108	123	0	-1	150	128	0	0
U.S. Total	8,891	8,670	2.5%	320	372	4,844	4,481	717	682	3,010	3,135

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	204	159	28.7%	NM	11	189	146	NM	1	NM	0
Connecticut	NM	1	NM	0	0	NM	1	0	0	0	0
Maine	129	101	27.2%	0	0	129	101	0	0	0	0
Massachusetts	NM	11	NM	NM	3	NM	7	NM	1	NM	0
New Hampshire	25	18	40.5%	0	0	25	18	0	0	0	0
Rhode Island	12	9	37.7%	0	0	12	8	0	0	0	0
Vermont	24	18	29.6%	NM	8	14	11	0	0	0	0
Middle Atlantic	477	442	7.9%	0	0	477	442	NM	0	NM	NM
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	273	241	13.2%	0	0	272	241	NM	0	NM	NM
Pennsylvania	203	200	1.7%	0	0	203	200	0	0	0	0
East North Central	1,480	1,247	18.6%	192	139	1,282	1,104	NM	1	NM	3
Illinois	671	571	17.6%	NM	0	670	570	NM	0	0	0
Indiana	296	260	14.0%	0	0	296	260	0	0	0	0
Michigan	323	263	22.4%	135	96	188	167	0	0	0	0
Ohio	90	75	20.8%	NM	1	85	71	0	0	NM	3
Wisconsin	100	79	27.0%	55	42	43	36	NM	1	0	0
West North Central	4,793	4,569	4.9%	1,519	1,435	3,271	3,131	NM	3	0	0
Iowa	1,370	1,217	12.6%	965	851	404	365	0	0	0	0
Kansas	1,434	1,372	4.5%	132	137	1,301	1,234	NM	1	0	0
Minnesota	613	610	0.5%	127	137	484	472	NM	1	0	0
Missouri	153	195	-21.6%	0	0	153	195	0	0	0	0
Nebraska	410	355	15.3%	16	11	393	344	0	0	0	0
North Dakota	658	638	3.2%	234	243	424	395	NM	NM	0	0
South Dakota	156	182	-14.6%	45	55	111	127	0	0	0	0
South Atlantic	146	175	-16.5%	0	0	146	175	0	0	0	0
Delaware	0	0	17.5%	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	32	41	-23.3%	0	0	32	41	0	0	0	0
North Carolina	23	24	-0.5%	0	0	23	24	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	91	110	-17.4%	0	0	91	110	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	8,498	8,049	5.6%	122	133	8,371	7,910	3	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	2,034	2,080	-2.2%	102	111	1,932	1,970	0	0	0	0
Texas	6,463	5,968	8.3%	20	23	6,439	5,940	3	4	NM	1
Mountain	1,927	1,848	4.3%	310	198	1,617	1,649	NM	0	0	0
Arizona	43	38	14.4%	0	0	43	38	0	0	0	0
Colorado	795	716	11.0%	177	24	618	693	NM	0	0	0
Idaho	152	188	-19.2%	NM	11	143	177	0	0	0	0
Montana	130	147	-11.3%	NM	16	117	131	0	0	0	0
Nevada	25	22	12.2%	0	0	25	22	0	0	0	0
New Mexico	482	373	29.3%	0	0	482	373	NM	0	0	0
Utah	69	76	-9.0%	0	0	69	76	0	0	0	0
Wyoming	231	288	-19.9%	111	147	120	141	0	0	0	0
Pacific Contiguous	2,285	3,299	-30.7%	499	688	1,786	2,610	0	0	1	1
California	1,201	1,645	-27.0%	97	117	1,104	1,527	0	0	1	1
Oregon	607	834	-27.3%	141	151	466	683	0	0	0	0
Washington	477	819	-41.8%	261	419	216	400	0	0	0	0
Pacific Noncontiguous	53	55	-4.0%	NM	7	47	48	0	0	0	0
Alaska	NM	11	NM	NM	7	NM	4	0	0	0	0
Hawaii	44	44	0.0%	0	0	44	44	0	0	0	0
U.S. Total	19,867	19,845	0.1%	2,661	2,611	17,188	17,218	11	11	NM	5

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

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

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	2,409	2,266	6.3%	152	148	2,234	2,096	21	19	NM	2
Connecticut	NM	8	NM	0	0	NM	8	0	0	0	0
Maine	1,577	1,514	4.1%	0	0	1,577	1,514	0	0	0	0
Massachusetts	148	147	1.2%	38	38	93	92	16	14	NM	2
New Hampshire	275	258	6.4%	0	0	275	258	0	0	0	0
Rhode Island	147	102	44.5%	0	0	142	97	5	5	0	0
Vermont	253	237	6.9%	114	110	139	127	0	0	0	0
Middle Atlantic	5,349	4,936	8.3%	0	0	5,344	4,930	NM	2	NM	4
New Jersey	15	15	-0.1%	0	0	15	15	0	0	0	0
New York	2,998	2,584	16.0%	0	0	2,993	2,578	NM	2	NM	4
Pennsylvania	2,335	2,337	-0.1%	0	0	2,335	2,337	0	0	0	0
East North Central	19,272	17,001	13.4%	2,108	1,929	17,094	15,009	19	18	51	45
Illinois	8,989	7,721	16.4%	8	8	8,978	7,710	NM	3	0	0
Indiana	4,067	3,543	14.8%	0	0	4,067	3,543	0	0	0	0
Michigan	3,757	3,570	5.2%	1,492	1,335	2,265	2,235	0	0	0	0
Ohio	1,336	1,088	22.9%	NM	7	1,279	1,038	2	2	47	40
Wisconsin	1,123	1,080	4.0%	599	579	505	483	14	13	5	4
West North Central	52,299	47,711	9.6%	17,886	15,764	34,382	31,916	31	31	0	0
Iowa	16,682	13,812	20.8%	11,802	9,564	4,877	4,246	2	2	0	0
Kansas	13,385	12,684	5.5%	1,233	1,270	12,142	11,403	10	10	0	0
Minnesota	7,013	7,012	0.0%	1,527	1,582	5,469	5,414	16	17	0	0
Missouri	1,856	1,871	-0.8%	0	0	1,856	1,871	0	0	0	0
Nebraska	4,508	3,552	26.9%	189	112	4,319	3,441	0	0	0	0
North Dakota	7,014	6,932	1.2%	2,604	2,676	4,408	4,255	NM	NM	0	0
South Dakota	1,842	1,848	-0.4%	531	561	1,311	1,287	0	0	0	0
South Atlantic	1,873	1,956	-4.3%	0	0	1,869	1,953	3	3	0	0
Delaware	3	3	1.2%	0	0	0	0	3	3	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	370	394	-5.9%	0	0	370	394	0	0	0	0
North Carolina	344	365	-5.8%	0	0	344	365	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	1,155	1,194	-3.3%	0	0	1,155	1,194	0	0	0	0
East South Central	30	28	7.1%	0	0	30	28	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	30	28	7.1%	0	0	30	28	0	0	0	0
West South Central	73,894	72,205	2.3%	1,092	1,120	72,758	71,042	35	36	9	7
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	18,507	18,899	-2.1%	906	916	17,601	17,983	0	0	0	0
Texas	55,387	53,307	3.9%	186	205	55,157	53,059	35	36	9	7
Mountain	18,537	17,702	4.7%	3,110	1,886	15,420	15,812	NM	2	2	2
Arizona	387	361	7.4%	0	0	387	361	0	0	0	0
Colorado	7,171	6,522	9.9%	1,557	214	5,609	6,306	NM	0	2	2
Idaho	1,737	1,806	-3.8%	104	109	1,633	1,697	0	0	0	0
Montana	1,472	1,394	5.6%	146	153	1,327	1,241	0	0	0	0
Nevada	224	212	5.6%	0	0	224	212	0	0	0	0
New Mexico	4,328	4,100	5.6%	0	0	4,326	4,098	NM	2	0	0
Utah	571	546	4.5%	0	0	571	546	0	0	0	0
Wyoming	2,646	2,760	-4.1%	1,303	1,411	1,343	1,349	0	0	0	0
Pacific Contiguous	20,576	22,291	-7.7%	4,194	4,816	16,375	17,467	4	4	4	4
California	10,447	10,527	-0.8%	611	645	9,827	9,875	4	4	4	4
Oregon	4,993	5,789	-13.7%	879	1,012	4,114	4,777	0	0	0	0
Washington	5,137	5,974	-14.0%	2,703	3,159	2,433	2,816	0	0	0	0
Pacific Noncontiguous	501	523	-4.1%	66	68	436	455	0	0	0	0
Alaska	102	107	-4.8%	66	68	36	39	0	0	0	0
Hawaii	399	416	-3.9%	0	0	399	416	0	0	0	0
U.S. Total	194,740	186,620	4.4%	28,607	25,732	165,941	160,708	120	115	72	64

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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 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	590	569	3.7%	55	45	421	422	10	13	104	90
Connecticut	68	71	-4.5%	0	0	68	71	0	0	0	0
Maine	230	226	1.8%	0	0	122	131	4	5	104	90
Massachusetts	93	98	-5.7%	0	0	91	95	2	3	0	0
New Hampshire	136	112	21.1%	26	19	106	89	4	4	0	0
Rhode Island	18	20	-6.7%	0	0	18	20	0	0	0	0
Vermont	45	42	7.8%	29	26	16	16	0	0	0	0
Middle Atlantic	431	468	-7.9%	0	0	332	369	41	45	59	54
New Jersey	69	82	-15.0%	0	0	56	68	13	13	0	0
New York	173	187	-7.7%	0	0	141	153	16	20	16	15
Pennsylvania	189	199	-5.1%	0	0	135	148	11	12	43	39
East North Central	481	463	3.7%	77	66	264	255	10	16	130	127
Illinois	37	33	11.5%	9	7	28	26	0	0	0	0
Indiana	35	36	-1.3%	25	25	4	4	2	2	5	5
Michigan	215	223	-3.5%	0	0	156	154	4	11	56	58
Ohio	62	52	18.3%	0	0	40	35	1	1	22	17
Wisconsin	131	119	10.2%	44	34	36	35	3	2	48	47
West North Central	162	176	-7.7%	34	40	56	61	13	17	60	57
Iowa	23	20	16.6%	NM	1	10	10	4	4	8	4
Kansas	5	6	-11.5%	0	0	5	6	0	0	0	0
Minnesota	120	128	-5.5%	27	29	37	40	5	5	52	53
Missouri	9	14	-35.3%	2	3	3	4	3	6	0	0
Nebraska	5	9	-47.5%	4	7	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	1,708	1,737	-1.6%	208	211	554	559	23	30	923	937
Delaware	4	5	-9.2%	0	0	4	4	0	0	NM	1
District of Columbia	5	4	14.0%	0	0	0	0	5	4	0	0
Florida	379	417	-9.1%	65	63	148	181	3	4	163	169
Georgia	474	444	6.7%	0	0	110	75	0	0	363	369
Maryland	37	44	-15.8%	0	0	36	38	2	1	0	5
North Carolina	232	231	0.7%	0	0	121	111	NM	6	111	114
South Carolina	216	203	6.3%	27	32	36	35	0	0	152	136
Virginia	361	389	-7.2%	116	117	100	115	13	14	132	143
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	584	560	4.3%	7	8	24	28	0	0	553	524
Alabama	323	303	6.3%	0	0	16	20	0	0	307	284
Kentucky	40	30	32.2%	7	8	1	1	0	0	32	21
Mississippi	134	134	0.2%	0	0	NM	1	0	0	133	133
Tennessee	87	93	-5.7%	0	0	6	7	0	0	81	86
West South Central	484	-155	-412.1%	0	0	93	-595	0	3	390	437
Arkansas	113	-553	-120.5%	0	0	6	-666	0	0	107	112
Louisiana	187	218	-14.3%	0	0	7	7	0	0	180	211
Oklahoma	29	28	1.2%	0	0	2	3	0	0	27	26
Texas	156	152	2.3%	0	0	79	61	0	3	76	88
Mountain	89	71	25.5%	NM	1	56	56	1	2	31	11
Arizona	20	19	4.9%	0	0	20	19	0	0	0	0
Colorado	15	15	-0.1%	0	0	15	15	0	0	0	0
Idaho	42	22	86.9%	NM	1	11	11	1	1	29	9
Montana	2	2	-5.5%	0	0	0	0	0	0	2	2
Nevada	5	5	0.1%	0	0	5	5	0	0	0	0
New Mexico	1	2	-36.3%	0	0	1	2	0	0	0	0
Utah	6	7	-19.7%	0	0	5	6	0	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	761	801	-5.0%	41	46	435	449	62	71	222	235
California	521	540	-3.6%	6	5	387	399	58	68	69	68
Oregon	102	98	3.6%	5	5	39	41	2	2	56	50
Washington	138	163	-14.9%	31	36	9	10	NM	1	98	116
Pacific Noncontiguous	29	32	-11.3%	5	5	4	4	19	23	NM	0
Alaska	4	4	4.3%	0	0	0	0	4	3	NM	0
Hawaii	25	29	-13.3%	5	5	4	4	15	20	0	0
U.S. Total	5,318	4,722	12.6%	430	422	2,240	1,609	178	219	2,471	2,472

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 1.15.B. Utility Scale Facility Net Generation from Biomass

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	4,299	4,482	-4.1%	310	323	3,143	3,341	78	95	768	722
Connecticut	515	505	2.0%	0	0	515	505	0	0	0	0
Maine	1,700	1,790	-5.0%	0	0	902	1,021	31	47	768	722
Massachusetts	689	783	-12.0%	0	0	671	763	18	20	0	0
New Hampshire	978	976	0.2%	165	154	785	795	28	27	0	0
Rhode Island	135	138	-2.6%	0	0	135	138	0	0	0	0
Vermont	281	289	-2.7%	145	169	135	119	1	1	0	0
Middle Atlantic	3,220	3,556	-9.4%	0	0	2,474	2,753	315	341	431	462
New Jersey	542	641	-15.4%	0	0	446	530	96	111	0	0
New York	1,241	1,416	-12.4%	0	0	997	1,158	129	140	115	118
Pennsylvania	1,436	1,499	-4.2%	0	0	1,031	1,064	89	91	316	344
East North Central	3,559	3,698	-3.8%	472	507	1,985	2,030	96	138	1,005	1,023
Illinois	280	287	-2.3%	66	59	214	227	0	0	0	0
Indiana	273	310	-12.2%	187	216	33	33	12	15	40	47
Michigan	1,624	1,677	-3.2%	0	0	1,143	1,130	43	86	437	462
Ohio	465	474	-2.0%	0	0	312	324	5	5	147	146
Wisconsin	917	950	-3.4%	219	232	283	316	35	34	380	368
West North Central	1,207	1,501	-19.6%	234	322	411	612	92	97	471	469
Iowa	147	140	5.1%	9	11	72	78	27	29	39	22
Kansas	41	43	-5.2%	0	0	41	45	0	0	0	-2
Minnesota	897	1,163	-22.8%	164	238	274	457	30	22	429	446
Missouri	69	92	-25.5%	17	22	24	32	27	37	1	2
Nebraska	52	62	-16.5%	45	52	0	0	7	10	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	12,749	13,637	-6.5%	1,503	1,653	4,152	4,663	178	244	6,916	7,076
Delaware	34	40	-13.2%	0	0	27	31	0	0	7	8
District of Columbia	37	38	-4.5%	0	0	0	0	37	38	0	0
Florida	3,057	3,453	-11.5%	483	423	1,285	1,704	26	30	1,264	1,296
Georgia	3,383	3,402	-0.6%	0	0	713	621	0	0	2,671	2,781
Maryland	280	358	-22.0%	0	0	216	281	15	11	49	67
North Carolina	1,677	1,804	-7.0%	0	0	856	890	4	51	817	863
South Carolina	1,658	1,598	3.7%	269	281	268	269	0	0	1,122	1,049
Virginia	2,623	2,943	-10.9%	752	950	787	867	97	114	987	1,012
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	4,171	4,225	-1.3%	57	62	179	213	0	0	3,935	3,950
Alabama	2,340	2,314	1.2%	0	0	120	148	0	0	2,221	2,166
Kentucky	290	283	2.5%	57	62	5	5	0	0	228	215
Mississippi	925	976	-5.2%	0	0	8	8	0	0	917	967
Tennessee	616	653	-5.7%	0	0	47	52	0	0	569	601
West South Central	3,554	562	532.0%	0	0	434	-2,941	15	25	3,106	3,478
Arkansas	969	-2,536	-138.2%	0	0	48	-3,445	4	4	917	905
Louisiana	1,464	1,751	-16.4%	0	0	50	49	0	0	1,413	1,701
Oklahoma	209	235	-11.0%	0	0	13	16	0	0	196	219
Texas	913	1,113	-18.0%	0	0	322	439	11	21	580	653
Mountain	704	698	0.8%	9	10	426	424	12	16	256	249
Arizona	160	143	11.3%	0	0	160	143	0	0	0	0
Colorado	106	108	-2.3%	0	0	106	108	0	0	0	0
Idaho	333	330	0.8%	9	10	75	79	6	7	243	235
Montana	14	14	-2.2%	0	0	0	0	0	0	14	14
Nevada	35	35	-2.3%	0	0	35	35	0	0	0	0
New Mexico	12	14	-16.6%	0	0	12	14	0	0	0	0
Utah	46	53	-13.4%	0	0	39	44	6	9	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	5,661	5,784	-2.1%	308	388	3,252	3,236	463	544	1,638	1,616
California	3,868	3,908	-1.0%	32	66	2,916	2,889	436	516	485	437
Oregon	715	670	6.8%	36	39	264	265	19	19	396	346
Washington	1,077	1,206	-10.7%	240	283	72	82	8	8	757	833
Pacific Noncontiguous	225	231	-2.5%	44	32	34	34	146	163	2	2
Alaska	26	32	-19.4%	0	0	0	0	24	30	2	2
Hawaii	200	199	0.2%	44	32	34	34	122	133	0	0
U.S. Total	39,349	38,374	2.5%	2,937	3,299	16,489	14,365	1,395	1,664	18,528	19,047

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	359	334	7.5%	20	19	309	315	31	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	NM	7	NM	0	0	NM	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	311	288	8.1%	0	0	280	288	31	0	0	0
New Mexico	5	1	393.2%	0	0	5	1	0	0	0	0
Utah	37	38	-3.0%	20	19	17	19	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,037	1,024	1.3%	64	69	973	955	0	0	0	0
California	1,024	1,009	1.6%	64	69	961	939	0	0	0	0
Oregon	13	15	-17.1%	0	0	13	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	12	9	27.2%	0	0	12	9	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	12	9	27.2%	0	0	12	9	0	0	0	0
U.S. Total	1,408	1,367	3.0%	83	88	1,294	1,279	31	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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	2,873	2,631	9.2%	152	148	2,431	2,483	289	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	49	55	-12.1%	0	0	49	55	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,496	2,272	9.9%	0	0	2,207	2,272	289	0	0	0
New Mexico	39	8	381.8%	0	0	39	8	0	0	0	0
Utah	289	296	-2.4%	152	148	137	148	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	7,963	7,885	1.0%	478	521	7,485	7,364	0	0	0	0
California	7,865	7,768	1.3%	478	521	7,387	7,247	0	0	0	0
Oregon	98	117	-16.1%	0	0	98	117	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	90	73	22.5%	0	0	90	73	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	90	73	22.5%	0	0	90	73	0	0	0	0
U.S. Total	10,926	10,589	3.2%	630	669	10,006	9,920	289	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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	527	449	17.6%	168	132	360	317	14	6	153	125	NM	171	NM	0	189	171	NM	12	NM	0	13	12	157	134
Connecticut	83	61	35.9%	17	8	66	53	0	0	17	7	NM	21	NM	0	24	20	NM	2	NM	0	3	2	39	30
Maine	NM	7	NM	NM	1	8	6	0	0	NM	1	4	2	0	0	4	2	0	0	0	0	0	0	5	4
Massachusetts	359	332	8.1%	125	110	234	222	10	2	115	107	NM	134	NM	0	137	134	10	9	0	0	9	9	87	79
New Hampshire	14	12	22.3%	0	0	14	12	0	0	0	0	5	3	0	0	5	3	1	1	0	0	1	1	9	7
Rhode Island	28	12	123.8%	7	3	20	10	0	0	7	3	14	5	0	0	14	5	0	0	0	0	0	0	6	5
Vermont	34	24	39.1%	17	10	17	14	4	3	13	7	6	5	0	0	6	5	0	NM	0	0	0	NM	11	9
Middle Atlantic	686	561	22.1%	203	153	483	408	8	8	179	129	222	195	14	15	208	181	NM	21	NM	1	25	20	250	207
New Jersey	356	310	14.9%	128	110	228	200	8	8	106	87	118	111	13	14	105	98	NM	13	NM	1	17	12	107	90
New York	268	201	33.5%	65	37	203	164	0	0	65	37	NM	68	NM	0	87	67	2	2	0	0	2	2	115	95
Pennsylvania	62	51	21.3%	10	7	52	44	0	0	8	5	NM	16	NM	1	17	16	NM	7	NM	1	6	6	29	22
East North Central	166	128	30.2%	84	72	82	55	28	23	55	48	NM	36	NM	2	45	35	6	3	0	0	5	3	32	18
Illinois	29	18	66.7%	7	7	22	10	0	0	7	6	NM	7	NM	0	12	7	0	NM	0	0	0	NM	10	4
Indiana	50	44	15.8%	36	32	14	11	16	12	20	21	9	8	0	0	9	8	0	0	0	0	0	0	4	3
Michigan	31	24	31.1%	18	15	13	9	10	10	8	5	NM	NM	NM	NM	6	5	NM	0	0	0	NM	0	7	4
Ohio	39	30	31.8%	18	13	22	17	NM	1	16	12	NM	13	NM	0	13	12	3	1	0	0	3	1	6	4
Wisconsin	16	13	24.1%	4	4	11	8	0	0	4	4	NM	4	NM	1	4	3	2	1	0	0	2	1	5	3
West North Central	260	177	46.9%	194	127	67	51	NM	2	191	125	32	25	0	0	32	25	3	2	0	0	3	2	33	24
Iowa	NM	15	NM	NM	1	17	14	NM	1	NM	0	11	9	0	0	11	9	1	0	0	0	1	0	6	5
Kansas	NM	4	NM	NM	1	4	3	NM	0	NM	1	2	1	0	0	2	1	0	0	0	0	0	0	2	2
Minnesota	187	121	54.6%	175	112	11	9	NM	0	175	112	4	3	0	0	4	3	1	1	0	0	1	1	7	5
Missouri	43	34	29.3%	11	10	32	24	0	1	11	9	15	12	0	0	15	11	1	0	0	0	1	0	16	12
Nebraska	5	4	20.3%	3	3	2	1	NM	0	3	3	1	0	0	0	1	0	0	0	0	0	0	0	1	1
North Dakota	0	0	104.5%	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	1,829	1,480	23.6%	1,538	1,247	291	233	376	256	1,147	976	89	79	15	14	74	65	NM	29	NM	0	32	29	185	139
Delaware	18	16	9.9%	5	5	13	11	NM	1	5	4	3	3	0	0	3	3	1	1	0	0	1	1	8	7
District of Columbia	NM	7	NM	NM	0	9	7	0	0	NM	0	4	4	0	0	4	4	0	0	0	0	0	0	5	3
Florida	391	244	60.1%	327	204	64	40	279	169	47	34	NM	10	NM	1	13	10	NM	1	NM	0	1	1	51	29
Georgia	NM	229	NM	213	203	NM	26	31	30	181	173	NM	NM	NM	0	4	NM	NM	NM	0	0	NM	NM	NM	NM
Maryland	157	138	14.5%	53	45	104	93	NM	1	51	43	NM	25	NM	1	27	24	4	4	0	0	4	4	74	65
North Carolina	799	679	17.7%	772	658	27	21	42	42	718	604	24	23	12	12	12	11	1	1	0	0	1	1	14	9
South Carolina	108	79	35.8%	76	53	32	26	NM	0	75	53	7	7	0	0	7	7	NM	2	NM	0	3	2	22	17
Virginia	103	86	19.4%	90	78	13	8	22	13	68	65	NM	2	NM	0	4	2	0	0	0	0	0	0	10	6
West Virginia	1	1	31.1%	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	129	106	21.8%	113	91	17	15	8	7	104	83	NM	11	NM	0	11	10	NM	NM	NM	1	0	NM	5	5
Alabama	NM	38	NM	41	37	NM	NM	3	3	37	34	NM	1	0	0	NM	1	0	0	0	0	0	0	NM	NM
Kentucky	9	8	14.3%	4	4	4	3	4	4	NM	0	2	2	0	0	2	2	0	0	0	0	0	0	2	1
Mississippi	32	33	-5.6%	30	32	1	1	0	0	30	32	1	1	0	0	1	1	NM	NM	0	0	NM	NM	1	0
Tennessee	47	28	71.7%	38	18	10	9	NM	0	36	17	NM	7	NM	0	7	7	NM	NM	NM	1	NM	NM	3	3
West South Central	623	479	30.3%	493	380	130	98	8	7	483	373	30	22	2	0	27	22	1	0	0	0	1	0	102	76
Arkansas	28	24	15.2%	24	22	4	2	NM	0	22	21	3	1	2	0	1	1	0	0	0	0	0	0	2	1
Louisiana	NM	22	NM	NM	0	23	22	NM	0	0	0	2	1	0	0	2	1	0	0	0	0	0	0	22	21
Oklahoma	9	7	15.8%	7	6	2	1	7	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	564	425	32.7%	462	352	101	73	NM	1	461	351	NM	19	NM	0	24	19	0	0	0	0	0	0	77	54
Mountain	2,022	1,816	11.3%	1,566	1,434	456	381	112	101	1,444	1,324	128	120	10	9	118	111	NM	7	NM	0	6	7	332	264
Arizona	704	656	7.2%	465	449	239	207	73	70	390	378	NM	65	NM	1	68	64	1	2	0	0	1	2	170	141
Colorado	196	166	17.9%	133	109	63	56	NM	1	131	108	NM	22	NM	1	21	21	0	0	0	0	0	0	42	36
Idaho	70	61	14.3%	63	57	7	4	0	0	62	57	1	1	0	0	1	1	NM	0	NM	0	0	0	6	3
Montana	6	6	11.6%	4	4	3	2	0	0	4	4	1	1	0	0	1	1	0	0	0	0	0	0	2	2
Nevada	565	497	13.8%	495	447	70	49	4	4	484	436	17	17	7	7	11	11	4	3	0	0	4	3	55	36
New Mexico	175	161	8.9%	148	139	27	22	34	27	114	112	8	7	0	0	8	7	0	0	0	0	0	0	19	15
Utah	283	269	5.2%	236	229	46	40	0	0	236	229	9	8	0	0	9	8	1	1	0	0	1	1	36	31
Wyoming	23	1	NM	22	0	1	1	0	0	22	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pacific Contiguous	4,687	3,993	17.4%	3,050	2,631	1,638	1,362	54	56	2,974	2,558	409	351	18	16	391	336	NM	197	NM	2	225	194	1,022	832
California	4,549	3,882	17.2%	2,970	2,565	1,579	1,318	54	55	2,896	2,492	390	338	18	16	372	322	NM	195	NM	2	223	193	984	803
Oregon	107	92	16.8%	75	67	33	25	NM	1	74	66	15	11	0	0	15	11	2	2	0	0	2	2	15	13
Washington	NM	19	NM	NM	0	27	19	0	0	NM	0	4	3	0	0	4	3	0	0	0	0	0	0	23	16
Pacific Noncontiguous	130	114	14.1%	23	18	107	96	2	3	21	14	41	39	0	0	41	39	0	0	0	0	0	0	66	58
Alaska	1	0	52.6%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	130	114	14.0%	23	18	106	96	2	3	21	14	41	38	0	0	41	38	0	0	0	0	0	0	65	57
U.S. Total	11,061	9,303	18.9%	7,431	6,286	3,630	3,017	612	470	6,751	5,754	1,197	1,049	61	56	1,136	993	318	273	7	5	311	268	2,183	1,756

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 August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	3,526	3,079	14.5%	1,119	917	2,407	2,162	96	43	1,019	870	1,293	1,177	3	3	1,290	1,174	96	86	2	2	95	84	1,022	903
Connecticut	556	424	30.9%	115	61	441	363	2	2	112	58	165	144	NM	1	164	143	21	18	NM	0	21	18	256	202
Maine	63	49	29.1%	8	9	55	40	0	0	8	9	23	14	0	0	23	14	0	0	0	0	0	0	32	26
Massachusetts	2,418	2,264	6.8%	837	746	1,581	1,518	68	13	766	730	952	928	2	2	950	926	68	61	2	2	66	59	564	533
New Hampshire	94	79	19.6%	0	0	94	79	0	0	0	0	29	23	0	0	29	23	6	5	0	0	6	5	59	51
Rhode Island	166	85	95.8%	45	21	121	64	0	0	45	21	81	34	0	0	81	34	0	0	0	0	0	0	41	31
Vermont	228	177	28.7%	114	80	114	97	26	28	88	52	42	35	0	0	42	35	2	2	0	0	2	2	70	60
Middle Atlantic	4,598	3,785	21.5%	1,280	998	3,318	2,786	54	58	1,120	830	1,549	1,345	97	101	1,453	1,244	177	155	9	9	168	145	1,697	1,397
New Jersey	2,439	2,131	14.5%	829	742	1,610	1,388	54	58	681	587	849	786	90	94	759	692	114	94	4	4	110	90	741	606
New York	1,745	1,303	33.9%	390	209	1,355	1,094	0	0	387	206	582	446	3	3	579	443	13	13	0	0	13	13	764	639
Pennsylvania	414	350	18.3%	62	47	353	304	0	0	53	38	119	113	4	4	116	109	50	48	5	5	45	43	192	152
East North Central	1,046	842	24.3%	540	482	506	359	175	157	353	314	296	235	10	10	286	226	36	21	1	2	34	19	186	114
Illinois	169	116	46.4%	47	49	122	66	1	2	43	45	71	46	2	3	69	43	0	1	0	0	0	1	53	23
Indiana	331	292	13.4%	239	223	92	69	103	82	136	141	62	46	0	0	62	46	2	2	0	0	2	2	28	21
Michigan	199	148	34.0%	119	90	79	58	65	68	53	20	41	34	NM	2	39	32	2	2	0	0	2	2	38	25
Ohio	245	201	21.7%	104	90	141	111	5	6	96	81	89	85	NM	2	87	83	19	6	1	2	17	5	36	24
Wisconsin	102	84	20.4%	30	30	72	54	0	0	25	27	33	25	5	4	29	22	12	10	0	0	12	10	31	23
West North Central	1,637	1,248	31.2%	1,206	909	431	339	15	13	1,190	895	204	167	1	1	203	166	17	13	0	0	17	13	211	160
Iowa	124	98	26.2%	10	9	114	89	5	5	5	4	71	56	0	0	71	56	4	3	0	0	4	3	40	30
Kansas	40	24	63.6%	13	6	27	18	NM	1	12	5	11	7	0	0	11	7	0	0	0	0	0	0	16	12
Minnesota	1,156	868	33.3%	1,082	809	74	59	NM	2	1,080	807	25	21	0	0	25	21	8	7	0	0	8	7	41	31
Missouri	281	227	23.7%	76	63	204	164	3	3	72	58	94	80	1	1	93	79	4	3	0	0	4	3	107	83
Nebraska	33	28	16.8%	23	21	10	7	NM	0	19	21	4	3	0	0	4	3	1	0	0	0	1	0	6	4
North Dakota	1	0	104.6%	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	7.8%	NM	1	1	1	0	0	NM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
South Atlantic	12,869	10,352	24.3%	10,802	8,743	2,068	1,609	2,955	1,909	7,745	6,735	639	558	97	97	543	460	242	217	5	2	237	215	1,288	934
Delaware	127	114	10.9%	37	35	90	79	4	4	32	30	25	24	0	1	25	23	6	6	0	0	6	6	59	50
District of Columbia	69	49	39.6%	10	0	59	49	0	0	10	0	29	30	0	0	29	30	0	0	0	0	0	0	30	20
Florida	3,122	1,870	66.9%	2,663	1,583	459	288	2,296	1,308	361	269	99	80	4	4	95	76	9	9	NM	2	7	8	357	204
Georgia	1,666	1,621	2.8%	1,449	1,431	217	190	218	205	1,230	1,224	31	25	NM	2	29	24	173	154	0	0	173	154	14	12
Maryland	1,085	898	20.7%	358	274	726	625	6	6	342	260	204	173	10	7	193	165	26	27	0	0	26	27	507	433
North Carolina	5,348	4,657	14.8%	5,160	4,511	188	146	282	289	4,799	4,138	166	166	79	84	87	82	5	5	0	0	5	5	96	59
South Carolina	744	533	39.7%	513	363	231	170	NM	1	506	361	57	43	0	0	57	43	21	15	NM	0	18	15	156	112
Virginia	700	602	16.2%	611	546	88	56	145	95	465	451	26	16	NM	0	25	16	1	1	0	0	1	1	62	39
West Virginia	9	7	27.5%	0	0	9	7	0	0	0	0	3	2	0	0	3	2	0	0	0	0	0	0	6	5
East South Central	887	748	18.5%	773	647	114	102	51	51	714	588	79	73	3	3	76	70	6	5	4	5	2	1	36	31
Alabama	295	269	9.4%	285	262	10	8	21	22	263	239	7	5	0	0	7	5	1	0	0	0	1	0	2	2
Kentucky	56	51	10.0%	28	29	28	22	27	28	NM	1	16	13	0	0	16	13	1	0	0	0	1	0	11	9
Mississippi	232	245	-5.3%	223	238	9	8	0	0	223	238	5	5	0	0	5	5	0	0	0	0	0	0	4	3
Tennessee	304	182	66.5%	237	118	67	65	NM	0	227	110	51	50	3	3	48	47	4	5	4	5	0	0	19	18
West South Central	4,088	3,162	29.3%	3,206	2,492	882	670	52	54	3,149	2,437	196	148	5	1	192	147	5	1	0	0	5	1	686	522
Arkansas	168	165	1.7%	144	151	24	15	NM	1	141	150	9	5	2	0	7	5	2	1	0	0	2	1	14	9
Louisiana	169	161	5.2%	NM	1	168	160	NM	1	0	0	12	10	0	0	12	10	0	0	0	0	0	0	157	150
Oklahoma	57	53	8.2%	44	45	13	8	44	45	0	0	3	3	0	0	3	3	0	0	0	0	0	0	10	5
Texas	3,693	2,783	32.7%	3,017	2,294	677	488	6	6	3,008	2,287	173	130	NM	1	170	129	2	0	0	0	2	0	506	359
Mountain	13,603	12,869	5.7%	10,312	10,065	3,291	2,804	728	717	9,516	9,282	953	924	64	64	888	860	50	49	3	2	47	47	2,356	1,897
Arizona	4,904	4,709	4.1%	3,108	3,141	1,796	1,568	485	494	2,614	2,637	533	516	9	10	524	507	10	17	0	0	10	17	1,262	1,044
Colorado	1,317	1,180	11.5%	870	765	447	415	4	4	856	752	166	166	11	9	155	157	2	2	0	0	2	2	290	256
Idaho	439	430	2.1%	399	407	39	22	0	0	398	407	4	4	0	0	4	4	3	1	NM	0	2	1	33	18
Montana	41	39	6.9%	24	25	17	14	0	0	24	25	5	4	0	0	5	4	0	0	0	0	0	0	12	10
Nevada	3,723	3,486	6.8%	3,258	3,149	465	337	29	30	3,183	3,072	122	120	45	45	77	75	28	23	2	2	26	21	362	241
New Mexico	1,176	1,142	3.0%	973	970	202	172	211	189	763	781	59	57	0	0	59	57	1	1	0	0	1	1	142	114
Utah	1,861	1,879	-1.0%	1,543	1,608	317	272	0	0	1,543	1,608	61	55	0	0	61	55	6	6	0	0	6	6	249	211
Wyoming	142	4	NM	136	0	6	4	0	0	136	0	2	1	0	0	2	1	0	0	0	0	0	0	4	3
Pacific Contiguous	30,415	27,285	11.5%	19,437	18,035	10,978	9,249	368	381	18,929	17,535	2,795	2,387	118	106	2,677	2,280	1,543	1,328	22	13	1,522	1,315	6,779	5,654
California	29,553	26,622	11.0%	18,924	17,635	10,629	8,987	363	376	18,421	17,139	2,683	2,305	118	106	2,565	2,199	1,531	1,317	22	13	1,510	1,304	6,554	5,484
Oregon	674	552	22.2%	482	400	192	151	4	4	478	396	89	64	0	0	89	64	12	11	0	0	12	11	91	77
Washington	188	111	68.7%	30	0	157	111	0	0	30	0	23	18	0	0	23	18	0	0	0	0	0	0	134	93
Pacific Noncontiguous	929	839	10.7%	162	127	767	712	26	25	136	102	301	280	0	0	301	280	3	2	0	0	3	2	463	431
Alaska	3	2	46.1%	0	0	3	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Hawaii	926	837	10.6%	162	127	764	710	26	25	136	102	300	279	0	0	300	279	3	2	0	0	3	2	461	429
U.S. Total	73,597	64,208	14.6%	48,835	43,415	24,762	20,793	4,520	3,406	43,872	39,589	8,306	7,293	397	387	7,909	6,907	2,175	1,876	46	34	2,129	1,843	14,724	12,043

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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, August 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	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	4	6	-33.2%	4	6	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4	6	-33.2%	4	6	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	115	131	-12.9%	0	0	115	131	0	0	0	0
Arizona	99	87	14.1%	0	0	99	87	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	15	44	-65.6%	0	0	15	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	294	272	8.2%	0	0	294	272	0	0	0	0
California	294	272	8.2%	0	0	294	272	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	413	409	0.9%	4	6	409	403	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 1.18.B. Utility Scale Facility Net Generation from Solar Thermal

by State, by Sector, Year-to-Date through August 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	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	23	40	-42.2%	23	40	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	23	40	-42.2%	23	40	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	734	787	-6.7%	0	0	734	787	0	0	0	0
Arizona	599	576	3.9%	0	0	599	576	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	135	210	-35.6%	0	0	135	210	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	1,657	1,800	-7.9%	0	0	1,657	1,800	0	0	0	0
California	1,657	1,800	-7.9%	0	0	1,657	1,800	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	2,415	2,627	-8.1%	23	40	2,391	2,587	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-August 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
Year to Date					
2017	449,843	331,299	116,602	62	1,880
2018	426,552	318,333	106,421	60	1,739
2019	371,265	276,371	93,323	53	1,518
Rolling 12 Months Ending in August					
2018	640,620	471,424	166,462	92	2,641
2019	580,927	431,655	146,878	80	2,313

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-August 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
Year to Date					
2017	9,795	1,902	761	343	6,789
2018	9,372	1,572	911	336	6,554
2019	8,629	1,478	867	303	5,981
Rolling 12 Months Ending in August					
2018	14,244	2,472	1,308	508	9,956
2019	13,070	2,174	1,312	457	9,127

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.C. Coal: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	459,638	333,201	117,363	405	8,670
2018	435,924	319,905	107,331	396	8,292
2019	379,895	277,849	94,190	356	7,500
Rolling 12 Months Ending in August					
2018	654,864	473,896	167,770	601	12,598
2019	593,997	433,830	148,190	537	11,441

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 2.2.A. Petroleum Liquids: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	13,394	10,117	2,857	118	302
2018	21,398	13,079	7,759	193	367
2019	13,775	9,971	3,338	149	317
Rolling 12 Months Ending in August					
2018	29,700	18,529	10,364	266	541
2019	20,991	15,237	5,046	225	484

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-August 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
Year to Date					
2017	1,121	43	120	150	808
2018	1,780	85	224	254	1,218
2019	1,573	54	171	300	1,049
Rolling 12 Months Ending in August					
2018	2,671	114	324	342	1,892
2019	2,407	72	301	396	1,638

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-August 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
Year to Date					
2017	14,515	10,160	2,976	268	1,110
2018	23,178	13,163	7,983	447	1,585
2019	15,348	10,024	3,509	449	1,366
Rolling 12 Months Ending in August					
2018	32,371	18,643	10,687	608	2,432
2019	23,398	15,309	5,346	621	2,122

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 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	2,400	1,886	367	2	146
2018	2,477	1,886	472	1	117
2019	2,168	1,582	463	1	122
Rolling 12 Months Ending in August					
2018	3,566	2,732	647	2	186
2019	3,314	2,436	694	2	182

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-August 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
Year to Date					
2017	660	6	78	9	567
2018	624	9	61	5	549
2019	593	10	65	5	513
Rolling 12 Months Ending in August					
2018	941	13	98	11	818
2019	899	13	97	10	778

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 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-August 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
Year to Date					
2017	3,060	1,892	445	11	712
2018	3,101	1,895	533	6	666
2019	2,762	1,592	528	7	635
Rolling 12 Months Ending in August					
2018	4,508	2,745	745	13	1,004
2019	4,213	2,449	792	12	960

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 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	6,345,538	3,191,652	2,758,024	33,521	362,341
2018	7,303,245	3,782,721	3,112,131	35,663	372,730
2019	7,694,360	3,994,819	3,282,183	35,747	381,610
Rolling 12 Months Ending in August					
2018	10,465,467	5,345,952	4,516,093	52,202	551,219
2019	11,222,120	5,763,277	4,832,702	52,734	573,407

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-August 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
Year to Date					
2017	771,242	25,866	207,025	68,833	469,518
2018	800,332	29,305	221,995	55,076	493,955
2019	823,679	31,474	229,590	53,406	509,208
Rolling 12 Months Ending in August					
2018	1,197,940	42,179	324,915	90,567	740,279
2019	1,230,059	45,325	339,547	80,187	764,999

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

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	7,116,780	3,217,518	2,965,049	102,354	831,859
2018	8,103,577	3,812,026	3,334,126	90,739	866,686
2019	8,518,039	4,026,294	3,511,773	89,154	890,819
Rolling 12 Months Ending in August					
2018	11,663,407	5,388,131	4,841,008	142,769	1,291,499
2019	12,452,179	5,808,603	5,172,249	132,921	1,338,406

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 2.5.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	187,090	16,933	154,111	13,445	2,601
2018	181,761	16,569	149,699	13,136	2,357
2019	160,255	12,696	135,961	9,719	1,879
Rolling 12 Months Ending in August					
2018	272,782	24,710	224,639	19,811	3,623
2019	248,729	19,706	209,775	16,373	2,874

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 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	2,670	1	1,303	742	623
2018	2,441	0	1,261	589	591
2019	2,433	0	1,290	589	554
Rolling 12 Months Ending in August					
2018	3,711	1	1,906	946	859
2019	3,613	0	1,895	911	806

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.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	189,760	16,935	155,414	14,187	3,224
2018	184,202	16,569	150,960	13,724	2,948
2019	162,688	12,696	137,251	10,308	2,433
Rolling 12 Months Ending in August					
2018	276,494	24,711	226,544	20,757	4,482
2019	252,341	19,706	211,670	17,285	3,680

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 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	11,020	286	9,038	1,692	5
2018	11,278	312	9,327	1,632	7
2019	10,246	204	8,555	1,481	7
Rolling 12 Months Ending in August					
2018	16,606	448	13,669	2,478	11
2019	15,752	359	13,088	2,297	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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Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	1,482	0	565	775	142
2018	1,390	0	497	765	129
2019	1,076	0	509	440	127
Rolling 12 Months Ending in August					
2018	2,033	0	746	1,092	196
2019	1,735	0	764	784	187

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Totals may not equal sum of components because of independent rounding.
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Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	12,502	286	9,603	2,467	146
2018	12,668	312	9,823	2,397	136
2019	11,322	204	9,064	1,921	134
Rolling 12 Months Ending in August					
2018	18,639	448	14,415	3,570	206
2019	17,487	359	13,852	3,081	195

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

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-August 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
Year to Date					
2017	242,769	29,146	101,116	328	112,179
2018	247,299	32,072	99,072	370	115,785
2019	235,361	31,479	91,800	418	111,664
Rolling 12 Months Ending in August					
2018	368,501	45,732	149,833	502	172,434
2019	350,552	45,262	136,016	568	168,705

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Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	688,916	7,851	14,866	2,891	663,308
2018	686,836	6,712	14,947	3,280	661,898
2019	651,880	7,416	14,643	3,300	626,522
Rolling 12 Months Ending in August					
2018	1,034,347	10,517	23,066	4,911	995,852
2019	992,714	11,001	21,319	4,827	955,567

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-August 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
Year to Date					
2017	931,685	36,997	115,982	3,219	775,487
2018	934,134	38,784	114,018	3,650	777,682
2019	887,242	38,895	106,442	3,719	738,186
Rolling 12 Months Ending in August					
2018	1,402,847	56,249	172,899	5,413	1,168,286
2019	1,343,266	56,263	157,335	5,395	1,124,273

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, August 2019 and August 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	11	20	-47.0%	8	15	3	5	0	0	NM	0
Connecticut	2	4	-55.0%	0	0	2	4	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	8	15	-47.0%	8	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	1,784	2,324	-23.0%	0	0	1,781	2,321	0	0	3	3
New Jersey	35	50	-29.0%	0	0	35	50	0	0	0	0
New York	19	16	16.0%	0	0	19	16	0	0	0	0
Pennsylvania	1,730	2,257	-23.0%	0	0	1,726	2,255	0	0	3	3
East North Central	10,255	14,014	-27.0%	6,104	8,208	4,092	5,746	2	1	57	59
Illinois	2,569	3,668	-30.0%	168	226	2,357	3,396	1	0	44	45
Indiana	2,565	3,599	-29.0%	2,359	3,356	204	242	1	1	0	0
Michigan	1,917	2,473	-22.0%	1,895	2,455	20	17	0	0	2	1
Ohio	1,735	2,354	-26.0%	224	264	1,511	2,091	0	0	0	0
Wisconsin	1,469	1,919	-23.0%	1,458	1,907	0	0	0	0	11	12
West North Central	10,053	11,535	-13.0%	9,949	11,437	0	0	1	2	103	96
Iowa	1,316	1,614	-18.0%	1,268	1,564	0	0	1	2	46	47
Kansas	1,176	1,319	-11.0%	1,176	1,319	0	0	0	0	0	0
Minnesota	918	1,209	-24.0%	898	1,194	0	0	0	0	20	16
Missouri	3,138	3,742	-16.0%	3,138	3,742	0	0	0	0	0	0
Nebraska	1,327	1,357	-2.2%	1,295	1,327	0	0	0	0	33	29
North Dakota	2,049	2,134	-4.0%	2,046	2,131	0	0	0	0	3	3
South Dakota	129	160	-19.0%	129	160	0	0	0	0	0	0
South Atlantic	7,538	8,979	-16.0%	6,670	8,050	855	916	0	1	14	12
Delaware	9	29	-68.0%	0	0	9	29	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	864	1,422	-39.0%	863	1,421	0	0	0	0	NM	1
Georgia	1,428	1,732	-18.0%	1,425	1,729	0	0	0	0	NM	3
Maryland	344	335	2.8%	0	0	344	334	0	0	0	1
North Carolina	1,627	1,285	27.0%	1,621	1,279	NM	4	0	1	2	2
South Carolina	701	819	-14.0%	701	819	0	0	0	0	0	0
Virginia	270	537	-50.0%	263	512	1	20	0	0	6	5
West Virginia	2,295	2,819	-19.0%	1,798	2,290	498	529	0	0	0	0
East South Central	5,343	6,039	-12.0%	5,024	5,718	307	307	0	0	12	13
Alabama	1,388	1,694	-18.0%	1,385	1,694	0	0	0	0	NM	1
Kentucky	2,453	2,882	-15.0%	2,453	2,882	0	0	0	0	0	0
Mississippi	461	431	6.9%	154	124	307	307	0	0	0	0
Tennessee	1,042	1,032	1.0%	1,032	1,019	0	0	0	0	9	12
West South Central	8,613	11,527	-25.0%	4,674	6,566	3,932	4,953	0	0	6	7
Arkansas	1,394	1,831	-24.0%	1,179	1,620	215	211	0	0	1	0
Louisiana	549	952	-42.0%	535	710	13	241	0	0	0	0
Oklahoma	544	1,088	-50.0%	462	967	76	114	0	0	5	7
Texas	6,126	7,656	-20.0%	2,498	3,269	3,628	4,387	0	0	0	0
Mountain	8,053	8,510	-5.4%	6,961	7,722	1,085	780	0	0	8	8
Arizona	1,537	1,693	-9.2%	1,537	1,693	0	0	0	0	0	0
Colorado	1,373	1,516	-9.4%	1,373	1,516	0	0	0	0	0	0
Idaho	NM	0	NM	0	0	0	0	0	0	NM	0
Montana	975	653	49.0%	26	20	948	633	0	0	NM	0
Nevada	172	217	-21.0%	108	150	63	66	0	0	0	0
New Mexico	878	730	20.0%	878	730	0	0	0	0	0	0
Utah	1,085	1,286	-16.0%	1,056	1,250	29	36	0	0	0	0
Wyoming	2,034	2,415	-16.0%	1,982	2,363	45	45	0	0	7	7
Pacific Contiguous	745	674	10.0%	194	120	550	548	0	0	0	6
California	0	5	-100.0%	0	0	0	0	0	0	0	5
Oregon	194	120	62.0%	194	120	0	0	0	0	0	0
Washington	550	549	0.3%	0	0	550	548	0	0	0	1
Pacific Noncontiguous	117	115	1.4%	NM	29	82	83	2	3	0	0
Alaska	49	46	5.8%	NM	29	14	14	2	3	0	0
Hawaii	68	69	-1.5%	0	0	68	69	0	0	0	0
U.S. Total	52,512	63,737	-18.0%	39,619	47,866	12,686	15,660	5	7	202	204

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 August 2019 and August 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	175	411	-57.0%	117	237	56	170	0	0	3	3
Connecticut	48	162	-71.0%	0	0	48	162	0	0	0	0
Maine	11	11	-1.1%	0	0	8	8	0	0	3	3
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	117	237	-51.0%	117	237	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	14,801	17,032	-13.0%	0	0	14,775	17,003	0	0	26	29
New Jersey	298	352	-15.0%	0	0	298	352	0	0	0	0
New York	187	230	-19.0%	0	0	187	226	0	0	0	4
Pennsylvania	14,316	16,450	-13.0%	0	0	14,290	16,424	0	0	26	26
East North Central	82,184	97,845	-16.0%	48,989	59,333	32,742	38,037	14	15	439	461
Illinois	20,739	24,853	-17.0%	1,378	1,510	19,025	22,999	7	8	329	336
Indiana	22,006	26,015	-15.0%	20,724	24,668	1,275	1,340	6	7	0	0
Michigan	15,096	16,813	-10.0%	14,962	16,638	119	147	0	0	15	28
Ohio	13,925	16,950	-18.0%	1,602	3,399	12,323	13,550	0	0	0	1
Wisconsin	10,418	13,214	-21.0%	10,323	13,118	0	0	0	0	95	96
West North Central	71,190	79,897	-11.0%	70,459	79,074	0	0	13	14	718	809
Iowa	9,420	10,397	-9.4%	9,073	10,044	0	0	11	12	336	341
Kansas	7,810	8,866	-12.0%	7,810	8,866	0	0	0	0	0	0
Minnesota	7,437	8,755	-15.0%	7,305	8,564	0	0	1	0	131	190
Missouri	22,756	25,654	-11.0%	22,754	25,653	0	0	1	1	0	0
Nebraska	8,965	9,819	-8.7%	8,737	9,566	0	0	0	0	228	254
North Dakota	13,671	15,273	-10.0%	13,649	15,248	0	0	0	0	22	25
South Dakota	1,132	1,134	-0.1%	1,132	1,134	0	0	0	0	0	0
South Atlantic	48,728	59,261	-18.0%	43,695	51,314	4,914	7,813	7	7	111	127
Delaware	81	145	-44.0%	0	0	81	145	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,274	8,908	-30.0%	6,265	8,895	0	0	0	0	9	13
Georgia	9,747	10,746	-9.3%	9,723	10,717	0	0	0	0	24	29
Maryland	1,763	3,353	-47.0%	0	0	1,755	3,342	0	0	8	11
North Carolina	8,320	9,054	-8.1%	8,261	8,998	36	31	6	6	17	19
South Carolina	4,350	5,432	-20.0%	4,349	5,430	0	0	0	0	1	2
Virginia	1,458	3,391	-57.0%	1,353	3,141	53	197	1	1	52	52
West Virginia	16,734	18,232	-8.2%	13,745	14,135	2,989	4,098	0	0	0	0
East South Central	35,995	41,275	-13.0%	33,853	39,064	2,065	2,104	0	0	76	108
Alabama	9,396	11,735	-20.0%	9,386	11,726	0	0	0	0	10	9
Kentucky	17,443	18,797	-7.2%	17,443	18,797	0	0	0	0	0	0
Mississippi	3,018	3,023	-0.2%	953	920	2,065	2,104	0	0	0	0
Tennessee	6,137	7,720	-20.0%	6,071	7,621	0	0	0	0	66	99
West South Central	60,941	73,037	-17.0%	32,180	39,794	28,713	33,154	0	0	49	90
Arkansas	9,189	11,015	-17.0%	7,802	9,234	1,382	1,775	0	0	5	6
Louisiana	3,744	5,530	-32.0%	2,908	3,574	836	1,956	0	0	0	0
Oklahoma	4,129	6,833	-40.0%	3,907	6,059	178	690	0	0	44	84
Texas	43,881	49,659	-12.0%	17,563	20,927	26,317	28,733	0	0	0	0
Mountain	52,891	55,097	-4.0%	45,973	49,036	6,856	5,992	0	0	62	69
Arizona	9,146	11,136	-18.0%	9,146	11,136	0	0	0	0	0	0
Colorado	9,492	9,980	-4.9%	9,491	9,978	0	0	0	0	1	2
Idaho	3	2	13.0%	0	0	0	0	0	0	3	2
Montana	6,045	5,139	18.0%	192	139	5,851	4,998	0	0	2	3
Nevada	1,043	793	32.0%	659	415	384	378	0	0	0	0
New Mexico	5,296	4,291	23.0%	5,296	4,291	0	0	0	0	0	0
Utah	7,677	7,790	-1.4%	7,405	7,515	273	275	0	0	0	0
Wyoming	14,189	15,967	-11.0%	13,784	15,564	348	342	0	0	56	62
Pacific Contiguous	3,539	1,925	84.0%	858	318	2,646	1,564	0	0	34	43
California	30	39	-23.0%	0	0	0	0	0	0	30	39
Oregon	858	318	170.0%	858	318	0	0	0	0	0	0
Washington	2,650	1,568	69.0%	0	0	2,646	1,564	0	0	4	4
Pacific Noncontiguous	822	771	6.6%	246	163	556	584	19	24	0	0
Alaska	355	281	26.0%	246	163	89	95	19	24	0	0
Hawaii	467	490	-4.7%	0	0	467	490	0	0	0	0
U.S. Total	371,265	426,552	-13.0%	276,371	318,333	93,323	106,421	53	60	1,518	1,739

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, August 2019 and August 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	39	68	-42.0%	NM	13	29	53	6	2	0	1
Connecticut	13	19	-32.0%	NM	1	12	18	NM	0	0	0
Maine	4	17	-76.0%	0	0	3	15	1	1	0	1
Massachusetts	18	23	-21.0%	NM	2	11	20	5	1	0	0
New Hampshire	1	9	-84.0%	NM	9	NM	0	0	0	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	98	158	-38.0%	19	14	75	139	NM	2	2	3
New Jersey	NM	3	NM	0	0	NM	2	0	0	0	0
New York	48	91	-47.0%	19	14	27	75	NM	0	0	1
Pennsylvania	44	64	-32.0%	0	0	42	61	0	1	2	2
East North Central	70	93	-25.0%	48	53	21	37	NM	1	1	2
Illinois	7	11	-35.0%	NM	1	6	10	NM	0	0	0
Indiana	16	25	-37.0%	15	23	0	0	0	0	1	2
Michigan	21	21	0.9%	21	20	0	0	NM	0	0	0
Ohio	19	30	-38.0%	NM	2	16	27	0	0	0	0
Wisconsin	NM	6	NM	NM	6	0	0	NM	0	0	0
West North Central	50	47	7.1%	49	46	NM	1	0	0	0	0
Iowa	14	6	114.0%	13	6	1	0	0	0	0	0
Kansas	10	12	-9.9%	10	12	0	0	0	0	0	0
Minnesota	NM	7	NM	NM	7	NM	0	0	0	0	0
Missouri	10	13	-26.0%	10	13	0	0	0	0	0	0
Nebraska	NM	2	NM	NM	2	0	0	0	0	0	0
North Dakota	3	6	-42.0%	3	6	0	0	0	0	0	0
South Dakota	4	1	712.0%	4	1	0	0	NM	0	0	0
South Atlantic	316	286	10.0%	261	213	34	47	12	19	8	8
Delaware	NM	4	NM	0	0	NM	4	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	61	91	-33.0%	58	89	1	1	0	0	2	1
Georgia	15	30	-52.0%	7	18	NM	8	1	0	5	4
Maryland	15	21	-29.0%	0	2	15	19	0	0	0	0
North Carolina	28	45	-38.0%	25	42	NM	2	NM	0	NM	1
South Carolina	15	21	-29.0%	14	20	0	0	0	0	0	1
Virginia	158	56	182.0%	137	31	10	6	11	18	NM	1
West Virginia	20	18	5.9%	20	12	0	7	0	0	0	0
East South Central	33	44	-26.0%	32	43	NM	0	0	0	NM	1
Alabama	NM	5	NM	0	5	NM	0	0	0	NM	0
Kentucky	10	9	8.1%	10	9	0	0	0	0	0	0
Mississippi	2	7	-78.0%	2	7	0	0	0	0	0	0
Tennessee	20	22	-11.0%	19	22	0	0	0	0	0	0
West South Central	17	14	19.0%	16	10	NM	4	0	0	1	0
Arkansas	2	5	-45.0%	2	2	0	3	0	0	0	0
Louisiana	3	1	167.0%	3	1	0	0	0	0	0	0
Oklahoma	5	3	69.0%	5	3	0	0	0	0	0	0
Texas	7	6	14.0%	6	4	NM	1	0	0	0	0
Mountain	30	31	-2.7%	28	24	2	6	NM	0	0	0
Arizona	8	9	-11.0%	8	9	0	0	NM	0	0	0
Colorado	NM	2	NM	NM	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	6	NM	NM	0	1	6	0	0	0	0
Nevada	2	4	-44.0%	2	3	0	1	0	0	0	0
New Mexico	4	4	3.0%	4	4	0	0	0	0	0	0
Utah	6	4	53.0%	5	4	1	0	0	0	0	0
Wyoming	8	3	138.0%	8	3	0	0	0	0	0	0
Pacific Contiguous	11	12	-9.6%	8	8	2	3	NM	0	1	1
California	8	8	5.4%	7	6	1	1	0	0	NM	0
Oregon	1	NM	NM	1	NM	0	0	NM	0	0	0
Washington	2	3	-33.0%	NM	0	1	2	0	0	1	1
Pacific Noncontiguous	1,228	1,117	10.0%	986	870	217	227	2	1	24	20
Alaska	148	123	20.0%	141	117	0	0	0	0	7	6
Hawaii	1,080	994	8.7%	845	753	217	227	2	0	17	14
U.S. Total	1,892	1,870	1.2%	1,448	1,295	383	516	22	24	39	35

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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.
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 August 2019 and August 2018 (Thousand Barrels)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	394	1,996	-80.0%	46	308	312	1,650	27	25	8	12
Connecticut	133	577	-77.0%	6	7	123	567	3	2	2	1
Maine	33	299	-89.0%	0	0	23	285	5	4	6	10
Massachusetts	166	734	-77.0%	NM	113	139	612	9	8	1	1
New Hampshire	31	268	-88.0%	21	179	NM	79	8	10	0	0
Rhode Island	27	109	-75.0%	0	0	NM	107	1	1	NM	0
Vermont	NM	9	NM	NM	9	0	0	0	0	0	0
Middle Atlantic	1,199	4,067	-71.0%	333	1,032	820	2,965	17	31	28	38
New Jersey	99	445	-78.0%	3	3	95	437	1	4	1	1
New York	710	2,517	-72.0%	330	1,027	358	1,447	NM	18	12	25
Pennsylvania	390	1,105	-65.0%	0	2	367	1,081	7	9	16	12
East North Central	649	770	-16.0%	408	440	229	309	3	5	8	15
Illinois	57	68	-16.0%	8	9	49	58	NM	0	0	0
Indiana	170	158	7.5%	165	144	0	1	NM	0	5	12
Michigan	131	183	-28.0%	129	179	0	0	2	4	1	1
Ohio	227	304	-25.0%	49	53	175	248	0	1	2	2
Wisconsin	64	57	11.0%	57	55	5	2	1	0	0	0
West North Central	470	488	-3.7%	453	444	13	42	2	2	1	1
Iowa	94	91	3.7%	89	85	5	5	0	0	0	0
Kansas	82	88	-7.6%	82	88	0	0	0	0	0	0
Minnesota	56	77	-28.0%	44	39	NM	36	2	1	1	1
Missouri	140	157	-11.0%	140	157	0	0	0	0	0	0
Nebraska	32	24	32.0%	32	24	0	0	0	0	0	0
North Dakota	50	42	20.0%	50	41	0	0	0	0	0	0
South Dakota	17	9	84.0%	17	9	0	0	NM	0	0	0
South Atlantic	1,767	5,014	-65.0%	1,314	3,515	312	1,301	82	119	58	79
Delaware	61	321	-81.0%	0	12	61	309	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	380	668	-43.0%	366	630	4	26	0	0	9	12
Georgia	130	355	-63.0%	78	170	14	142	4	6	34	36
Maryland	139	501	-72.0%	3	10	135	487	0	1	1	2
North Carolina	306	1,070	-71.0%	288	982	10	68	NM	4	7	16
South Carolina	126	515	-75.0%	119	497	3	9	0	0	5	8
Virginia	471	1,381	-66.0%	308	1,036	84	234	76	107	3	5
West Virginia	153	204	-25.0%	151	178	2	26	0	0	0	0
East South Central	363	405	-10.0%	353	336	3	59	0	0	7	10
Alabama	23	123	-82.0%	16	58	2	58	0	0	5	6
Kentucky	105	110	-5.3%	105	110	0	0	0	0	0	0
Mississippi	20	26	-25.0%	19	24	0	0	0	0	1	3
Tennessee	217	145	49.0%	214	144	0	0	0	0	2	1
West South Central	165	181	-8.8%	124	139	34	35	1	1	6	6
Arkansas	51	45	14.0%	34	34	16	8	0	0	2	2
Louisiana	16	31	-50.0%	16	31	0	0	0	0	0	0
Oklahoma	29	22	31.0%	27	21	0	0	0	0	2	1
Texas	69	83	-16.0%	48	52	18	27	1	1	2	2
Mountain	283	246	15.0%	261	212	22	34	0	0	0	0
Arizona	83	68	22.0%	83	68	0	0	NM	0	0	0
Colorado	19	22	-12.0%	19	22	0	0	0	0	0	0
Idaho	0	0	124.0%	0	0	0	0	0	0	0	0
Montana	20	30	-32.0%	NM	1	16	29	0	0	0	0
Nevada	18	14	26.0%	15	11	3	4	0	0	0	0
New Mexico	46	23	100.0%	46	23	0	0	0	0	0	0
Utah	43	41	6.7%	41	40	2	1	0	0	0	0
Wyoming	53	48	9.8%	53	48	0	0	0	0	0	0
Pacific Contiguous	87	118	-26.0%	51	50	18	24	NM	1	17	42
California	62	95	-34.0%	45	44	6	14	1	1	11	36
Oregon	5	NM	NM	5	NM	0	0	NM	0	0	0
Washington	20	18	15.0%	NM	1	13	10	0	0	6	6
Pacific Noncontiguous	8,398	8,115	3.5%	6,626	6,601	1,574	1,340	15	9	183	165
Alaska	1,056	953	11.0%	1,007	910	0	0	5	3	44	40
Hawaii	7,343	7,161	2.5%	5,619	5,691	1,574	1,340	11	6	139	125
U.S. Total	13,775	21,398	-36.0%	9,971	13,079	3,338	7,759	149	193	317	367

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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, August 2019 and August 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	2	2	-12.0%	0	0	0	0	0	0	2	2
New Jersey	1	1	-20.0%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	1	NM	0	0	0	0	0	0	NM	1
East North Central	85	100	-15.0%	34	43	45	52	0	0	7	5
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	36	43	-17.0%	29	38	0	0	0	0	6	5
Ohio	45	52	-13.0%	0	0	45	52	0	0	0	0
Wisconsin	4	5	-18.0%	4	5	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	33	75	-56.0%	30	72	0	0	0	0	3	3
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	30	72	-58.0%	30	72	0	0	0	0	0	0
Georgia	3	3	-14.0%	0	0	0	0	0	0	3	3
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	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	143	161	-11.0%	139	157	0	0	0	0	4	5
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	139	158	-12.0%	139	157	0	0	0	0	0	1
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	4	0.5%	0	0	0	0	0	0	4	4
Mountain	15	14	5.3%	0	0	15	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	15	14	5.3%	0	0	15	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	278	352	-21.0%	203	272	59	66	0	0	15	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 August 2019 and August 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	12	16	-22.0%	0	0	0	0	0	0	12	16
New Jersey	5	4	13.0%	0	0	0	0	0	0	5	4
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	7	11	-35.0%	0	0	0	0	0	0	7	11
East North Central	681	797	-15.0%	292	392	347	378	0	0	41	28
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	306	387	-21.0%	265	361	0	0	0	0	41	27
Ohio	348	379	-8.2%	0	0	347	378	0	0	0	1
Wisconsin	27	31	-13.0%	27	31	0	0	0	0	0	0
West North Central	10	6	67.0%	0	0	0	0	1	1	9	5
Iowa	10	6	67.0%	0	0	0	0	1	1	9	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	332	431	-23.0%	310	407	0	0	0	0	22	24
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	310	407	-24.0%	310	407	0	0	0	0	0	0
Georgia	22	24	-8.4%	0	0	0	0	0	0	22	24
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	1,017	1,132	-10.0%	980	1,088	0	0	0	0	37	44
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	981	1,104	-11.0%	980	1,088	0	0	0	0	1	17
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	36	28	31.0%	0	0	0	0	0	0	36	28
Mountain	116	95	22.0%	0	0	116	95	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	116	95	22.0%	0	0	116	95	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	2,168	2,477	-12.0%	1,582	1,886	463	472	1	1	122	117

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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, August 2019 and August 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	39,129	50,304	-22.0%	NM	591	37,384	47,983	559	717	867	1,012
Connecticut	15,132	15,583	-2.9%	29	45	14,533	14,926	209	245	362	366
Maine	1,319	2,746	-52.0%	0	0	1,067	2,411	13	13	240	321
Massachusetts	12,176	19,825	-39.0%	NM	402	11,465	18,875	307	426	115	122
New Hampshire	3,875	4,174	-7.2%	1	144	3,854	4,009	4	4	16	17
Rhode Island	6,624	7,975	-17.0%	0	0	6,465	7,761	25	28	134	186
Vermont	1	0	103.0%	0	0	0	0	0	0	0	0
Middle Atlantic	148,989	148,846	0.1%	11,592	14,282	135,278	132,055	769	991	1,350	1,518
New Jersey	29,937	33,017	-9.3%	NM	215	29,461	32,475	79	124	202	203
New York	46,294	55,346	-16.0%	11,394	14,064	33,947	40,033	628	800	325	449
Pennsylvania	72,758	60,482	20.0%	2	3	71,871	59,547	63	66	823	866
East North Central	125,720	106,432	18.0%	50,097	39,579	72,443	63,626	798	840	2,382	2,388
Illinois	19,849	17,983	10.0%	2,272	1,747	16,922	15,562	260	252	396	421
Indiana	22,402	19,461	15.0%	10,439	8,069	10,620	10,157	98	97	1,245	1,138
Michigan	29,820	22,257	34.0%	14,985	9,914	14,322	11,791	269	287	244	265
Ohio	36,148	31,530	15.0%	7,302	6,885	28,647	24,433	125	134	74	78
Wisconsin	17,501	15,201	15.0%	15,100	12,964	1,932	1,683	46	69	424	485
West North Central	36,003	24,458	47.0%	31,339	21,351	4,231	2,633	164	147	269	327
Iowa	7,705	4,939	56.0%	7,438	4,660	NM	5	53	43	204	231
Kansas	4,684	2,397	95.0%	4,674	2,354	0	0	0	0	10	42
Minnesota	9,950	8,168	22.0%	8,493	7,123	1,388	968	32	45	38	33
Missouri	7,821	5,940	32.0%	4,907	4,211	2,834	1,660	73	59	7	10
Nebraska	2,431	1,083	125.0%	2,425	1,082	0	0	6	1	0	0
North Dakota	1,590	943	69.0%	1,579	932	0	0	0	0	10	11
South Dakota	1,822	989	84.0%	1,822	989	0	0	0	0	0	0
South Atlantic	297,309	277,692	7.1%	240,854	220,531	52,709	53,733	1,081	1,058	2,665	2,371
Delaware	4,910	5,707	-14.0%	59	76	4,341	5,208	0	0	510	423
District of Columbia	65	60	8.6%	0	0	0	0	65	60	0	0
Florida	136,012	129,669	4.9%	128,416	121,401	6,821	7,521	8	11	768	735
Georgia	45,465	36,992	23.0%	33,199	27,875	11,955	8,765	0	0	311	353
Maryland	11,194	12,459	-10.0%	2,851	2,938	7,400	8,597	922	888	21	35
North Carolina	30,855	33,647	-8.3%	24,433	28,327	6,279	5,175	81	96	63	49
South Carolina	19,915	19,531	2.0%	19,242	16,100	611	3,376	0	0	61	55
Virginia	46,379	38,052	22.0%	32,202	23,660	13,479	13,849	6	3	693	540
West Virginia	2,513	1,576	59.0%	451	154	1,824	1,242	0	0	237	180
East South Central	109,613	103,055	6.4%	78,356	70,912	29,975	30,806	98	105	1,185	1,231
Alabama	44,415	41,569	6.8%	17,510	14,072	26,275	26,888	0	0	630	608
Kentucky	10,103	10,923	-7.5%	9,807	10,192	218	678	0	0	79	54
Mississippi	42,245	38,556	9.6%	38,607	35,027	3,467	3,235	0	0	171	295
Tennessee	12,850	12,006	7.0%	12,432	11,621	15	5	98	105	305	275
West South Central	341,544	293,276	16.0%	141,642	115,186	163,934	142,402	594	478	35,375	35,211
Arkansas	18,132	15,432	18.0%	17,321	14,599	645	648	NM	46	129	139
Louisiana	53,837	43,495	24.0%	34,693	28,193	5,259	2,375	73	72	13,812	12,855
Oklahoma	46,165	37,141	24.0%	31,620	23,985	14,214	12,758	0	0	331	398
Texas	223,410	197,209	13.0%	58,008	48,408	143,815	126,621	484	360	21,103	21,820
Mountain	106,061	97,229	9.1%	86,475	79,722	18,425	15,972	200	172	960	1,363
Arizona	42,478	38,252	11.0%	32,559	30,051	9,866	8,157	53	44	0	0
Colorado	14,109	12,005	18.0%	11,683	9,623	2,392	2,355	1	0	33	28
Idaho	4,017	2,835	42.0%	2,432	1,615	1,524	1,183	14	13	48	24
Montana	749	628	19.0%	587	450	162	177	0	0	NM	1
Nevada	23,447	23,859	-1.7%	21,776	22,072	1,318	1,350	25	24	328	412
New Mexico	12,719	10,547	21.0%	9,551	7,684	3,116	2,704	49	52	2	106
Utah	7,834	8,519	-8.0%	7,413	8,014	45	46	58	39	317	420
Wyoming	707	584	21.0%	473	212	2	1	0	0	232	371
Pacific Contiguous	100,675	105,319	-4.4%	43,415	41,376	50,603	56,770	890	1,085	5,767	6,088
California	71,810	76,798	-6.5%	26,041	24,477	39,196	45,241	870	1,063	5,703	6,017
Oregon	15,493	15,407	0.6%	8,027	8,032	7,405	7,324	20	17	41	34
Washington	13,371	13,115	2.0%	9,346	8,867	4,002	4,204	0	6	23	38
Pacific Noncontiguous	3,752	2,105	78.0%	3,728	2,080	0	0	0	0	24	25
Alaska	3,752	2,105	78.0%	3,728	2,080	0	0	0	0	24	25
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,308,794	1,208,717	8.3%	687,816	605,610	564,983	545,979	5,152	5,593	50,843	51,534

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 August 2019 and August 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	241,827	246,746	-2.0%	1,378	1,857	230,992	235,218	3,692	3,949	5,766	5,723
Connecticut	98,338	89,867	9.4%	215	337	94,261	85,615	1,405	1,476	2,458	2,438
Maine	7,920	10,780	-27.0%	0	0	6,492	9,328	98	100	1,330	1,352
Massachusetts	80,324	94,536	-15.0%	1,107	1,170	76,315	90,283	1,998	2,188	904	895
New Hampshire	16,314	14,382	13.0%	47	343	16,110	13,886	33	21	125	132
Rhode Island	38,917	37,171	4.7%	0	0	37,814	36,106	155	160	948	906
Vermont	14	10	34.0%	10	7	0	0	4	3	0	0
Middle Atlantic	893,346	805,138	11.0%	66,148	68,698	812,434	721,015	5,200	5,646	9,565	9,779
New Jersey	189,268	181,383	4.3%	1,046	1,072	186,259	178,123	560	792	1,403	1,396
New York	262,517	270,029	-2.8%	65,080	67,576	190,730	195,348	4,160	4,357	2,547	2,747
Pennsylvania	441,561	353,726	25.0%	21	50	435,444	347,543	480	497	5,616	5,636
East North Central	778,030	702,744	11.0%	284,428	270,612	469,869	408,711	5,370	5,388	18,363	18,033
Illinois	106,833	100,286	6.5%	9,406	8,267	93,206	87,622	1,457	1,398	2,764	2,999
Indiana	150,657	138,268	9.0%	67,685	66,955	72,626	61,820	624	647	9,722	8,846
Michigan	169,842	167,849	1.2%	65,347	67,762	100,178	95,641	2,161	2,134	2,156	2,313
Ohio	248,138	208,388	19.0%	50,550	50,164	196,120	156,705	774	845	693	674
Wisconsin	102,560	87,952	17.0%	91,440	77,464	7,739	6,923	355	364	3,027	3,201
West North Central	171,497	163,698	4.8%	147,695	142,421	20,406	17,982	1,187	1,086	2,209	2,209
Iowa	36,621	34,990	4.7%	34,836	33,220	NM	53	378	345	1,354	1,371
Kansas	20,665	22,009	-6.1%	20,347	21,746	0	0	0	0	317	263
Minnesota	50,138	46,709	7.3%	43,470	40,169	5,955	5,839	322	318	390	383
Missouri	41,494	39,671	4.6%	26,571	27,083	14,399	12,090	453	395	71	103
Nebraska	8,003	6,495	23.0%	7,969	6,468	0	0	34	27	0	0
North Dakota	7,710	6,903	12.0%	7,633	6,815	0	0	0	0	76	88
South Dakota	6,868	6,921	-0.8%	6,868	6,921	0	0	0	0	0	0
South Atlantic	1,896,453	1,775,091	6.8%	1,560,175	1,441,862	308,516	308,969	7,903	6,924	19,860	17,336
Delaware	24,639	28,301	-13.0%	254	160	20,601	25,622	0	0	3,784	2,519
District of Columbia	419	443	-5.3%	0	0	0	0	419	443	0	0
Florida	893,916	842,607	6.1%	850,546	793,256	37,706	43,993	70	98	5,594	5,260
Georgia	274,532	256,304	7.1%	206,006	194,347	66,066	59,451	1	0	2,458	2,505
Maryland	76,638	68,566	12.0%	20,684	17,609	48,973	44,944	6,747	5,708	234	305
North Carolina	208,082	220,510	-5.6%	166,258	190,074	40,701	29,366	614	634	509	437
South Carolina	121,580	105,205	16.0%	117,087	90,912	3,975	13,781	0	1	518	512
Virginia	286,997	245,747	17.0%	197,691	154,124	84,124	86,651	51	41	5,131	4,932
West Virginia	9,650	7,408	30.0%	1,649	1,380	6,369	5,162	0	0	1,633	867
East South Central	673,893	695,179	-3.1%	470,959	483,111	192,633	202,486	677	735	9,623	8,847
Alabama	277,346	282,370	-1.8%	106,238	104,534	166,246	173,164	0	0	4,862	4,672
Kentucky	69,364	77,175	-10.0%	66,074	71,434	2,659	5,229	0	0	632	512
Mississippi	243,943	266,896	-8.6%	218,898	241,232	23,624	23,980	0	40	1,421	1,644
Tennessee	83,239	68,738	21.0%	79,749	65,911	104	113	677	696	2,708	2,019
West South Central	1,905,336	1,840,126	3.5%	752,632	715,191	884,941	865,072	3,537	2,817	264,227	257,046
Arkansas	102,312	112,526	-9.1%	96,191	106,323	4,793	4,839	276	324	1,052	1,040
Louisiana	354,056	302,402	17.0%	220,363	185,625	26,247	21,129	465	486	106,981	95,162
Oklahoma	230,513	224,338	2.8%	150,786	141,199	77,469	81,109	0	0	2,259	2,030
Texas	1,218,455	1,200,860	1.5%	285,292	282,044	776,432	757,995	2,796	2,006	153,935	158,815
Mountain	593,072	524,386	13.0%	479,246	429,087	104,377	84,826	1,495	1,427	7,955	9,046
Arizona	230,233	176,109	31.0%	176,516	142,765	53,313	32,928	404	416	0	0
Colorado	86,907	83,210	4.4%	72,435	68,676	14,233	14,317	8	0	231	218
Idaho	19,486	13,583	43.0%	9,940	6,536	9,067	6,677	110	113	369	257
Montana	3,717	3,120	19.0%	2,791	2,628	914	482	0	0	11	10
Nevada	128,015	136,650	-6.3%	116,062	124,473	9,950	9,852	180	178	1,822	2,147
New Mexico	70,075	65,990	6.2%	53,524	45,274	16,150	20,205	349	330	53	181
Utah	50,087	41,684	20.0%	45,886	37,582	738	356	444	389	3,020	3,357
Wyoming	4,552	4,039	13.0%	2,091	1,154	11	10	0	0	2,450	2,875
Pacific Contiguous	520,212	532,505	-2.3%	211,667	212,428	258,017	267,852	6,686	7,689	43,842	44,536
California	370,900	411,558	-9.9%	128,188	143,141	192,965	217,009	6,507	7,486	43,241	43,922
Oregon	89,788	72,085	25.0%	44,365	38,203	44,964	33,454	150	144	309	284
Washington	59,524	48,862	22.0%	39,114	31,084	20,088	17,390	29	59	293	330
Pacific Noncontiguous	20,692	17,631	17.0%	20,491	17,454	0	0	0	2	200	175
Alaska	20,692	17,631	17.0%	20,491	17,454	0	0	0	2	200	175
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	7,694,360	7,303,245	5.4%	3,994,819	3,782,721	3,282,183	3,112,131	35,747	35,663	381,610	372,730

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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, August 2019 and August 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	877	978	-10.0%	0	0	855	955	21	23	0	0
Connecticut	NM	23	NM	0	0	NM	23	0	0	0	0
Maine	52	59	-11.0%	0	0	52	59	0	0	0	0
Massachusetts	316	340	-7.0%	0	0	316	340	0	0	0	0
New Hampshire	90	150	-40.0%	0	0	68	126	21	23	0	0
Rhode Island	381	383	-0.7%	0	0	381	383	0	0	0	0
Vermont	NM	24	NM	0	0	NM	24	0	0	0	0
Middle Atlantic	3,988	4,907	-19.0%	0	0	3,843	4,790	NM	47	96	69
New Jersey	519	664	-22.0%	0	0	505	650	NM	14	0	0
New York	1,334	1,397	-4.5%	0	0	1,334	1,397	0	0	0	0
Pennsylvania	2,136	2,846	-25.0%	0	0	2,005	2,743	NM	34	96	69
East North Central	5,014	4,915	2.0%	791	749	4,185	4,133	22	12	17	21
Illinois	873	921	-5.2%	207	216	667	705	0	0	0	0
Indiana	682	644	5.9%	584	533	98	111	0	0	0	0
Michigan	1,670	1,676	-0.3%	0	0	1,670	1,676	0	0	0	0
Ohio	924	863	7.0%	0	0	924	863	0	0	0	0
Wisconsin	865	810	6.7%	0	0	826	778	22	12	17	21
West North Central	723	875	-17.0%	193	302	530	573	0	0	0	0
Iowa	211	209	1.0%	0	0	211	209	0	0	0	0
Kansas	125	141	-11.0%	0	0	125	141	0	0	0	0
Minnesota	171	191	-11.0%	52	64	119	127	0	0	0	0
Missouri	136	175	-22.0%	61	79	75	96	0	0	0	0
Nebraska	81	159	-49.0%	81	159	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,026	4,465	-9.8%	328	327	3,502	3,829	NM	180	NM	129
Delaware	90	97	-7.0%	0	0	81	87	0	0	NM	9
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	795	903	-12.0%	130	127	664	777	0	0	0	0
Georgia	620	557	11.0%	0	0	611	554	0	0	8	3
Maryland	190	216	-12.0%	0	0	131	142	NM	74	0	0
North Carolina	885	936	-5.5%	0	0	871	849	NM	87	0	0
South Carolina	312	346	-9.9%	190	201	NM	29	0	0	NM	117
Virginia	1,135	1,409	-19.0%	8	0	1,114	1,391	NM	18	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	423	452	-6.4%	178	201	245	251	0	0	0	0
Alabama	66	70	-6.2%	0	0	66	70	0	0	0	0
Kentucky	193	219	-12.0%	178	201	15	18	0	0	0	0
Mississippi	NM	20	NM	0	0	NM	20	0	0	0	0
Tennessee	143	143	0.4%	0	0	143	143	0	0	0	0
West South Central	933	1,105	-16.0%	0	0	933	1,056	0	49	0	0
Arkansas	94	94	-0.2%	0	0	94	94	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	39	40	-3.6%	0	0	39	40	0	0	0	0
Texas	801	971	-17.0%	0	0	801	922	0	49	0	0
Mountain	486	555	-12.0%	NM	28	435	475	29	52	0	0
Arizona	75	81	-7.8%	0	0	75	81	0	0	0	0
Colorado	85	116	-27.0%	0	0	85	116	0	0	0	0
Idaho	49	61	-20.0%	NM	28	NM	13	20	20	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	125	128	-2.5%	0	0	125	128	0	0	0	0
New Mexico	NM	14	NM	0	0	NM	14	0	0	0	0
Utah	144	154	-6.4%	0	0	135	122	9	32	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,362	4,744	-8.1%	109	130	3,249	3,315	1,004	1,268	0	30
California	3,813	4,153	-8.2%	NM	9	2,826	2,879	980	1,234	0	30
Oregon	452	491	-8.1%	102	121	326	336	NM	34	0	0
Washington	97	100	-3.1%	0	0	97	100	0	0	0	0
Pacific Noncontiguous	71	65	9.5%	0	0	0	0	71	65	0	0
Alaska	71	65	9.5%	0	0	0	0	71	65	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	20,903	23,061	-9.4%	1,621	1,739	17,778	19,377	1,281	1,696	223	249

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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 August 2019 and August 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	6,478	7,315	-11.0%	0	0	6,326	7,171	151	144	0	0
Connecticut	148	174	-15.0%	0	0	148	174	0	0	0	0
Maine	393	469	-16.0%	0	0	393	469	0	0	0	0
Massachusetts	2,373	2,662	-11.0%	0	0	2,373	2,662	0	0	0	0
New Hampshire	689	1,098	-37.0%	0	0	537	954	151	144	0	0
Rhode Island	2,729	2,729	0.0%	0	0	2,729	2,729	0	0	0	0
Vermont	147	183	-20.0%	0	0	147	183	0	0	0	0
Middle Atlantic	31,008	34,528	-10.0%	0	0	29,936	33,315	354	360	717	853
New Jersey	4,289	5,088	-16.0%	0	0	4,185	4,981	104	106	0	0
New York	10,005	10,731	-6.8%	0	0	10,005	10,731	0	0	0	0
Pennsylvania	16,714	18,710	-11.0%	0	0	15,747	17,603	250	254	717	853
East North Central	39,015	41,842	-6.8%	5,974	6,434	32,615	35,017	261	222	165	169
Illinois	6,656	8,069	-18.0%	1,584	1,773	5,071	6,296	0	0	0	0
Indiana	5,139	5,471	-6.1%	4,389	4,661	749	810	0	0	0	0
Michigan	13,108	13,338	-1.7%	0	0	13,108	13,338	0	0	0	0
Ohio	7,407	7,594	-2.5%	0	0	7,407	7,594	0	0	0	0
Wisconsin	6,705	7,370	-9.0%	0	0	6,279	6,979	261	222	165	169
West North Central	5,722	6,818	-16.0%	1,852	2,166	3,870	4,652	0	0	0	0
Iowa	1,489	1,661	-10.0%	0	0	1,489	1,661	0	0	0	0
Kansas	933	1,009	-7.5%	0	0	933	1,009	0	0	0	0
Minnesota	1,295	1,752	-26.0%	408	462	887	1,290	0	0	0	0
Missouri	1,048	1,257	-17.0%	487	565	561	691	0	0	0	0
Nebraska	957	1,139	-16.0%	957	1,139	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	31,289	36,012	-13.0%	2,518	2,801	27,017	30,664	757	1,439	997	1,108
Delaware	683	779	-12.0%	0	0	614	705	0	0	69	74
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,088	7,687	-21.0%	1,002	1,150	5,086	6,536	0	0	0	0
Georgia	4,542	4,562	-0.5%	0	0	4,453	4,471	0	0	89	92
Maryland	1,521	1,816	-16.0%	0	0	990	1,219	531	598	0	0
North Carolina	6,674	7,615	-12.0%	0	0	6,564	6,913	110	702	0	0
South Carolina	2,522	2,793	-9.7%	1,465	1,618	218	233	0	0	839	942
Virginia	9,258	10,760	-14.0%	51	33	9,091	10,587	116	139	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,203	3,526	-9.2%	1,351	1,577	1,851	1,949	0	0	0	0
Alabama	495	550	-10.0%	0	0	495	550	0	0	0	0
Kentucky	1,479	1,704	-13.0%	1,351	1,577	127	127	0	0	0	0
Mississippi	154	154	0.1%	0	0	154	154	0	0	0	0
Tennessee	1,075	1,118	-3.8%	0	0	1,075	1,118	0	0	0	0
West South Central	7,424	8,726	-15.0%	0	0	7,235	8,334	189	392	0	0
Arkansas	703	729	-3.6%	0	0	703	729	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	290	312	-7.3%	0	0	290	312	0	0	0	0
Texas	6,431	7,684	-16.0%	0	0	6,242	7,292	189	392	0	0
Mountain	3,752	4,288	-13.0%	169	218	3,315	3,719	267	351	0	0
Arizona	558	634	-12.0%	0	0	558	634	0	0	0	0
Colorado	632	907	-30.0%	0	0	632	907	0	0	0	0
Idaho	340	446	-24.0%	169	218	58	105	112	123	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	947	1,004	-5.7%	0	0	947	1,004	0	0	0	0
New Mexico	70	112	-37.0%	0	0	70	112	0	0	0	0
Utah	1,205	1,185	1.7%	0	0	1,049	957	155	227	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	31,904	38,149	-16.0%	832	3,373	23,795	24,878	7,277	9,671	0	227
California	27,762	31,947	-13.0%	54	837	20,651	21,487	7,057	9,397	0	227
Oregon	3,414	3,837	-11.0%	778	975	2,416	2,588	220	274	0	0
Washington	729	2,365	-69.0%	0	1,562	729	804	0	0	0	0
Pacific Noncontiguous	461	557	-17.0%	0	0	0	0	461	557	0	0
Alaska	461	557	-17.0%	0	0	0	0	461	557	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	160,255	181,761	-12.0%	12,696	16,569	135,961	149,699	9,719	13,136	1,879	2,357

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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, August 2019 and August 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	299	305	-2.0%	0	0	288	291	11	13	0	0
Connecticut	104	101	2.8%	0	0	104	101	0	0	0	0
Maine	20	23	-12.0%	0	0	10	10	11	13	0	0
Massachusetts	164	171	-4.2%	0	0	164	171	0	0	0	0
New Hampshire	10	9	10.0%	0	0	10	9	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	449	483	-7.0%	0	0	355	381	94	102	0	0
New Jersey	113	125	-9.8%	0	0	84	96	29	30	0	0
New York	168	183	-8.0%	0	0	127	133	41	49	0	0
Pennsylvania	168	176	-4.1%	0	0	145	152	24	23	0	0
East North Central	15	21	-30.0%	3	3	0	0	11	17	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	1	2	-16.0%	0	0	0	0	1	2	0	0
Michigan	10	15	-36.0%	0	0	0	0	10	15	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	3	-8.2%	3	3	0	0	0	0	0	0
West North Central	46	64	-28.0%	25	44	21	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	46	64	-28.0%	25	44	21	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	467	513	-8.8%	0	0	431	473	37	40	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	313	348	-10.0%	0	0	313	348	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	57	59	-3.1%	0	0	57	59	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	98	107	-8.0%	0	0	61	67	37	40	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	-11.0%	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	-11.0%	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	58	55	5.0%	0	0	58	55	0	0	0	0
California	35	34	2.4%	0	0	35	34	0	0	0	0
Oregon	10	9	6.6%	0	0	10	9	0	0	0	0
Washington	13	11	12.0%	0	0	13	11	0	0	0	0
Pacific Noncontiguous	38	42	-9.9%	0	0	0	0	38	42	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	38	42	-9.9%	0	0	0	0	38	42	0	0
U.S. Total	1,372	1,483	-7.5%	29	47	1,152	1,220	190	215	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 August 2019 and August 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	2,184	2,393	-8.7%	0	0	2,089	2,274	95	119	0	0
Connecticut	758	780	-2.8%	0	0	758	780	0	0	0	0
Maine	168	195	-14.0%	0	0	73	76	95	119	0	0
Massachusetts	1,181	1,338	-12.0%	0	0	1,181	1,338	0	0	0	0
New Hampshire	77	81	-4.2%	0	0	77	81	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	3,342	3,620	-7.7%	0	0	2,646	2,852	695	768	0	0
New Jersey	850	966	-12.0%	0	0	629	731	221	235	0	0
New York	1,226	1,349	-9.1%	0	0	911	980	315	369	0	0
Pennsylvania	1,266	1,305	-3.0%	0	0	1,106	1,141	160	165	0	0
East North Central	125	158	-21.0%	24	23	0	0	101	134	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	12	13	-12.0%	0	0	0	0	12	13	0	0
Michigan	89	121	-26.0%	0	0	0	0	89	121	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	24	23	0.5%	24	23	0	0	0	0	0	0
West North Central	315	449	-30.0%	180	288	135	154	0	8	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	315	449	-30.0%	180	288	135	154	0	8	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	3,541	3,880	-8.7%	0	0	3,254	3,574	287	306	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	2,358	2,646	-11.0%	0	0	2,358	2,646	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	417	435	-4.1%	0	0	417	435	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	766	798	-4.0%	0	0	479	492	287	306	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	7	-5.0%	0	0	0	0	0	0	7	7
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	7	7	-5.0%	0	0	0	0	0	0	7	7
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	431	473	-9.1%	0	0	431	473	0	0	0	0
California	255	292	-13.0%	0	0	255	292	0	0	0	0
Oregon	75	76	-2.3%	0	0	75	76	0	0	0	0
Washington	101	105	-3.7%	0	0	101	105	0	0	0	0
Pacific Noncontiguous	303	298	1.7%	0	0	0	0	303	298	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	303	298	1.7%	0	0	0	0	303	298	0	0
U.S. Total	10,246	11,278	-9.1%	204	312	8,555	9,327	1,481	1,632	7	7

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

Table 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, August 2019 and August 2018 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	4,850	4,316	12.0%	891	706	3,455	3,172	1	1	504	437
Connecticut	322	284	13.0%	0	0	322	284	0	0	0	0
Maine	1,899	1,853	2.5%	0	0	1,395	1,416	0	0	504	437
Massachusetts	164	162	0.9%	0	0	164	162	0	0	0	0
New Hampshire	1,827	1,437	27.0%	445	316	1,382	1,121	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	638	580	10.0%	446	390	192	189	1	1	0	0
Middle Atlantic	813	837	-2.9%	0	0	514	550	0	0	299	288
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	599	629	-4.7%	0	0	514	549	0	0	85	80
Pennsylvania	214	209	2.5%	0	0	0	1	0	0	214	208
East North Central	2,508	2,253	11.0%	532	431	1,344	1,208	0	0	632	614
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,637	1,510	8.5%	0	0	1,332	1,195	0	0	306	315
Ohio	111	89	24.0%	0	0	13	13	0	0	98	76
Wisconsin	760	654	16.0%	532	431	0	0	0	0	228	223
West North Central	528	474	11.0%	122	27	130	153	49	60	227	234
Iowa	7	1	469.0%	0	0	0	0	7	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	502	439	14.0%	122	27	130	153	23	24	227	234
Missouri	19	34	-45.0%	0	0	0	0	19	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	11,510	11,448	0.5%	2,729	2,753	3,012	2,733	14	8	5,756	5,954
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	1,774	2,043	-13.0%	812	790	139	396	0	0	822	856
Georgia	3,371	3,004	12.0%	0	0	1,054	679	0	0	2,317	2,325
Maryland	14	42	-68.0%	0	0	0	0	14	8	0	34
North Carolina	1,509	1,300	16.0%	0	0	931	708	0	0	578	592
South Carolina	1,515	1,609	-5.9%	116	140	510	563	0	0	889	905
Virginia	3,329	3,450	-3.5%	1,801	1,822	379	387	0	0	1,149	1,241
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,376	3,244	4.1%	0	0	135	177	0	0	3,241	3,067
Alabama	2,196	2,087	5.2%	0	0	135	177	0	0	2,061	1,910
Kentucky	151	100	50.0%	0	0	0	0	0	0	151	100
Mississippi	626	628	-0.4%	0	0	0	0	0	0	626	628
Tennessee	404	428	-5.7%	0	0	0	0	0	0	404	428
West South Central	3,104	2,775	12.0%	0	0	945	388	0	0	2,159	2,387
Arkansas	546	581	-6.1%	0	0	0	0	0	0	546	581
Louisiana	1,076	1,244	-13.0%	0	0	0	0	0	0	1,076	1,244
Oklahoma	151	154	-1.9%	0	0	0	10	0	0	151	144
Texas	1,331	796	67.0%	0	0	945	378	0	0	386	418
Mountain	550	472	17.0%	0	0	399	410	0	0	151	62
Arizona	250	262	-4.7%	0	0	250	262	0	0	0	0
Colorado	117	117	-0.4%	0	0	117	117	0	0	0	0
Idaho	161	69	135.0%	0	0	32	30	0	0	129	39
Montana	22	23	-5.6%	0	0	0	0	0	0	22	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	6,096	6,411	-4.9%	433	510	3,694	3,833	0	0	1,969	2,068
California	4,239	4,378	-3.2%	0	0	3,392	3,494	0	0	847	884
Oregon	752	752	0.0%	0	0	302	340	0	0	450	412
Washington	1,105	1,281	-14.0%	433	510	0	0	0	0	672	772
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	33,336	32,229	3.4%	4,707	4,427	13,628	12,624	63	69	14,938	15,110

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	33,369	36,101	-7.6%	5,210	4,999	24,435	27,556	7	15	3,717	3,531
Connecticut	2,158	2,087	3.4%	0	0	2,158	2,087	0	0	0	0
Maine	13,279	15,515	-14.0%	0	0	9,561	11,975	0	9	3,717	3,531
Massachusetts	1,404	1,446	-2.9%	0	0	1,404	1,446	0	0	0	0
New Hampshire	12,712	13,019	-2.4%	2,968	2,496	9,743	10,523	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	3,817	4,033	-5.3%	2,242	2,503	1,569	1,523	7	6	0	0
Middle Atlantic	5,897	7,440	-21.0%	0	0	3,704	4,282	0	0	2,193	3,157
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	4,327	4,965	-13.0%	0	0	3,703	4,280	0	0	624	685
Pennsylvania	1,570	2,475	-37.0%	0	0	1	2	0	0	1,568	2,473
East North Central	16,296	16,290	0.0%	3,049	3,265	8,419	8,110	0	0	4,829	4,915
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	10,702	10,519	1.7%	0	0	8,328	8,012	0	0	2,373	2,507
Ohio	752	768	-2.1%	0	0	90	98	0	0	661	670
Wisconsin	4,843	5,004	-3.2%	3,049	3,265	0	0	0	0	1,794	1,739
West North Central	3,905	6,244	-37.0%	739	842	959	3,171	313	267	1,894	1,964
Iowa	46	2	NM	0	0	0	0	46	2	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	3,711	6,036	-39.0%	739	842	959	3,171	120	59	1,894	1,964
Missouri	148	206	-28.0%	0	0	0	0	148	206	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	83,501	88,224	-5.4%	19,086	20,019	21,236	23,186	98	88	43,081	44,931
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	13,716	15,381	-11.0%	5,976	4,684	1,699	4,437	0	0	6,041	6,261
Georgia	23,934	23,305	2.7%	0	0	6,867	5,527	0	0	17,067	17,777
Maryland	355	453	-22.0%	0	0	0	0	98	88	257	365
North Carolina	10,350	10,571	-2.1%	0	0	6,092	6,111	0	0	4,258	4,459
South Carolina	11,694	12,419	-5.8%	1,196	1,269	4,002	4,191	0	0	6,497	6,958
Virginia	23,451	26,096	-10.0%	11,914	14,066	2,575	2,919	0	0	8,962	9,111
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	24,286	24,763	-1.9%	0	0	1,012	1,359	0	0	23,274	23,404
Alabama	16,050	16,159	-0.7%	0	0	1,012	1,359	0	0	15,038	14,800
Kentucky	1,084	1,003	8.1%	0	0	0	0	0	0	1,084	1,003
Mississippi	4,324	4,610	-6.2%	0	0	0	0	0	0	4,324	4,610
Tennessee	2,828	2,991	-5.5%	0	0	0	0	0	0	2,828	2,991
West South Central	18,392	21,189	-13.0%	0	0	1,319	2,189	0	0	17,073	18,999
Arkansas	4,611	4,684	-1.5%	0	0	0	0	0	0	4,611	4,684
Louisiana	8,444	9,994	-16.0%	0	0	0	0	0	0	8,444	9,994
Oklahoma	1,107	1,262	-12.0%	0	0	0	20	0	0	1,107	1,242
Texas	4,229	5,249	-19.0%	0	0	1,319	2,169	0	0	2,910	3,080
Mountain	4,400	4,144	6.2%	0	0	3,155	2,933	0	0	1,245	1,211
Arizona	2,111	1,922	9.8%	0	0	2,111	1,922	0	0	0	0
Colorado	836	801	4.3%	0	0	836	801	0	0	0	0
Idaho	1,293	1,257	2.8%	0	0	208	210	0	0	1,085	1,047
Montana	160	164	-2.2%	0	0	0	0	0	0	160	164
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	45,315	42,904	5.6%	3,396	2,947	27,561	26,285	0	0	14,358	13,671
California	31,563	29,924	5.5%	0	0	25,520	24,569	0	0	6,043	5,355
Oregon	5,234	4,639	13.0%	0	0	2,041	1,716	0	0	3,193	2,923
Washington	8,519	8,341	2.1%	3,396	2,947	0	0	0	0	5,123	5,394
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	235,361	247,299	-4.8%	31,479	32,072	91,800	99,072	418	370	111,664	115,785

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 - August 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

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, August 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	August 2019	August 2018	Percentage Change	August 2019	August 2018	Percentage Change	August 2019	August 2018	Percentage Change
New England	W	697	W	3,350	3,098	8.1%	0	0	--
Connecticut	W	W	W	1,183	1,141	3.7%	0	0	--
Maine	0	0	--	264	183	44.0%	0	0	--
Massachusetts	W	W	W	1,313	1,347	-2.6%	0	0	--
New Hampshire	W	W	W	354	216	63.8%	0	0	--
Rhode Island	0	W	W	196	166	18.0%	0	0	--
Vermont	0	0	--	40	44	-8.5%	0	0	--
Middle Atlantic	4,361	2,440	78.7%	5,048	4,809	5.0%	0	0	--
New Jersey	W	W	W	638	649	-1.8%	0	0	--
New York	W	W	W	3,128	3,068	2.0%	0	0	--
Pennsylvania	4,208	2,242	87.7%	1,282	1,091	17.5%	0	0	--
East North Central	23,928	20,759	15.3%	1,034	1,033	0.1%	93	128	-27.9%
Illinois	4,897	4,613	6.2%	72	75	-3.1%	0	0	--
Indiana	6,966	6,512	7.0%	81	92	-12.0%	W	W	W
Michigan	4,046	3,393	19.2%	266	306	-13.0%	W	W	W
Ohio	4,800	3,150	52.4%	425	351	20.9%	0	W	W
Wisconsin	3,220	3,091	4.2%	189	209	-9.5%	W	W	W
West North Central	17,734	20,607	-13.9%	797	898	-11.2%	0	0	--
Iowa	3,067	4,273	-28.2%	123	137	-10.1%	0	0	--
Kansas	2,651	3,054	-13.2%	111	109	1.1%	0	0	--
Minnesota	3,525	2,399	46.9%	85	101	-15.6%	0	0	--
Missouri	4,870	7,096	-31.4%	328	371	-11.7%	0	0	--
Nebraska	2,354	2,261	4.1%	88	107	-17.9%	0	0	--
North Dakota	W	W	W	24	27	-11.3%	0	0	--
South Dakota	W	W	W	38	45	-15.9%	0	0	--
South Atlantic	20,106	16,858	19.3%	10,711	10,713	0.0%	W	W	W
Delaware	W	W	W	585	464	26.1%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	2,935	3,304	-11.2%	3,957	4,505	-12.2%	W	W	W
Georgia	3,991	3,761	6.1%	865	747	15.7%	0	0	--
Maryland	1,542	918	67.9%	669	577	16.1%	0	0	--
North Carolina	3,489	W	W	1,294	1,179	9.7%	0	0	--
South Carolina	2,466	2,387	3.3%	747	639	16.9%	0	0	--
Virginia	W	606	W	2,435	2,469	-1.4%	0	0	--
West Virginia	4,564	W	W	159	134	19.2%	W	W	W
East South Central	10,791	9,440	14.3%	1,191	1,246	-4.4%	0	W	W
Alabama	W	2,064	W	210	194	8.1%	0	0	--
Kentucky	5,339	4,552	17.3%	226	248	-9.1%	0	W	W
Mississippi	W	W	W	36	190	-81.2%	0	0	--
Tennessee	2,899	W	W	720	613	17.3%	0	0	--
West South Central	14,891	14,139	5.3%	1,312	1,462	-10.3%	W	W	W
Arkansas	3,480	2,375	46.5%	165	160	3.4%	0	0	--
Louisiana	2,525	1,665	51.6%	228	351	-35.1%	W	W	W
Oklahoma	2,349	2,989	-21.4%	92	96	-4.8%	0	0	--
Texas	6,537	7,110	-8.1%	827	855	-3.3%	0	0	--
Mountain	16,784	18,156	-7.6%	361	381	-5.4%	W	W	W
Arizona	3,314	3,029	9.4%	138	130	6.3%	0	0	--
Colorado	3,930	4,204	-6.5%	115	128	-9.6%	0	0	--
Idaho	0	0	--	0	0	-35.3%	0	0	--
Montana	W	W	W	15	18	-18.2%	W	W	W
Nevada	W	W	W	3	2	43.7%	0	0	--
New Mexico	W	W	W	18	31	-41.7%	0	0	--
Utah	3,035	4,381	-30.7%	43	38	13.1%	0	0	--
Wyoming	4,108	3,937	4.3%	28	34	-18.0%	0	0	--
Pacific Contiguous	W	W	W	353	360	-2.0%	0	0	--
California	0	0	--	175	193	-9.5%	0	0	--
Oregon	W	W	W	77	66	16.1%	0	0	--
Washington	W	W	W	101	100	0.6%	0	0	--
Pacific Noncontiguous	W	W	W	2,105	2,214	-4.9%	0	0	--
Alaska	0	W	W	83	256	-67.4%	0	0	--
Hawaii	W	W	W	2,021	1,958	3.2%	0	0	--
U.S. Total	110,560	104,048	6.3%	26,260	26,214	0.2%	381	625	-39.0%

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 3.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Divison, August 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**August 2019**	**August 2018**	**Percentage Change**	**August 2019**	**August 2018**	**August 2019**	**August 2018**
Coal (Thousand Tons)							
New England	W	697	W	W	W	W	W
Middle Atlantic	4,361	2,440	78.7%	0	W	4,361	W
East North Central	23,928	20,759	15.3%	15,427	14,170	8,501	6,589
West North Central	17,734	20,607	-13.9%	17,734	20,607	0	0
South Atlantic	20,106	16,858	19.3%	17,432	15,383	2,674	1,475
East South Central	10,791	9,440	14.3%	10,791	9,440	0	0
West South Central	14,891	14,139	5.3%	11,209	10,774	3,682	3,365
Mountain	16,784	18,156	-7.6%	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	**110,560**	**104,048**	**6.3%**	**89,229**	**88,230**	**21,331**	**15,818**
Petroleum Liquids (Thousand Barrels)							
New England	3,350	3,098	8.1%	490	440	2,860	2,657
Middle Atlantic	5,048	4,809	5.0%	2,011	1,903	3,037	2,905
East North Central	1,034	1,033	0.1%	682	715	351	318
West North Central	797	898	-11.2%	771	886	26	12
South Atlantic	10,711	10,713	0.0%	8,547	8,890	2,164	1,822
East South Central	1,191	1,246	-4.4%	1,100	1,172	91	73
West South Central	1,312	1,462	-10.3%	1,048	1,140	263	323
Mountain	361	381	-5.4%	331	351	29	31
Pacific Contiguous	353	360	-2.0%	272	262	81	98
Pacific Noncontiguous	2,105	2,214	-4.9%	2,070	2,176	34	38
U.S. Total	**26,260**	**26,214**	**0.2%**	**17,323**	**17,935**	**8,937**	**8,278**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	93	128	-27.9%	93	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	**381**	**625**	**-39.0%**	**373**	**580**	**8**	**45**

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 - August 2019

	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

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 - August 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
Year to Date												
2017	8,279,947	432,426	2.07	39.63	1.30	94.1	62,342	10,394	11.44	68.63	0.49	71.6
2018	7,453,943	390,191	2.05	39.23	1.31	89.5	96,386	16,016	14.12	85.06	0.41	69.1
2019	7,216,116	374,500	2.05	39.59	1.34	98.6	55,771	9,253	13.80	83.17	0.49	60.3
Rolling 12 Months Ending in August												
2018	11,435,025	600,129	2.05	38.99	1.29	91.6	131,021	21,749	13.71	82.69	0.43	67.2
2019	11,133,290	580,524	2.06	39.48	1.33	97.7	93,453	15,527	14.35	86.36	0.47	66.4

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

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

- Values for 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 - August 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
Year to Date												
2017	61,018	2,175	2.07	58.01	5.53	71.1	6,655,710	6,439,776	3.40	3.52	90.5	2.67
2018	57,658	2,041	2.58	72.97	5.71	65.8	7,559,766	7,320,017	3.43	3.54	90.3	2.79
2019	38,263	1,340	2.14	61.06	5.53	48.5	7,424,343	7,184,409	2.97	3.07	84.3	2.54
Rolling 12 Months Ending in August												
2018	89,477	3,175	2.47	69.58	5.67	70.4	10,855,871	10,508,973	3.39	3.51	90.1	2.73
2019	65,726	2,309	2.26	64.49	5.63	54.8	11,108,735	10,750,157	3.24	3.35	86.3	2.68

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 - August 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
Year to Date												
2017	6,094,358	314,892	2.13	41.18	1.18	94.5	47,180	7,824	11.30	68.11	0.48	77.0
2018	5,507,138	287,022	2.10	40.28	1.18	89.7	59,841	9,895	14.07	85.14	0.36	75.2
2019	5,359,828	277,394	2.12	40.96	1.20	99.8	42,204	6,965	13.59	82.37	0.46	69.5
Rolling 12 Months Ending in August												
2018	8,424,410	439,724	2.10	40.20	1.16	92.8	83,083	13,711	13.55	82.16	0.39	73.5
2019	8,203,726	426,336	2.12	40.79	1.19	98.3	66,413	10,966	14.17	85.83	0.43	71.6

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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 - August 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
Year to Date												
2017	60,197	2,145	2.08	58.33	5.53	113.4	3,225,087	3,121,575	3.62	3.74	97.0	2.68
2018	57,238	2,025	2.59	73.17	5.71	106.8	3,776,240	3,657,982	3.57	3.68	96.0	2.77
2019	37,605	1,315	2.14	61.32	5.52	82.6	3,644,062	3,527,945	3.12	3.23	87.6	2.57
Rolling 12 Months Ending in August												
2018	87,522	3,103	2.49	70.08	5.67	113.0	5,345,537	5,177,234	3.58	3.70	96.1	2.73
2019	63,578	2,230	2.28	65.09	5.63	91.1	5,421,381	5,249,422	3.39	3.50	90.4	2.67

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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 - August 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
Year to Date												
2017	2,054,941	111,316	1.87	34.49	1.64	94.9	14,074	2,395	11.96	70.30	0.46	80.5
2018	1,829,699	97,540	1.88	35.39	1.71	90.9	35,035	5,879	14.25	85.07	0.45	73.7
2019	1,757,561	92,326	1.83	34.82	1.79	98.0	12,450	2,106	14.56	86.04	0.49	60.0
Rolling 12 Months Ending in August												
2018	2,830,974	151,791	1.86	34.74	1.68	90.5	45,666	7,674	14.07	83.86	0.45	71.8
2019	2,776,924	146,801	1.85	35.05	1.75	99.1	25,115	4,250	14.88	87.88	0.46	79.5

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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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- See Glossary for definitions.
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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - August 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
Year to Date												
2017	0	0	--	--	--	0.0	2,886,706	2,791,084	3.14	3.24	94.1	2.57
2018	0	0	--	--	--	0.0	3,258,156	3,151,770	3.29	3.40	94.5	2.79
2019	0	0	--	--	--	0.0	3,243,794	3,135,655	2.77	2.87	89.3	2.43
Rolling 12 Months Ending in August												
2018	0	0	--	--	--	0.0	4,717,606	4,562,258	3.19	3.30	94.2	2.69
2019	0	0	--	--	--	0.0	4,874,850	4,711,577	3.04	3.15	91.1	2.60

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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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- 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 - August 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
Year to Date												
2017	339	15	2.77	63.19	3.00	3.7	0	0	--	--	--	0.0
2018	130	6	2.92	66.44	3.13	1.4	0	0	--	--	--	0.0
2019	119	5	2.90	65.77	2.96	1.5	0	0	--	--	--	0.0
Rolling 12 Months Ending in August												
2018	339	15	2.84	64.64	3.04	2.5	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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Sources: U.S. Energy Information Administration (EIA), Form EIA-923, "Power Plant Operations Report" and predecessor forms including Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report" and Federal Energy Regulatory Commission (FERC), FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants."

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - August 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
Year to Date												
2017	0	0	--	--	--	0.0	5,046	4,883	3.86	3.99	4.8	3.80
2018	0	0	--	--	--	0.0	6,076	5,898	3.53	3.64	6.5	3.52
2019	0	0	--	--	--	0.0	6,341	6,121	3.28	3.39	6.9	3.27
Rolling 12 Months Ending in August												
2018	0	0	--	--	--	0.0	8,871	8,607	3.60	3.71	6.0	3.57
2019	0	0	--	--	--	0.0	9,355	9,047	3.31	3.43	6.8	3.30

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PETROLEUM COKE - includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - August 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
Year to Date												
2017	130,310	6,203	2.50	52.53	1.29	71.6	1,088	174	11.08	69.08	1.25	15.7
2018	116,976	5,624	2.48	51.62	1.29	67.8	1,510	242	13.11	81.74	1.32	15.3
2019	98,608	4,775	2.54	52.40	1.21	63.7	1,117	182	13.14	80.68	1.50	13.3
Rolling 12 Months Ending in August												
2018	179,303	8,599	2.48	51.68	1.35	68.3	2,272	365	12.51	77.88	1.45	15.0
2019	152,362	7,374	2.51	51.85	1.25	64.5	1,926	311	13.55	83.77	1.46	14.7

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

Notes:
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 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 - August 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
Year to Date												
2017	821	29	1.25	34.93	5.82	4.1	538,871	522,234	3.23	3.33	62.8	3.10
2018	420	16	1.75	46.28	5.66	2.4	519,294	504,367	3.14	3.23	58.2	3.04
2019	658	24	1.75	46.99	5.75	3.9	530,146	514,688	2.94	3.03	57.8	2.89
Rolling 12 Months Ending in August												
2018	1,955	72	1.77	48.32	5.81	7.1	783,858	760,874	3.12	3.21	58.9	3.02
2019	2,148	79	1.75	47.56	5.76	8.2	803,149	780,110	3.26	3.35	58.3	3.16

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

Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, August 2019 and 2018
(Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	4	20	-81.0%	0	0	4	20	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	4	5	-30.0%	0	0	4	5	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	15	-100.0%	0	0	0	15	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,443	1,886	-23.0%	0	0	1,443	1,875	0	0	0	11
New Jersey	55	37	48.0%	0	0	55	37	0	0	0	0
New York	0	42	-100.0%	0	0	0	42	0	0	0	0
Pennsylvania	1,388	1,806	-23.0%	0	0	1,388	1,795	0	0	0	11
East North Central	10,825	12,997	-17.0%	6,526	7,611	4,136	5,205	0	0	163	181
Illinois	3,231	4,058	-20.0%	838	677	2,243	3,214	0	0	150	168
Indiana	2,324	2,750	-15.0%	2,147	2,559	176	191	0	0	0	0
Michigan	2,005	2,528	-21.0%	1,974	2,467	31	61	0	0	0	0
Ohio	1,874	1,936	-3.2%	189	197	1,685	1,739	0	0	0	0
Wisconsin	1,390	1,725	-19.0%	1,377	1,712	0	0	0	0	13	13
West North Central	9,917	10,721	-7.5%	9,662	10,453	0	0	0	0	256	268
Iowa	1,516	1,388	9.2%	1,314	1,168	0	0	0	0	202	220
Kansas	924	1,106	-16.0%	924	1,106	0	0	0	0	0	0
Minnesota	1,121	1,163	-3.7%	1,121	1,163	0	0	0	0	0	0
Missouri	2,877	3,276	-12.0%	2,877	3,276	0	0	0	0	0	0
Nebraska	1,221	1,280	-4.6%	1,167	1,232	0	0	0	0	54	48
North Dakota	2,133	2,338	-8.8%	2,133	2,338	0	0	0	0	0	0
South Dakota	126	170	-26.0%	126	170	0	0	0	0	0	0
South Atlantic	6,900	7,685	-10.0%	6,185	6,629	673	1,001	0	0	42	55
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	775	1,043	-26.0%	775	1,033	0	0	0	0	0	10
Georgia	1,537	1,514	1.6%	1,537	1,511	0	0	0	0	0	3
Maryland	195	433	-55.0%	0	0	195	420	0	0	0	13
North Carolina	1,198	1,156	3.7%	1,179	1,117	2	18	0	0	18	20
South Carolina	675	572	18.0%	675	570	0	0	0	0	0	2
Virginia	259	465	-44.0%	214	407	21	51	0	0	24	7
West Virginia	2,261	2,503	-9.7%	1,805	1,991	456	512	0	0	0	0
East South Central	5,498	5,298	3.8%	5,125	4,923	307	307	0	0	65	68
Alabama	1,562	1,199	30.0%	1,562	1,199	0	0	0	0	0	0
Kentucky	2,784	3,139	-11.0%	2,784	3,139	0	0	0	0	0	0
Mississippi	426	443	-3.8%	120	136	307	307	0	0	0	0
Tennessee	725	517	40.0%	660	449	0	0	0	0	65	68
West South Central	8,574	9,537	-10.0%	4,592	5,151	3,978	4,367	0	0	4	19
Arkansas	1,572	1,610	-2.4%	1,338	1,441	229	165	0	0	4	4
Louisiana	626	580	8.0%	513	334	114	246	0	0	0	0
Oklahoma	507	964	-47.0%	443	848	64	101	0	0	0	15
Texas	5,869	6,382	-8.0%	2,298	2,528	3,571	3,854	0	0	0	0
Mountain	7,370	7,861	-6.2%	6,343	7,096	1,027	765	0	0	0	0
Arizona	1,369	1,545	-11.0%	1,369	1,545	0	0	0	0	0	0
Colorado	1,197	1,272	-5.9%	1,197	1,272	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	917	646	42.0%	25	23	892	623	0	0	0	0
Nevada	157	159	-1.6%	95	98	62	61	0	0	0	0
New Mexico	838	735	14.0%	838	735	0	0	0	0	0	0
Utah	1,064	1,113	-4.4%	1,035	1,077	29	36	0	0	0	0
Wyoming	1,830	2,390	-23.0%	1,785	2,346	45	45	0	0	0	0
Pacific Contiguous	448	408	9.8%	154	0	294	342	0	0	0	66
California	0	66	-100.0%	0	0	0	0	0	0	0	66
Oregon	154	0	--	154	0	0	0	0	0	0	0
Washington	294	342	-14.0%	0	0	294	342	0	0	0	0
Pacific Noncontiguous	91	86	6.5%	30	25	61	60	0	0	0	0
Alaska	30	25	18.0%	30	25	0	0	0	0	0	0
Hawaii	61	60	1.5%	0	0	61	60	0	0	0	0
U.S. Total	51,071	56,499	-9.6%	38,617	41,889	11,923	13,942	0	0	530	668

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

Notes:
See Glossary for definitions. Values for 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) August 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	91	208	-56.0%	49	45	43	162	0	0	0	0
Connecticut	0	105	-100.0%	0	0	0	105	0	0	0	0
Maine	43	42	0.9%	0	0	43	42	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	12,696	14,433	-12.0%	0	0	12,653	14,358	0	0	43	74
New Jersey	400	381	5.0%	0	0	400	381	0	0	0	0
New York	69	271	-74.0%	0	0	69	262	0	0	0	9
Pennsylvania	12,227	13,781	-11.0%	0	0	12,184	13,716	0	0	43	66
East North Central	83,633	89,046	-6.1%	48,858	52,695	33,557	34,891	0	0	1,219	1,460
Illinois	24,349	27,935	-13.0%	4,957	5,169	18,215	21,363	0	0	1,177	1,403
Indiana	19,636	19,754	-0.6%	18,294	18,407	1,343	1,348	0	0	0	0
Michigan	14,096	14,012	0.6%	13,970	13,848	125	159	0	0	1	4
Ohio	15,551	14,998	3.7%	1,678	2,978	13,874	12,020	0	0	0	0
Wisconsin	10,000	12,346	-19.0%	9,960	12,293	0	0	0	0	40	53
West North Central	69,112	75,303	-8.2%	67,047	73,090	0	0	5	6	2,059	2,208
Iowa	10,431	9,553	9.2%	8,941	8,002	0	0	0	0	1,490	1,550
Kansas	7,007	7,839	-11.0%	7,007	7,839	0	0	0	0	0	0
Minnesota	8,180	7,803	4.8%	8,111	7,684	0	0	0	0	68	119
Missouri	19,313	23,940	-19.0%	19,307	23,934	0	0	5	6	0	0
Nebraska	8,506	8,822	-3.6%	8,004	8,284	0	0	0	0	501	538
North Dakota	14,572	16,206	-10.0%	14,572	16,206	0	0	0	0	0	0
South Dakota	1,104	1,140	-3.2%	1,104	1,140	0	0	0	0	0	0
South Atlantic	52,312	52,215	0.2%	46,573	44,068	5,211	7,540	0	0	528	607
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	6,120	7,581	-19.0%	6,087	7,522	0	0	0	0	33	59
Georgia	10,453	9,309	12.0%	10,371	9,225	0	0	0	0	83	84
Maryland	1,873	2,908	-36.0%	0	0	1,781	2,779	0	0	92	129
North Carolina	8,698	7,725	13.0%	8,526	7,468	37	87	0	0	135	170
South Carolina	5,517	3,836	44.0%	5,502	3,825	0	0	0	0	15	11
Virginia	1,996	3,412	-42.0%	1,609	2,779	217	479	0	0	170	154
West Virginia	17,585	17,445	0.8%	14,479	13,249	3,106	4,196	0	0	0	0
East South Central	37,476	38,293	-2.1%	34,979	35,579	2,064	2,102	0	0	433	613
Alabama	9,515	10,366	-8.2%	9,515	10,366	0	0	0	0	0	0
Kentucky	20,504	20,848	-1.6%	20,504	20,848	0	0	0	0	0	0
Mississippi	2,992	3,139	-4.7%	929	1,037	2,064	2,102	0	0	0	0
Tennessee	4,464	3,941	13.0%	4,031	3,328	0	0	0	0	433	613
West South Central	61,564	63,793	-3.5%	32,552	32,958	28,880	30,598	0	0	132	237
Arkansas	9,549	10,587	-9.8%	8,097	8,785	1,411	1,746	0	0	42	57
Louisiana	4,247	4,552	-6.7%	3,350	2,895	897	1,657	0	0	0	0
Oklahoma	3,527	6,177	-43.0%	3,172	5,323	265	674	0	0	90	180
Texas	44,240	42,477	4.2%	17,933	15,956	26,307	26,521	0	0	0	0
Mountain	52,617	54,222	-3.0%	46,074	48,335	6,543	5,886	0	0	0	0
Arizona	9,803	10,986	-11.0%	9,803	10,986	0	0	0	0	0	0
Colorado	9,349	9,627	-2.9%	9,349	9,627	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	5,703	5,039	13.0%	187	142	5,516	4,897	0	0	0	0
Nevada	1,248	652	91.0%	842	280	406	372	0	0	0	0
New Mexico	5,648	4,575	23.0%	5,648	4,575	0	0	0	0	0	0
Utah	7,405	7,641	-3.1%	7,132	7,366	273	275	0	0	0	0
Wyoming	13,461	15,702	-14.0%	13,112	15,360	348	342	0	0	0	0
Pacific Contiguous	4,358	2,063	111.0%	1,043	124	2,954	1,515	0	0	361	425
California	361	425	-15.0%	0	0	0	0	0	0	361	425
Oregon	1,043	124	742.0%	1,043	124	0	0	0	0	0	0
Washington	2,954	1,515	95.0%	0	0	2,954	1,515	0	0	0	0
Pacific Noncontiguous	642	616	4.2%	219	128	422	487	0	0	0	0
Alaska	219	128	71.0%	219	128	0	0	0	0	0	0
Hawaii	422	487	-13.0%	0	0	422	487	0	0	0	0
U.S. Total	374,500	390,191	-4.0%	277,394	287,022	92,326	97,540	5	6	4,775	5,624

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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, August 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	0	2	-81.0%	0	1	0	1	0	0	0	0
Connecticut	0	0	-100.0%	0	0	0	0	0	0	0	0
Maine	0	0	-80.0%	0	0	0	0	0	0	0	0
Massachusetts	0	0	-60.0%	0	0	0	0	0	0	0	0
New Hampshire	0	1	-74.0%	0	1	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	16	63	-75.0%	0	2	9	54	0	0	6	7
New Jersey	0	0	-100.0%	0	0	0	0	0	0	0	0
New York	0	32	-99.0%	0	2	0	30	0	0	0	1
Pennsylvania	15	31	-50.0%	0	0	9	24	0	0	6	6
East North Central	52	64	-19.0%	41	45	10	16	0	0	0	2
Illinois	5	9	-42.0%	0	1	5	9	0	0	0	0
Indiana	14	26	-47.0%	14	26	0	0	0	0	0	0
Michigan	17	14	21.0%	17	14	0	0	0	0	0	1
Ohio	11	11	-2.7%	6	2	5	8	0	0	0	2
Wisconsin	4	3	51.0%	4	3	0	0	0	0	0	0
West North Central	36	31	19.0%	36	31	0	0	0	0	0	0
Iowa	9	4	137.0%	9	4	0	0	0	0	0	0
Kansas	11	9	20.0%	11	9	0	0	0	0	0	0
Minnesota	4	2	48.0%	4	2	0	0	0	0	0	0
Missouri	6	10	-38.0%	6	10	0	0	0	0	0	0
Nebraska	0	0	-100.0%	0	0	0	0	0	0	0	0
North Dakota	4	5	-24.0%	4	5	0	0	0	0	0	0
South Dakota	2	0	--	2	0	0	0	0	0	0	0
South Atlantic	150	231	-35.0%	127	170	13	49	0	0	11	12
Delaware	2	15	-88.0%	0	0	2	15	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	66	35	89.0%	63	32	0	0	0	0	3	3
Georgia	15	35	-58.0%	11	29	0	4	0	0	4	3
Maryland	11	8	40.0%	0	0	11	8	0	0	0	0
North Carolina	13	41	-67.0%	11	34	0	2	0	0	2	5
South Carolina	7	13	-47.0%	6	13	0	0	0	0	1	0
Virginia	1	46	-97.0%	1	24	0	21	0	0	0	1
West Virginia	35	38	-8.6%	35	38	0	0	0	0	0	0
East South Central	22	20	5.5%	21	20	0	0	0	0	1	1
Alabama	1	4	-87.0%	1	4	0	0	0	0	0	0
Kentucky	8	10	-20.0%	8	10	0	0	0	0	0	0
Mississippi	1	0	NM	1	0	0	0	0	0	0	0
Tennessee	12	6	86.0%	11	6	0	0	0	0	1	1
West South Central	8	10	-24.0%	6	6	1	4	0	0	0	0
Arkansas	0	4	-100.0%	0	0	0	4	0	0	0	0
Louisiana	2	1	111.0%	2	1	0	0	0	0	0	0
Oklahoma	2	1	133.0%	2	1	0	0	0	0	0	0
Texas	4	5	-7.5%	3	4	1	0	0	0	0	0
Mountain	27	21	31.0%	23	12	4	9	0	0	0	0
Arizona	10	2	346.0%	10	2	0	0	0	0	0	0
Colorado	0	1	-100.0%	0	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2	9	-76.0%	0	0	2	9	0	0	0	0
Nevada	3	3	-17.0%	3	2	0	1	0	0	0	0
New Mexico	2	1	63.0%	2	1	0	0	0	0	0	0
Utah	4	2	57.0%	2	2	2	0	0	0	0	0
Wyoming	7	2	234.0%	7	2	0	0	0	0	0	0
Pacific Contiguous	0	3	-84.0%	0	0	0	3	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	3	-84.0%	0	0	0	3	0	0	0	0
Pacific Noncontiguous	549	718	-24.0%	388	540	161	177	0	0	0	0
Alaska	3	6	-54.0%	3	6	0	0	0	0	0	0
Hawaii	546	712	-23.0%	385	534	161	177	0	0	0	0
U.S. Total	860	1,163	-26.0%	643	826	199	315	0	0	18	22

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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) August 2019 and 2018
(Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	193	1,447	-87.0%	8	129	185	1,318	0	0	0	0
Connecticut	6	379	-98.0%	0	0	6	379	0	0	0	0
Maine	128	254	-50.0%	0	0	128	254	0	0	0	0
Massachusetts	51	464	-89.0%	0	25	51	440	0	0	0	0
New Hampshire	8	184	-95.0%	8	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	666	3,159	-79.0%	295	941	324	2,154	0	0	47	65
New Jersey	23	260	-91.0%	0	0	23	260	0	0	0	0
New York	381	2,139	-82.0%	295	941	87	1,182	0	0	0	16
Pennsylvania	261	760	-66.0%	0	0	215	711	0	0	47	49
East North Central	603	559	7.9%	356	330	224	210	0	0	24	19
Illinois	58	61	-5.3%	2	3	56	58	0	0	0	0
Indiana	150	131	15.0%	150	130	0	1	0	0	0	0
Michigan	101	103	-1.9%	92	98	0	0	0	0	9	5
Ohio	264	200	32.0%	90	45	160	140	0	0	15	14
Wisconsin	29	64	-54.0%	22	53	8	11	0	0	0	0
West North Central	331	379	-13.0%	331	378	0	1	0	0	0	0
Iowa	80	84	-4.1%	80	84	0	0	0	0	0	0
Kansas	65	70	-7.2%	65	70	0	0	0	0	0	0
Minnesota	25	26	-4.8%	25	25	0	1	0	0	0	0
Missouri	99	146	-32.0%	99	146	0	0	0	0	0	0
Nebraska	11	6	71.0%	11	6	0	0	0	0	0	0
North Dakota	49	43	14.0%	49	43	0	0	0	0	0	0
South Dakota	2	4	-45.0%	2	4	0	0	0	0	0	0
South Atlantic	1,101	4,147	-73.0%	889	3,082	104	909	0	0	107	156
Delaware	4	263	-98.0%	0	0	4	263	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	335	357	-6.3%	311	324	0	0	0	0	24	34
Georgia	138	312	-56.0%	82	222	1	57	0	0	54	33
Maryland	86	402	-79.0%	0	0	86	402	0	0	0	0
North Carolina	180	971	-81.0%	166	895	0	41	0	0	14	35
South Carolina	69	490	-86.0%	63	458	0	0	0	0	6	33
Virginia	113	1,145	-90.0%	92	998	12	126	0	0	9	22
West Virginia	176	206	-15.0%	176	186	0	20	0	0	0	0
East South Central	203	252	-20.0%	190	191	8	58	0	0	4	3
Alabama	21	112	-81.0%	13	54	8	58	0	0	0	0
Kentucky	92	81	14.0%	92	81	0	0	0	0	0	0
Mississippi	18	13	43.0%	18	13	0	0	0	0	0	0
Tennessee	71	46	54.0%	67	44	0	0	0	0	4	3
West South Central	147	138	5.9%	108	108	39	31	0	0	0	0
Arkansas	42	34	24.0%	25	23	17	11	0	0	0	0
Louisiana	9	21	-54.0%	9	21	0	0	0	0	0	0
Oklahoma	23	22	6.5%	23	22	0	0	0	0	0	0
Texas	71	62	15.0%	50	42	22	20	0	0	0	0
Mountain	266	197	35.0%	245	171	20	26	0	0	0	0
Arizona	93	61	53.0%	93	61	0	0	0	0	0	0
Colorado	2	5	-57.0%	2	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	19	14	43.0%	16	10	3	4	0	0	0	0
New Mexico	31	15	105.0%	31	15	0	0	0	0	0	0
Utah	61	46	34.0%	59	44	2	1	0	0	0	0
Wyoming	44	35	24.0%	44	35	0	0	0	0	0	0
Pacific Contiguous	17	10	76.0%	6	0	11	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	17	10	76.0%	6	0	11	10	0	0	0	0
Pacific Noncontiguous	5,727	5,728	0.0%	4,536	4,565	1,192	1,162	0	0	0	0
Alaska	16	8	94.0%	16	8	0	0	0	0	0	0
Hawaii	5,711	5,720	-0.1%	4,519	4,557	1,192	1,162	0	0	0	0
U.S. Total	9,253	16,016	-42.0%	6,965	9,895	2,106	5,879	0	0	182	242

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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 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State, August 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	61	59	4.4%	61	59	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	55	53	4.2%	55	53	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	6	6	5.9%	6	6	0	0	0	0	0	0
West North Central	23	10	132.0%	0	0	0	0	0	0	23	10
Iowa	23	10	132.0%	0	0	0	0	0	0	23	10
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	76	-51.0%	37	76	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	76	-51.0%	37	76	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	137	154	-11.0%	137	154	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	137	154	-11.0%	137	154	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	258	298	-13.0%	235	288	0	0	0	0	23	10

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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) August 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 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	237	421	-44.0%	237	421	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	208	380	-45.0%	208	380	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	29	41	-28.0%	29	41	0	0	0	0	0	0
West North Central	24	16	54.0%	0	0	0	0	0	0	24	16
Iowa	24	16	54.0%	0	0	0	0	0	0	24	16
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	303	620	-51.0%	303	620	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	303	620	-51.0%	303	620	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	775	984	-21.0%	775	984	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	775	984	-21.0%	775	984	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	1,340	2,041	-34.0%	1,315	2,025	0	0	0	0	24	16

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NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
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, August 2019 and 2018
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	32,319	48,318	-33.0%	121	395	32,198	47,923	0	0	0	0
Connecticut	13,787	14,683	-6.1%	0	0	13,787	14,683	0	0	0	0
Maine	699	2,392	-71.0%	0	0	699	2,392	0	0	0	0
Massachusetts	9,969	19,352	-48.0%	121	251	9,849	19,102	0	0	0	0
New Hampshire	3,854	4,155	-7.2%	1	144	3,853	4,011	0	0	0	0
Rhode Island	4,010	7,736	-48.0%	0	0	4,010	7,736	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	137,463	144,005	-4.5%	10,936	13,587	125,727	129,473	0	0	801	945
New Jersey	27,789	33,587	-17.0%	0	0	27,789	33,587	0	0	0	0
New York	40,022	52,206	-23.0%	10,936	13,587	28,471	37,908	0	0	616	711
Pennsylvania	69,652	58,213	20.0%	0	0	69,467	57,978	0	0	185	235
East North Central	100,020	99,810	0.2%	35,376	35,907	63,094	62,279	593	591	958	1,033
Illinois	10,923	16,649	-34.0%	1,423	1,641	9,500	15,008	0	0	0	0
Indiana	18,200	17,948	1.4%	7,564	7,770	10,636	10,178	0	0	0	0
Michigan	26,907	21,465	25.0%	10,474	7,524	15,461	12,968	593	591	379	382
Ohio	31,203	29,600	5.4%	5,387	6,804	25,465	22,327	0	0	351	469
Wisconsin	12,787	14,148	-9.6%	10,528	12,168	2,031	1,798	0	0	228	182
West North Central	21,223	22,952	-7.5%	17,814	19,724	2,732	2,494	215	172	462	561
Iowa	7,432	4,768	56.0%	6,977	4,210	0	0	0	0	455	559
Kansas	2,549	2,043	25.0%	2,549	2,043	0	0	0	0	0	0
Minnesota	4,653	7,685	-39.0%	4,427	6,626	217	1,055	1	1	7	3
Missouri	5,890	5,612	5.0%	3,161	4,001	2,515	1,440	214	171	0	0
Nebraska	515	1,061	-51.0%	515	1,061	0	0	0	0	0	0
North Dakota	185	977	-81.0%	185	977	0	0	0	0	0	0
South Dakota	0	807	-100.0%	0	807	0	0	0	0	0	0
South Atlantic	271,456	273,872	-0.9%	224,235	220,223	44,301	50,649	0	0	2,920	3,000
Delaware	3,790	4,735	-20.0%	0	0	3,790	4,735	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	128,816	126,435	1.9%	123,605	120,065	4,775	5,989	0	0	436	381
Georgia	37,236	37,208	0.1%	28,251	27,906	8,325	8,755	0	0	660	547
Maryland	9,584	11,178	-14.0%	2,825	2,901	6,758	8,066	0	0	0	211
North Carolina	28,444	33,670	-16.0%	22,746	28,321	5,452	5,183	0	0	246	166
South Carolina	18,863	19,501	-3.3%	18,454	16,486	363	2,968	0	0	46	47
Virginia	42,110	38,987	8.0%	27,935	24,375	13,255	13,676	0	0	920	936
West Virginia	2,614	2,157	21.0%	419	170	1,583	1,275	0	0	612	711
East South Central	102,346	102,660	-0.3%	69,941	70,021	30,574	31,031	0	0	1,831	1,608
Alabama	42,278	40,755	3.7%	15,394	13,641	26,884	27,114	0	0	0	0
Kentucky	9,032	10,798	-16.0%	8,814	10,121	218	678	0	0	0	0
Mississippi	38,173	37,878	0.8%	34,700	34,639	3,473	3,239	0	0	0	0
Tennessee	12,863	13,229	-2.8%	11,033	11,621	0	0	0	0	1,831	1,608
West South Central	333,724	326,529	2.2%	111,819	114,274	165,719	154,678	0	0	56,186	57,577
Arkansas	14,645	15,939	-8.1%	13,212	14,522	1,182	1,171	0	0	251	247
Louisiana	53,530	48,769	9.8%	30,016	27,578	5,344	2,934	0	0	18,170	18,257
Oklahoma	40,931	36,882	11.0%	26,403	23,745	13,992	12,545	0	0	536	591
Texas	224,618	224,939	-0.1%	42,188	48,429	145,201	138,028	0	0	37,229	38,482
Mountain	96,110	90,571	6.1%	81,489	76,652	14,575	13,877	0	0	46	42
Arizona	41,725	37,828	10.0%	31,887	29,758	9,839	8,070	0	0	0	0
Colorado	13,100	11,561	13.0%	11,284	9,494	1,817	2,067	0	0	0	0
Idaho	1,454	2,407	-40.0%	1,454	1,224	0	1,183	0	0	0	0
Montana	323	306	5.7%	323	305	0	1	0	0	0	0
Nevada	21,702	22,156	-2.1%	21,702	22,156	0	0	0	0	0	0
New Mexico	10,884	8,799	24.0%	7,966	6,244	2,917	2,555	0	0	0	0
Utah	6,593	7,311	-9.8%	6,546	7,269	0	0	0	0	46	42
Wyoming	329	204	61.0%	327	203	2	1	0	0	0	0
Pacific Contiguous	82,967	93,897	-12.0%	32,369	36,194	47,780	55,128	0	0	2,818	2,575
California	62,382	66,862	-6.7%	22,051	20,538	37,512	43,749	0	0	2,818	2,575
Oregon	11,895	15,456	-23.0%	4,624	8,189	7,271	7,266	0	0	0	0
Washington	8,691	11,579	-25.0%	5,694	7,466	2,997	4,112	0	0	0	0
Pacific Noncontiguous	59	1,316	-96.0%	59	1,316	0	0	0	0	0	0
Alaska	59	1,316	-96.0%	59	1,316	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,177,687	1,203,931	-2.2%	584,158	588,293	526,699	547,533	808	764	66,022	67,341

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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) August 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	204,645	237,907	-14.0%	460	1,069	204,185	236,838	0	0	0	0
Connecticut	91,058	84,241	8.1%	0	0	91,058	84,241	0	0	0	0
Maine	4,841	9,272	-48.0%	0	0	4,841	9,272	0	0	0	0
Massachusetts	70,260	94,077	-25.0%	413	725	69,847	93,351	0	0	0	0
New Hampshire	16,176	14,254	13.0%	47	343	16,129	13,911	0	0	0	0
Rhode Island	22,310	36,064	-38.0%	0	0	22,310	36,064	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	839,656	780,381	7.6%	64,078	66,587	768,961	706,730	0	0	6,617	7,064
New Jersey	181,188	186,592	-2.9%	0	0	181,188	186,592	0	0	0	0
New York	235,087	257,205	-8.6%	64,078	66,587	166,051	185,546	0	0	4,958	5,072
Pennsylvania	423,381	336,583	26.0%	0	0	421,722	334,591	0	0	1,659	1,992
East North Central	664,155	667,334	-0.5%	224,599	246,345	425,524	406,711	4,689	4,489	9,343	9,790
Illinois	59,287	91,308	-35.0%	6,425	7,696	52,846	83,588	0	0	17	24
Indiana	126,450	125,098	1.1%	52,883	64,737	73,567	60,361	0	0	0	0
Michigan	164,408	165,930	-0.9%	45,757	51,429	110,058	105,732	4,689	4,489	3,905	4,280
Ohio	225,050	202,873	11.0%	40,884	49,622	180,397	149,596	0	0	3,769	3,655
Wisconsin	88,960	82,124	8.3%	78,651	72,861	8,657	7,434	0	0	1,652	1,830
West North Central	124,868	162,153	-23.0%	107,207	140,467	13,187	16,953	1,432	1,409	3,041	3,324
Iowa	43,739	44,328	-1.3%	40,760	41,044	0	0	0	0	2,979	3,284
Kansas	13,621	18,669	-27.0%	13,621	18,669	0	0	0	0	0	0
Minnesota	30,511	42,516	-28.0%	29,786	36,228	659	6,242	5	6	62	40
Missouri	33,353	37,617	-11.0%	19,397	25,503	12,529	10,711	1,427	1,404	0	0
Nebraska	2,328	6,383	-64.0%	2,328	6,383	0	0	0	0	0	0
North Dakota	1,315	7,035	-81.0%	1,315	7,035	0	0	0	0	0	0
South Dakota	0	5,605	-100.0%	0	5,605	0	0	0	0	0	0
South Atlantic	1,769,834	1,737,999	1.8%	1,476,503	1,426,817	269,696	287,559	0	0	23,635	23,623
Delaware	18,220	23,842	-24.0%	0	0	18,220	23,842	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	847,250	811,838	4.4%	818,030	776,483	26,161	32,672	0	0	3,058	2,683
Georgia	240,733	257,848	-6.6%	181,948	194,228	53,323	57,741	0	0	5,462	5,879
Maryland	67,865	58,281	16.0%	20,752	13,410	45,961	43,072	0	0	1,151	1,799
North Carolina	197,517	219,706	-10.0%	159,353	190,031	36,433	27,846	0	0	1,732	1,829
South Carolina	119,280	105,202	13.0%	116,422	93,418	2,191	11,211	0	0	667	573
Virginia	267,475	250,440	6.8%	178,378	157,930	82,097	85,846	0	0	6,999	6,664
West Virginia	11,493	10,841	6.0%	1,620	1,316	5,309	5,329	0	0	4,565	4,196
East South Central	646,544	692,621	-6.7%	433,625	475,982	195,231	203,759	0	0	17,687	12,880
Alabama	261,202	269,623	-3.1%	92,300	95,113	168,902	174,510	0	0	0	0
Kentucky	64,147	76,573	-16.0%	61,489	71,344	2,659	5,229	0	0	0	0
Mississippi	231,603	267,035	-13.0%	207,933	243,014	23,671	24,020	0	0	0	0
Tennessee	89,590	79,390	13.0%	71,903	66,511	0	0	0	0	17,687	12,880
West South Central	1,975,334	2,082,082	-5.1%	606,011	692,732	933,448	960,955	0	0	435,875	428,395
Arkansas	86,828	112,820	-23.0%	75,960	102,279	9,013	8,940	0	0	1,855	1,601
Louisiana	368,224	341,221	7.9%	193,106	178,499	28,597	25,156	0	0	146,521	137,566
Oklahoma	208,169	223,098	-6.7%	128,297	140,416	76,407	80,026	0	0	3,464	2,656
Texas	1,312,113	1,404,943	-6.6%	208,648	271,539	819,430	846,833	0	0	284,035	286,572
Mountain	536,585	478,896	12.0%	457,156	407,379	79,271	71,089	0	0	158	428
Arizona	225,514	170,529	32.0%	172,556	137,835	52,958	32,694	0	0	0	0
Colorado	82,416	80,252	2.7%	71,306	67,832	11,110	12,420	0	0	0	0
Idaho	6,666	10,990	-39.0%	6,666	4,314	0	6,677	0	0	0	0
Montana	1,809	1,850	-2.2%	1,809	1,845	0	5	0	0	0	0
Nevada	115,965	124,637	-7.0%	115,965	124,637	0	0	0	0	0	0
New Mexico	59,744	54,866	8.9%	44,552	35,583	15,192	19,283	0	0	0	0
Utah	42,702	34,657	23.0%	42,544	34,229	0	0	0	0	158	428
Wyoming	1,768	1,114	59.0%	1,756	1,104	11	10	0	0	0	0
Pacific Contiguous	422,350	469,210	-10.0%	157,867	189,169	246,151	261,177	0	0	18,332	18,864
California	314,763	354,007	-11.0%	109,143	123,007	187,289	212,136	0	0	18,332	18,864
Oregon	70,841	72,263	-2.0%	26,128	38,896	44,712	33,367	0	0	0	0
Washington	36,746	42,940	-14.0%	22,596	27,266	14,149	15,674	0	0	0	0
Pacific Noncontiguous	440	11,434	-96.0%	440	11,434	0	0	0	0	0	0
Alaska	440	11,434	-96.0%	440	11,434	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	7,184,409	7,320,017	-1.9%	3,527,945	3,657,982	3,135,655	3,151,770	6,121	5,898	514,688	504,367

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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, August 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.87	2.03	-7.9%	--	--	1.87	2.03
New Jersey	W	W	W	--	--	W	W
New York	--	W	W	--	--	--	W
Pennsylvania	W	1.98	W	--	--	W	1.98
East North Central	1.96	1.99	-1.5%	2.08	2.13	1.78	1.78
Illinois	1.77	1.70	4.1%	1.99	1.90	1.69	1.65
Indiana	W	W	W	2.13	2.11	W	W
Michigan	W	W	W	2.05	2.13	W	W
Ohio	W	W	W	1.78	1.73	W	W
Wisconsin	2.17	2.31	-6.1%	2.17	2.31	--	--
West North Central	1.58	1.72	-8.1%	1.58	1.72	--	--
Iowa	1.54	1.61	-4.3%	1.54	1.61	--	--
Kansas	1.59	1.68	-5.4%	1.59	1.68	--	--
Minnesota	1.97	2.21	-11.0%	1.97	2.21	--	--
Missouri	1.63	1.81	-9.9%	1.63	1.81	--	--
Nebraska	1.20	1.27	-5.5%	1.20	1.27	--	--
North Dakota	1.47	1.59	-7.5%	1.47	1.59	--	--
South Dakota	2.00	1.95	2.6%	2.00	1.95	--	--
South Atlantic	2.55	2.63	-3.0%	2.58	2.68	2.30	2.36
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.80	2.86	-2.1%	2.80	2.86	--	--
Georgia	2.68	2.72	-1.5%	2.68	2.72	--	--
Maryland	2.56	2.61	-1.9%	--	--	2.56	2.61
North Carolina	W	3.19	W	2.62	3.17	W	4.15
South Carolina	3.17	3.28	-3.4%	3.17	3.28	--	--
Virginia	W	2.81	W	2.70	2.68	W	3.65
West Virginia	W	2.08	W	2.17	2.12	W	1.94
East South Central	W	W	W	2.06	2.03	W	W
Alabama	2.32	2.10	10.0%	2.32	2.10	--	--
Kentucky	1.90	1.96	-3.1%	1.90	1.96	--	--
Mississippi	W	W	W	2.92	2.76	W	W
Tennessee	2.06	2.17	-5.1%	2.06	2.17	--	--
West South Central	1.82	1.86	-2.2%	2.09	2.04	1.49	1.63
Arkansas	W	W	W	1.89	2.00	W	W
Louisiana	W	W	W	3.14	3.27	W	W
Oklahoma	W	W	W	1.59	1.80	W	W
Texas	1.68	1.73	-2.9%	2.07	1.98	1.42	1.56
Mountain	W	W	W	2.06	2.05	W	W
Arizona	2.66	2.46	8.1%	2.66	2.46	--	--
Colorado	1.76	1.75	0.6%	1.76	1.75	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.98	2.21	W	W
Nevada	W	W	W	2.64	3.25	W	W
New Mexico	2.52	2.47	2.0%	2.52	2.47	--	--
Utah	1.90	2.04	-6.9%	1.90	2.04	--	--
Wyoming	W	W	W	1.60	1.74	W	W
Pacific Contiguous	W	W	W	2.40	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.40	--	--	2.40	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.52	3.22	W	W
Alaska	3.52	3.22	9.3%	3.52	3.22	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.00	2.05	-2.4%	2.07	2.11	1.78	1.86

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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) August 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	W	4.25	W	3.54	3.61	W	4.44
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	1.96	2.19	-11.0%	--	--	1.96	2.19
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.89	2.13	-11.0%	--	--	1.89	2.13
East North Central	1.99	1.98	0.5%	2.12	2.10	1.81	1.80
Illinois	W	1.75	W	1.97	1.86	W	1.72
Indiana	W	W	W	2.15	2.11	W	W
Michigan	W	W	W	2.07	2.12	W	W
Ohio	1.81	W	W	1.83	1.77	1.80	W
Wisconsin	2.24	2.26	-0.9%	2.24	2.26	--	--
West North Central	1.63	1.72	-5.2%	1.63	1.72	--	--
Iowa	1.55	1.68	-7.7%	1.55	1.68	--	--
Kansas	1.62	1.70	-4.7%	1.62	1.70	--	--
Minnesota	2.02	2.16	-6.5%	2.02	2.16	--	--
Missouri	1.67	1.82	-8.2%	1.67	1.82	--	--
Nebraska	1.22	1.27	-3.9%	1.22	1.27	--	--
North Dakota	1.58	1.53	3.3%	1.58	1.53	--	--
South Dakota	1.85	1.93	-4.1%	1.85	1.93	--	--
South Atlantic	2.61	2.63	-0.8%	2.64	2.69	2.35	2.27
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.88	2.87	0.3%	2.88	2.87	--	--
Georgia	2.72	2.78	-2.2%	2.72	2.78	--	--
Maryland	2.68	2.53	5.9%	--	--	2.68	2.53
North Carolina	W	3.11	W	2.88	3.10	W	3.99
South Carolina	3.24	3.32	-2.4%	3.24	3.32	--	--
Virginia	W	2.82	W	2.74	2.66	W	3.57
West Virginia	W	2.08	W	2.11	2.14	W	1.89
East South Central	W	W	W	2.09	2.08	W	W
Alabama	2.36	2.28	3.5%	2.36	2.28	--	--
Kentucky	1.93	1.96	-1.5%	1.93	1.96	--	--
Mississippi	W	W	W	3.11	2.63	W	W
Tennessee	2.16	2.16	0.0%	2.16	2.16	--	--
West South Central	1.89	1.84	2.7%	2.14	2.01	1.60	1.65
Arkansas	W	W	W	1.99	1.95	W	W
Louisiana	W	W	W	3.27	2.57	W	W
Oklahoma	W	W	W	1.73	1.76	W	W
Texas	1.76	1.75	0.6%	2.07	2.03	1.54	1.59
Mountain	W	W	W	2.11	2.00	W	W
Arizona	2.65	2.45	8.2%	2.65	2.45	--	--
Colorado	1.78	1.66	7.2%	1.78	1.66	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.98	2.01	W	W
Nevada	W	W	W	2.80	2.95	W	W
New Mexico	2.49	2.43	2.5%	2.49	2.43	--	--
Utah	1.97	2.05	-3.9%	1.97	2.05	--	--
Wyoming	W	W	W	1.77	1.69	W	W
Pacific Contiguous	W	W	W	2.25	2.26	W	W
California	--	--	--	--	--	--	--
Oregon	2.25	2.26	-0.4%	2.25	2.26	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.46	3.34	W	W
Alaska	3.46	3.34	3.6%	3.46	3.34	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.05	2.05	0.0%	2.12	2.10	1.83	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, August 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018
New England	W	16.75	W	17.62	19.61	W	14.74
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	21.57	W	W
New Hampshire	17.62	19.57	-10.0%	17.62	19.57	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	15.05	W	W	--	13.36	15.05	W
New Jersey	--	W	W	--	--	--	W
New York	W	14.25	W	--	13.36	W	14.29
Pennsylvania	W	16.97	W	--	--	W	16.97
East North Central	14.04	16.82	-17.0%	14.02	16.56	14.11	17.52
Illinois	W	W	W	--	16.88	W	W
Indiana	14.13	16.58	-15.0%	14.13	16.58	--	--
Michigan	13.32	16.47	-19.0%	13.32	16.47	--	--
Ohio	W	W	W	14.50	16.82	W	W
Wisconsin	15.65	16.56	-5.5%	15.65	16.56	--	--
West North Central	13.98	16.57	-16.0%	13.98	16.57	--	--
Iowa	13.97	16.41	-15.0%	13.97	16.41	--	--
Kansas	13.87	16.83	-18.0%	13.87	16.83	--	--
Minnesota	14.22	15.90	-11.0%	14.22	15.90	--	--
Missouri	13.91	16.49	-16.0%	13.91	16.49	--	--
Nebraska	--	18.70	--	--	18.70	--	--
North Dakota	14.18	16.62	-15.0%	14.18	16.62	--	--
South Dakota	13.99	--	--	13.99	--	--	--
South Atlantic	14.28	W	W	14.34	16.83	13.73	W
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	13.93	16.37	-15.0%	13.93	16.37	--	--
Georgia	14.69	W	W	14.69	16.25	--	W
Maryland	W	W	W	--	--	W	W
North Carolina	13.96	W	W	13.96	16.61	--	W
South Carolina	14.32	17.50	-18.0%	14.32	17.50	--	--
Virginia	14.13	W	W	14.13	18.69	--	W
West Virginia	15.09	16.44	-8.2%	15.09	16.44	--	--
East South Central	13.69	16.20	-15.0%	13.69	16.20	--	--
Alabama	14.62	16.53	-12.0%	14.62	16.53	--	--
Kentucky	13.91	16.05	-13.0%	13.91	16.05	--	--
Mississippi	13.31	17.36	-23.0%	13.31	17.36	--	--
Tennessee	13.52	16.24	-17.0%	13.52	16.24	--	--
West South Central	W	W	W	14.31	16.64	W	W
Arkansas	--	W	W	--	16.20	--	W
Louisiana	13.91	16.28	-15.0%	13.91	16.28	--	--
Oklahoma	14.81	17.16	-14.0%	14.81	17.16	--	--
Texas	W	W	W	14.34	16.66	W	W
Mountain	W	W	W	16.67	18.89	W	W
Arizona	16.69	18.14	-8.0%	16.69	18.14	--	--
Colorado	--	18.41	--	--	18.41	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	17.31	W	W	17.31	18.21	--	W
New Mexico	20.32	21.35	-4.8%	20.32	21.35	--	--
Utah	W	21.63	W	16.13	21.63	W	--
Wyoming	15.50	16.06	-3.5%	15.50	16.06	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	13.17	14.51	W	W
Alaska	14.30	17.43	-18.0%	14.30	17.43	--	--
Hawaii	W	W	W	13.16	14.48	W	W
U.S. Total	14.28	15.43	-7.5%	13.64	15.26	16.40	15.92

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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) August 2019 and 2018 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	10.35	W	W	16.93	11.89	10.07	W
Connecticut	W	14.90	W	--	--	W	14.90
Maine	W	W	W	--	--	W	W
Massachusetts	W	12.44	W	--	15.68	W	12.24
New Hampshire	16.93	W	W	16.93	11.06	--	W
Rhode Island	--	15.04	--	--	--	--	15.04
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	13.84	W	11.93	12.28	W	14.69
New Jersey	W	15.70	W	--	--	W	15.70
New York	12.59	13.09	-3.8%	11.93	12.28	14.94	13.79
Pennsylvania	13.63	16.50	-17.0%	--	--	13.63	16.50
East North Central	W	16.18	W	14.68	16.29	W	16.01
Illinois	16.49	W	W	15.63	16.11	16.52	W
Indiana	14.72	W	W	14.72	16.26	--	W
Michigan	13.76	15.85	-13.0%	13.76	15.85	--	--
Ohio	W	15.85	W	15.49	16.21	W	15.73
Wisconsin	W	17.22	W	14.95	17.22	W	--
West North Central	14.63	16.23	-9.9%	14.63	16.23	--	--
Iowa	14.57	16.12	-9.6%	14.57	16.12	--	--
Kansas	14.84	16.39	-9.5%	14.84	16.39	--	--
Minnesota	15.28	16.89	-9.5%	15.28	16.89	--	--
Missouri	14.49	16.14	-10.0%	14.49	16.14	--	--
Nebraska	14.91	17.07	-13.0%	14.91	17.07	--	--
North Dakota	14.34	15.89	-9.8%	14.34	15.89	--	--
South Dakota	13.99	17.15	-18.0%	13.99	17.15	--	--
South Atlantic	14.91	14.77	0.9%	15.01	14.89	14.06	14.22
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	15.32	16.14	-5.1%	15.32	16.14	--	--
Georgia	W	W	W	14.83	15.77	W	W
Maryland	14.22	14.32	-0.7%	--	--	14.22	14.32
North Carolina	14.67	W	W	14.67	17.27	--	W
South Carolina	15.14	17.46	-13.0%	15.14	17.46	--	--
Virginia	W	W	W	14.06	11.14	W	W
West Virginia	15.33	W	W	15.33	16.60	--	W
East South Central	W	W	W	14.45	15.90	W	W
Alabama	W	W	W	15.10	16.30	W	W
Kentucky	14.54	15.83	-8.1%	14.54	15.83	--	--
Mississippi	14.33	15.28	-6.2%	14.33	15.28	--	--
Tennessee	14.23	15.71	-9.4%	14.23	15.71	--	--
West South Central	W	W	W	14.54	15.94	W	W
Arkansas	W	W	W	15.04	15.96	W	W
Louisiana	14.48	15.34	-5.6%	14.48	15.34	--	--
Oklahoma	15.52	16.01	-3.1%	15.52	16.01	--	--
Texas	W	W	W	13.83	16.17	W	W
Mountain	16.73	W	W	16.80	17.88	15.94	W
Arizona	16.87	16.24	3.9%	16.87	16.24	--	--
Colorado	17.36	17.43	-0.4%	17.36	17.43	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	16.01	18.31	W	W
New Mexico	18.65	18.26	2.1%	18.65	18.26	--	--
Utah	W	W	W	16.69	19.24	W	W
Wyoming	15.77	18.73	-16.0%	15.77	18.73	--	--
Pacific Contiguous	W	W	W	16.52	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	16.52	--	W	W
Pacific Noncontiguous	W	W	W	13.06	13.43	W	W
Alaska	15.35	17.48	-12.0%	15.35	17.48	--	--
Hawaii	W	W	W	13.06	13.43	W	W
U.S. Total	13.81	14.13	-2.3%	13.59	14.07	14.56	14.25

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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, August 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.56	1.51	3.3%	1.56	1.51	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.53	1.48	3.4%	1.53	1.48	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.83	1.77	3.4%	1.83	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.42	3.64	-34.0%	2.42	3.64	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.42	3.64	-34.0%	2.42	3.64	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	1.60	2.89	-45.0%	1.60	2.89	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	1.60	2.89	-45.0%	1.60	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	1.72	2.82	-39.0%	1.72	2.82	--	--

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.57	1.52	3.3%	1.57	1.52	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.53	1.49	2.7%	1.53	1.49	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.87	1.77	5.6%	1.87	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.71	3.14	-14.0%	2.71	3.14	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.71	3.14	-14.0%	2.71	3.14	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.10	2.68	-22.0%	2.10	2.68	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.10	2.68	-22.0%	2.10	2.68	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.14	2.59	-17.0%	2.14	2.59	--	--

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W = Withheld to avoid disclosure of individual company data.

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019	August 2018	Percentage Change	August 2019	August 2018	August 2019	August 2018
New England	W	W	W	2.38	4.50	W	W
Connecticut	2.24	3.39	-34.0%	--	--	2.24	3.39
Maine	W	W	W	--	--	W	W
Massachusetts	2.84	3.16	-10.0%	2.32	3.66	2.85	3.15
New Hampshire	W	W	W	13.55	5.93	W	W
Rhode Island	W	3.14	W	--	--	W	3.14
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.09	2.91	-28.0%	2.16	3.31	2.08	2.86
New Jersey	2.42	2.79	-13.0%	--	--	2.42	2.79
New York	2.15	3.17	-32.0%	2.16	3.31	2.15	3.12
Pennsylvania	1.93	2.74	-30.0%	--	--	1.93	2.74
East North Central	2.21	3.06	-28.0%	2.33	3.13	2.14	3.03
Illinois	W	3.19	W	2.11	3.33	W	3.18
Indiana	2.33	3.09	-25.0%	2.58	3.20	2.16	3.01
Michigan	2.25	3.24	-31.0%	2.32	3.49	2.20	3.11
Ohio	2.06	2.90	-29.0%	2.08	2.95	2.05	2.89
Wisconsin	W	2.94	W	2.33	2.94	W	--
West North Central	W	W	W	2.14	3.07	W	W
Iowa	1.96	3.15	-38.0%	1.96	3.15	--	--
Kansas	2.25	3.15	-29.0%	2.25	3.15	--	--
Minnesota	W	W	W	2.40	3.20	W	W
Missouri	W	W	W	2.02	3.13	W	W
Nebraska	2.43	3.33	-27.0%	2.43	3.33	--	--
North Dakota	2.24	1.46	53.0%	2.24	1.46	--	--
South Dakota	--	2.73	--	--	2.73	--	--
South Atlantic	2.90	3.66	-21.0%	2.98	3.73	2.38	3.17
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.20	3.93	W	W
Georgia	W	3.59	W	2.46	3.72	W	3.14
Maryland	2.50	3.36	-26.0%	2.40	3.46	2.54	3.32
North Carolina	W	3.45	W	3.21	3.49	W	3.23
South Carolina	2.85	3.55	-20.0%	2.85	3.55	--	--
Virginia	2.38	3.18	-25.0%	2.50	3.27	2.04	2.96
West Virginia	W	W	W	2.08	2.89	W	W
East South Central	2.48	3.08	-19.0%	2.51	3.06	2.41	3.15
Alabama	W	W	W	2.49	3.22	W	W
Kentucky	W	W	W	2.89	3.21	W	W
Mississippi	W	W	W	2.41	3.02	W	W
Tennessee	2.53	2.88	-12.0%	2.53	2.88	--	--
West South Central	2.10	2.94	-29.0%	2.08	2.88	2.11	2.98
Arkansas	W	W	W	2.19	3.12	W	W
Louisiana	W	W	W	2.37	3.10	W	W
Oklahoma	W	W	W	1.94	2.54	W	W
Texas	2.06	2.96	-30.0%	1.94	2.86	2.10	3.00
Mountain	2.24	3.10	-28.0%	2.16	3.03	2.97	3.90
Arizona	W	W	W	2.05	3.02	W	W
Colorado	W	W	W	2.46	3.21	W	W
Idaho	2.09	2.77	-25.0%	2.09	2.77	--	--
Montana	0.81	W	W	0.81	0.99	--	W
Nevada	2.48	3.28	-24.0%	2.48	3.28	--	--
New Mexico	1.12	2.34	-52.0%	1.12	2.34	--	--
Utah	2.30	2.77	-17.0%	2.30	2.77	--	--
Wyoming	W	W	W	1.94	3.04	W	W
Pacific Contiguous	2.83	4.55	-38.0%	2.92	3.72	2.74	5.34
California	3.13	5.70	-45.0%	3.34	5.02	2.96	6.16
Oregon	W	W	W	1.70	1.82	W	W
Washington	W	W	W	2.58	2.62	W	W
Pacific Noncontiguous	7.87	6.47	22.0%	7.87	6.47	--	--
Alaska	7.87	6.47	22.0%	7.87	6.47	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.41	3.29	-27.0%	2.55	3.33	2.23	3.22

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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) August 2019 and 2018 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	August 2019 YTD	August 2018 YTD	Percentage Change	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	W	4.53	W	3.07	4.64	W	4.53
Connecticut	3.42	4.53	-25.0%	--	--	3.42	4.53
Maine	W	W	W	--	--	W	W
Massachusetts	4.85	4.77	1.7%	2.72	4.11	4.86	4.78
New Hampshire	W	W	W	6.07	5.74	W	W
Rhode Island	W	3.85	W	--	--	W	3.85
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.77	3.26	-15.0%	3.33	4.02	2.71	3.18
New Jersey	2.98	3.07	-2.9%	--	--	2.98	3.07
New York	3.09	3.73	-17.0%	3.33	4.02	2.98	3.60
Pennsylvania	2.51	3.02	-17.0%	--	--	2.51	3.02
East North Central	2.65	3.04	-13.0%	2.80	3.16	2.58	2.97
Illinois	W	3.24	W	2.58	3.48	W	3.22
Indiana	2.71	3.10	-13.0%	2.86	3.23	2.60	2.96
Michigan	2.69	3.07	-12.0%	2.77	3.31	2.65	2.96
Ohio	2.53	2.88	-12.0%	2.64	2.97	2.50	2.85
Wisconsin	W	3.08	W	2.88	3.08	W	--
West North Central	W	W	W	2.69	3.02	W	W
Iowa	2.46	2.82	-13.0%	2.46	2.82	--	--
Kansas	2.85	3.01	-5.3%	2.85	3.01	--	--
Minnesota	W	W	W	3.04	3.23	W	W
Missouri	W	W	W	2.45	3.13	W	W
Nebraska	2.86	3.32	-14.0%	2.86	3.32	--	--
North Dakota	3.69	2.78	33.0%	3.69	2.78	--	--
South Dakota	--	2.64	--	--	2.64	--	--
South Atlantic	3.52	4.18	-16.0%	3.61	4.28	2.86	3.49
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.80	4.25	W	W
Georgia	W	3.75	W	3.02	3.83	W	3.46
Maryland	3.16	3.87	-18.0%	3.41	3.29	3.05	4.05
North Carolina	W	W	W	3.82	4.58	W	W
South Carolina	3.21	4.21	-24.0%	3.21	4.21	--	--
Virginia	3.29	4.25	-23.0%	3.49	4.71	2.65	3.00
West Virginia	W	W	W	2.50	3.17	W	W
East South Central	2.90	3.14	-7.6%	2.94	3.14	2.80	3.15
Alabama	W	W	W	2.92	3.20	W	W
Kentucky	W	W	W	3.40	3.44	W	W
Mississippi	W	W	W	2.82	3.07	W	W
Tennessee	2.92	2.97	-1.7%	2.92	2.97	--	--
West South Central	2.48	2.98	-17.0%	2.47	2.97	2.49	2.99
Arkansas	W	W	W	2.60	3.18	W	W
Louisiana	W	W	W	2.74	3.16	W	W
Oklahoma	W	W	W	2.46	2.64	W	W
Texas	2.42	2.98	-19.0%	2.17	2.92	2.50	3.00
Mountain	2.59	W	W	2.54	2.96	3.01	W
Arizona	W	2.95	W	2.01	2.92	W	3.37
Colorado	W	W	W	3.07	3.52	W	W
Idaho	4.82	2.76	75.0%	4.82	2.76	--	--
Montana	1.55	W	W	1.55	1.33	--	W
Nevada	3.13	2.90	7.9%	3.13	2.90	--	--
New Mexico	1.05	2.49	-58.0%	1.05	2.49	--	--
Utah	3.18	2.72	17.0%	3.18	2.72	--	--
Wyoming	W	W	W	2.53	3.46	W	W
Pacific Contiguous	3.76	3.80	-1.1%	3.92	3.42	3.61	4.21
California	3.97	4.47	-11.0%	4.37	4.23	3.65	4.66
Oregon	W	W	W	2.53	1.76	W	W
Washington	W	W	W	3.68	2.62	W	W
Pacific Noncontiguous	7.81	6.83	14.0%	7.81	6.83	--	--
Alaska	7.81	6.83	14.0%	7.81	6.83	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.97	3.46	-14.0%	3.12	3.57	2.77	3.29

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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.

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, August 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	4	0.80	10.0	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	4	0.80	10.0	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,275	2.51	9.2	0	--	--	0	--	--
New Jersey	55	1.72	7.7	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,219	2.55	9.3	0	--	--	0	--	--
East North Central	5,049	3.23	10.7	5,776	0.24	4.7	0	--	--
Illinois	920	3.21	19.2	2,311	0.22	4.7	0	--	--
Indiana	2,100	2.86	9.3	224	0.23	4.6	0	--	--
Michigan	110	2.51	7.3	1,895	0.27	4.5	0	--	--
Ohio	1,859	3.69	9.2	16	0.47	4.7	0	--	--
Wisconsin	59	1.97	8.3	1,331	0.24	5.0	0	--	--
West North Central	134	3.06	9.1	7,650	0.26	5.1	2,117	0.77	9.7
Iowa	41	3.38	8.1	1,475	0.23	4.8	0	--	--
Kansas	11	3.09	12.0	913	0.31	5.0	0	--	--
Minnesota	0	--	--	1,121	0.34	6.2	0	--	--
Missouri	82	2.89	9.3	2,794	0.23	4.7	0	--	--
Nebraska	0	--	--	1,221	0.26	5.1	0	--	--
North Dakota	0	--	--	0	--	--	2,117	0.77	9.7
South Dakota	0	--	--	126	0.28	5.7	0	--	--
South Atlantic	6,028	2.37	9.7	839	0.32	4.9	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	775	2.39	8.2	0	--	--	0	--	--
Georgia	698	2.55	7.9	839	0.32	4.9	0	--	--
Maryland	195	2.24	11.2	0	--	--	0	--	--
North Carolina	1,198	1.79	9.1	0	--	--	0	--	--
South Carolina	675	1.81	9.4	0	--	--	0	--	--
Virginia	259	1.02	15.8	0	--	--	0	--	--
West Virginia	2,227	2.95	10.5	0	--	--	0	--	--
East South Central	3,190	2.53	9.3	2,001	0.28	5.3	307	0.52	13.9
Alabama	476	0.98	11.0	1,086	0.30	5.4	0	--	--
Kentucky	2,063	2.92	9.3	720	0.25	5.3	0	--	--
Mississippi	25	0.42	7.7	95	0.33	5.1	307	0.52	13.9
Tennessee	626	2.40	8.2	100	0.26	5.2	0	--	--
West South Central	57	2.52	12.3	6,534	0.25	5.0	1,983	1.10	17.2
Arkansas	4	0.48	8.2	1,568	0.23	4.9	0	--	--
Louisiana	46	2.91	9.4	466	0.27	5.0	115	0.62	15.8
Oklahoma	8	0.84	39.2	499	0.23	4.6	0	--	--
Texas	0	--	--	4,001	0.26	5.2	1,868	1.13	17.3
Mountain	1,990	0.60	12.3	5,326	0.53	9.1	25	0.56	9.0
Arizona	550	0.50	9.5	819	0.62	10.1	0	--	--
Colorado	108	0.46	11.6	1,088	0.32	5.8	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	892	0.70	9.9	25	0.56	9.0
Nevada	60	0.48	13.1	97	0.41	6.7	0	--	--
New Mexico	266	0.97	23.7	572	0.82	20.6	0	--	--
Utah	1,006	0.58	11.3	28	0.79	9.8	0	--	--
Wyoming	0	--	--	1,830	0.44	6.7	0	--	--
Pacific Contiguous	0	--	--	448	0.34	7.6	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	154	0.22	5.4	0	--	--
Washington	0	--	--	294	0.41	8.8	0	--	--
Pacific Noncontiguous	0	--	--	61	0.44	4.2	19	0.15	9.5
Alaska	0	--	--	0	--	--	19	0.15	9.5
Hawaii	0	--	--	61	0.44	4.2	0	--	--
U.S. Total	17,726	2.47	10.1	28,635	0.31	5.8	4,451	0.90	13.3

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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, August 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	2,459	2.85	9.1	4,067	0.25	4.7	0	--	--
Illinois	220	2.16	8.9	618	0.22	4.6	0	--	--
Indiana	1,924	2.84	9.3	224	0.23	4.6	0	--	--
Michigan	79	2.35	7.7	1,895	0.27	4.5	0	--	--
Ohio	189	3.99	9.2	0	--	--	0	--	--
Wisconsin	47	2.32	7.8	1,331	0.24	5.0	0	--	--
West North Central	93	2.92	9.6	7,435	0.26	5.1	2,117	0.77	9.7
Iowa	0	--	--	1,314	0.23	4.8	0	--	--
Kansas	11	3.09	12.0	913	0.31	5.0	0	--	--
Minnesota	0	--	--	1,121	0.34	6.2	0	--	--
Missouri	82	2.89	9.3	2,794	0.23	4.7	0	--	--
Nebraska	0	--	--	1,167	0.26	5.1	0	--	--
North Dakota	0	--	--	0	--	--	2,117	0.77	9.7
South Dakota	0	--	--	126	0.28	5.7	0	--	--
South Atlantic	5,347	2.35	9.8	839	0.32	4.9	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	775	2.39	8.2	0	--	--	0	--	--
Georgia	698	2.55	7.9	839	0.32	4.9	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,179	1.81	9.2	0	--	--	0	--	--
South Carolina	675	1.81	9.4	0	--	--	0	--	--
Virginia	214	1.06	17.9	0	--	--	0	--	--
West Virginia	1,805	2.94	10.9	0	--	--	0	--	--
East South Central	3,124	2.56	9.3	2,001	0.28	5.3	0	--	--
Alabama	476	0.98	11.0	1,086	0.30	5.4	0	--	--
Kentucky	2,063	2.92	9.3	720	0.25	5.3	0	--	--
Mississippi	25	0.42	7.7	95	0.33	5.1	0	--	--
Tennessee	560	2.59	8.3	100	0.26	5.2	0	--	--
West South Central	46	2.91	9.4	3,853	0.25	5.0	693	1.57	19.9
Arkansas	0	--	--	1,338	0.23	4.9	0	--	--
Louisiana	46	2.91	9.4	352	0.27	4.9	115	0.62	15.8
Oklahoma	0	--	--	443	0.23	4.6	0	--	--
Texas	0	--	--	1,720	0.27	5.3	578	1.79	20.9
Mountain	1,990	0.60	12.3	4,328	0.50	9.1	25	0.56	9.0
Arizona	550	0.50	9.5	819	0.62	10.1	0	--	--
Colorado	108	0.46	11.6	1,088	0.32	5.8	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	25	0.56	9.0
Nevada	60	0.48	13.1	36	0.46	8.6	0	--	--
New Mexico	266	0.97	23.7	572	0.82	20.6	0	--	--
Utah	1,006	0.58	11.3	28	0.79	9.8	0	--	--
Wyoming	0	--	--	1,785	0.44	6.8	0	--	--
Pacific Contiguous	0	--	--	154	0.22	5.4	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	154	0.22	5.4	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	19	0.15	9.5
Alaska	0	--	--	0	--	--	19	0.15	9.5
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	13,059	2.25	9.9	22,678	0.31	5.8	2,854	0.95	12.1

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, August 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	4	0.80	10.0	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	4	0.80	10.0	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,275	2.51	9.2	0	--	--	0	--	--
New Jersey	55	1.72	7.7	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,219	2.55	9.3	0	--	--	0	--	--
East North Central	2,490	3.61	12.2	1,645	0.22	4.7	0	--	--
Illinois	613	3.64	25.9	1,630	0.22	4.7	0	--	--
Indiana	176	3.11	9.3	0	--	--	0	--	--
Michigan	31	3.00	6.1	0	--	--	0	--	--
Ohio	1,669	3.66	9.2	16	0.47	4.7	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	0	--	--	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	639	2.69	9.5	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	195	2.24	11.2	0	--	--	0	--	--
North Carolina	2	0.68	6.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	21	0.98	8.4	0	--	--	0	--	--
West Virginia	422	2.99	8.8	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	307	0.52	13.9
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	307	0.52	13.9
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	8	0.84	39.2	2,681	0.25	5.1	1,290	0.87	15.9
Arkansas	0	--	--	229	0.22	5.1	0	--	--
Louisiana	0	--	--	114	0.29	5.1	0	--	--
Oklahoma	8	0.84	39.2	56	0.22	4.4	0	--	--
Texas	0	--	--	2,281	0.25	5.1	1,290	0.87	15.9
Mountain	0	--	--	998	0.66	9.4	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	892	0.70	9.9	0	--	--
Nevada	0	--	--	62	0.38	5.6	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	45	0.43	5.5	0	--	--
Pacific Contiguous	0	--	--	294	0.41	8.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	294	0.41	8.8	0	--	--
Pacific Noncontiguous	0	--	--	61	0.44	4.2	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	61	0.44	4.2	0	--	--
U.S. Total	4,416	3.13	10.9	5,679	0.32	5.9	1,597	0.82	15.6

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 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, August 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, August 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	100	3.10	9.0	63	0.22	5.6	0	--	--
Illinois	87	3.50	8.8	63	0.22	5.6	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	13	0.50	10.5	0	--	--	0	--	--
West North Central	41	3.38	8.1	215	0.21	4.4	0	--	--
Iowa	41	3.38	8.1	161	0.20	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	54	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	42	0.79	6.9	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	18	0.84	6.7	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	24	0.75	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	65	0.95	6.6	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	65	0.95	6.6	0	--	--	0	--	--
West South Central	4	0.48	8.2	0	--	--	0	--	--
Arkansas	4	0.48	8.2	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	252	2.06	7.8	278	0.21	4.7	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."

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 - August 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
Year to Date					
2017	936,733	906,533	658,245	5,017	2,506,528
2018	1,006,166	930,611	668,884	5,123	2,610,784
2019	973,386	908,937	637,577	5,204	2,525,103
Rolling 12 Months Ending in August					
2018	1,448,081	1,376,965	994,936	7,629	3,827,612
2019	1,436,316	1,360,087	970,290	7,746	3,774,438

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 - August 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
Year to Date					
2017	120,816	96,674	45,379	488	263,356
2018	129,807	99,611	46,458	494	276,371
2019	127,190	96,981	43,731	507	268,409
Rolling 12 Months Ending in August					
2018	186,653	147,179	68,770	735	403,337
2019	186,416	144,796	66,569	757	398,537

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 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - August 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
Year to Date					
2017	12.90	10.66	6.89	9.73	10.51
2018	12.90	10.70	6.95	9.65	10.59
2019	13.07	10.67	6.86	9.75	10.63
Rolling 12 Months Ending in August					
2018	12.89	10.69	6.91	9.63	10.54
2019	12.98	10.65	6.86	9.77	10.56

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
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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, August 2019 and 2018 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	4,694	5,108	4,770	5,278	1,353	1,624	47	59	10,864	12,068
Connecticut	1,250	1,401	1,099	1,246	258	308	17	28	2,623	2,983
Maine	433	452	386	437	234	292	0	0	1,054	1,180
Massachusetts	2,054	2,228	2,370	2,599	513	639	28	29	4,965	5,494
New Hampshire	440	455	391	434	169	192	0	0	1,000	1,080
Rhode Island	335	378	347	372	67	70	2	2	750	823
Vermont	182	193	176	191	113	123	0	0	472	507
Middle Atlantic	14,236	14,646	14,370	15,252	6,704	6,836	317	341	35,627	37,074
New Jersey	3,402	3,814	3,562	3,909	589	671	25	26	7,578	8,421
New York	5,586	5,643	7,239	7,423	1,466	1,624	241	268	14,533	14,958
Pennsylvania	5,248	5,189	3,569	3,920	4,649	4,540	51	47	13,517	13,695
East North Central	18,005	19,555	16,976	17,758	16,166	17,765	54	54	51,201	55,132
Illinois	4,549	5,203	4,621	4,804	3,719	3,956	50	49	12,939	14,012
Indiana	3,203	3,341	2,307	2,362	3,668	4,130	2	2	9,180	9,835
Michigan	3,255	3,602	3,652	3,786	2,531	2,832	0	1	9,437	10,221
Ohio	5,086	5,244	4,254	4,518	4,081	4,579	2	2	13,423	14,342
Wisconsin	1,913	2,164	2,142	2,288	2,167	2,269	0	0	6,221	6,720
West North Central	9,818	10,360	9,434	9,857	7,938	8,657	4	4	27,194	28,878
Iowa	1,298	1,412	1,073	1,166	2,016	2,165	0	0	4,387	4,744
Kansas	1,498	1,506	1,590	1,640	1,023	1,104	0	0	4,111	4,251
Minnesota	1,871	2,112	1,993	2,168	1,824	2,015	2	2	5,690	6,297
Missouri	3,511	3,637	2,948	3,003	1,046	1,243	2	2	7,507	7,884
Nebraska	934	920	866	877	971	1,117	0	0	2,771	2,914
North Dakota	325	360	527	554	801	744	0	0	1,652	1,658
South Dakota	382	413	437	447	256	270	0	0	1,075	1,130
South Atlantic	37,637	37,285	30,652	30,470	12,241	13,061	124	118	80,654	80,933
Delaware	539	517	432	423	159	228	0	0	1,130	1,167
District of Columbia	267	266	774	783	13	18	30	29	1,084	1,096
Florida	13,092	13,033	9,289	9,139	1,522	1,557	7	8	23,910	23,737
Georgia	6,452	6,074	4,706	4,587	2,777	2,963	14	14	13,949	13,638
Maryland	2,696	2,744	2,737	2,891	319	345	57	45	5,808	6,025
North Carolina	5,942	6,009	4,758	4,810	2,339	2,530	2	2	13,041	13,350
South Carolina	3,351	3,233	2,206	2,232	2,424	2,622	0	0	7,981	8,087
Virginia	4,352	4,486	5,061	4,879	1,484	1,588	14	20	10,912	10,972
West Virginia	946	924	688	727	1,204	1,210	0	0	2,838	2,861
East South Central	12,474	12,275	9,009	9,253	8,361	9,047	0	0	29,844	30,574
Alabama	3,476	3,337	2,282	2,318	2,924	3,001	0	0	8,683	8,656
Kentucky	2,673	2,650	1,918	1,935	2,339	2,606	0	0	6,930	7,191
Mississippi	2,033	2,013	1,371	1,450	1,462	1,458	0	0	4,866	4,920
Tennessee	4,292	4,275	3,438	3,550	1,636	1,981	0	0	9,366	9,807
West South Central	26,362	25,995	19,688	20,186	17,177	17,948	18	19	63,245	64,148
Arkansas	2,005	1,949	1,221	1,226	1,601	1,674	0	0	4,828	4,850
Louisiana	3,423	3,423	2,422	2,390	2,981	3,266	1	1	8,827	9,080
Oklahoma	2,750	2,533	2,009	2,073	1,845	1,735	0	0	6,604	6,341
Texas	18,183	18,089	14,036	14,497	10,750	11,272	17	18	42,986	43,876
Mountain	12,027	11,645	9,933	9,893	8,049	7,974	16	14	30,024	29,526
Arizona	4,819	4,575	3,226	3,198	1,286	1,281	1	1	9,333	9,054
Colorado	2,131	1,994	1,983	1,986	1,518	1,512	10	8	5,642	5,500
Idaho	737	711	596	588	1,117	1,067	0	0	2,449	2,365
Montana	399	415	423	428	450	454	0	0	1,272	1,297
Nevada	1,829	1,890	1,357	1,322	1,150	1,146	1	1	4,336	4,359
New Mexico	789	740	909	871	829	751	0	0	2,527	2,363
Utah	1,122	1,118	1,130	1,170	861	879	4	4	3,117	3,171
Wyoming	201	202	309	330	839	884	0	0	1,349	1,417
Pacific Contiguous	14,001	16,237	14,804	16,410	8,012	8,836	78	73	36,895	41,555
California	10,054	12,227	10,879	12,393	4,741	5,196	67	70	25,741	29,886
Oregon	1,477	1,504	1,471	1,498	1,146	1,366	2	2	4,096	4,370
Washington	2,470	2,506	2,454	2,519	2,126	2,274	9	1	7,059	7,299
Pacific Noncontiguous	405	393	501	492	455	442	0	0	1,362	1,326
Alaska	138	138	223	216	119	115	0	0	480	469
Hawaii	267	255	278	276	337	327	0	0	882	857
U.S. Total	149,660	153,497	130,136	134,849	86,457	92,189	658	680	366,910	381,215

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 August 2019 and 2018 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	31,761	32,752	34,568	35,712	10,413	11,409	367	376	77,110	80,249
Connecticut	8,687	8,996	8,163	8,401	1,982	2,143	119	123	18,951	19,663
Maine	3,279	3,279	2,862	2,980	1,868	2,043	0	0	8,009	8,301
Massachusetts	13,214	13,765	16,865	17,487	3,900	4,471	230	234	34,210	35,957
New Hampshire	3,102	3,146	2,892	2,982	1,276	1,316	0	0	7,269	7,445
Rhode Island	2,070	2,141	2,468	2,510	472	505	18	18	5,028	5,174
Vermont	1,409	1,426	1,319	1,352	914	931	0	0	3,642	3,709
Middle Atlantic	92,110	93,768	103,568	106,714	48,625	49,562	2,587	2,667	246,890	252,711
New Jersey	20,177	20,643	25,587	26,306	4,449	4,887	205	212	50,419	52,048
New York	34,466	35,045	50,261	51,308	11,176	11,808	1,931	1,995	97,835	100,156
Pennsylvania	37,467	38,079	27,719	29,100	32,999	32,866	450	460	98,636	100,506
East North Central	127,365	133,567	122,375	125,208	122,538	131,578	449	411	372,727	390,764
Illinois	31,127	32,877	33,403	34,198	27,973	29,754	404	366	92,908	97,195
Indiana	22,365	23,757	16,037	16,424	27,695	30,410	14	14	66,111	70,605
Michigan	23,009	24,299	25,768	26,368	19,418	20,754	4	5	68,199	71,426
Ohio	35,877	37,246	31,322	31,901	31,485	34,275	26	26	98,711	103,448
Wisconsin	14,985	15,388	15,846	16,316	15,966	16,386	1	0	46,798	48,090
West North Central	71,934	76,216	68,798	70,758	58,905	62,736	33	33	199,669	209,744
Iowa	9,844	10,363	8,177	8,383	15,604	15,893	0	0	33,625	34,639
Kansas	9,305	9,997	10,472	10,992	7,351	7,819	0	0	27,127	28,808
Minnesota	14,921	15,723	15,178	15,895	13,681	14,990	17	17	43,797	46,626
Missouri	24,069	25,958	20,757	21,201	7,564	8,935	16	16	52,406	56,109
Nebraska	7,062	7,256	6,381	6,456	6,829	7,439	0	0	20,272	21,151
North Dakota	3,354	3,466	4,470	4,535	6,049	5,688	0	0	13,873	13,689
South Dakota	3,379	3,453	3,363	3,297	1,826	1,972	0	0	8,568	8,722
South Atlantic	249,625	253,183	212,744	212,277	92,215	96,078	919	877	555,503	562,415
Delaware	3,457	3,499	3,000	2,932	1,230	1,572	0	0	7,687	8,003
District of Columbia	1,772	1,757	5,412	5,539	130	134	225	218	7,538	7,647
Florida	83,728	83,236	64,081	63,819	10,920	11,466	58	55	158,788	158,575
Georgia	40,168	40,390	31,795	31,783	21,054	21,891	111	114	93,128	94,178
Maryland	19,142	19,413	19,563	19,972	2,471	2,548	388	348	41,564	42,281
North Carolina	40,521	42,282	33,070	33,091	17,864	18,410	12	7	91,467	93,789
South Carolina	21,304	21,748	14,809	15,030	17,935	18,780	0	0	54,048	55,558
Virginia	31,978	32,894	35,903	34,853	10,981	11,851	124	135	78,987	79,733
West Virginia	7,555	7,964	5,110	5,259	9,630	9,427	0	0	22,296	22,650
East South Central	81,442	85,113	61,568	63,732	63,873	66,968	0	0	206,884	215,813
Alabama	21,914	22,414	15,173	15,826	22,018	22,710	0	0	59,106	60,950
Kentucky	18,216	19,158	13,122	13,454	18,338	18,979	0	0	49,676	51,591
Mississippi	12,657	13,100	9,104	9,716	11,012	10,997	0	0	32,773	33,813
Tennessee	28,654	30,441	24,169	24,737	12,505	14,282	0	0	65,329	69,460
West South Central	151,800	160,796	130,014	135,662	125,956	131,716	130	132	407,901	428,306
Arkansas	12,533	13,255	7,903	8,242	11,495	12,052	0	0	31,932	33,550
Louisiana	20,844	21,724	16,314	16,414	23,068	24,966	8	9	60,235	63,113
Oklahoma	16,354	16,923	13,237	14,447	13,404	12,655	0	0	42,995	44,024
Texas	102,069	108,895	92,560	96,559	77,989	82,042	121	123	272,740	287,619
Mountain	68,893	69,365	66,081	66,904	56,481	56,068	124	107	191,579	192,444
Arizona	24,322	24,330	19,951	20,250	9,104	9,331	7	5	53,385	53,916
Colorado	13,060	13,111	13,825	14,113	10,713	10,664	77	62	37,675	37,950
Idaho	5,751	5,640	4,272	4,307	6,348	6,438	0	0	16,372	16,385
Montana	3,547	3,542	3,318	3,314	3,211	3,032	0	0	10,077	9,888
Nevada	9,089	9,559	8,262	8,275	8,349	8,041	5	6	25,705	25,881
New Mexico	4,685	4,675	6,146	6,091	5,784	5,390	0	0	16,615	16,156
Utah	6,521	6,651	7,858	8,032	6,148	6,279	34	34	20,561	20,996
Wyoming	1,918	1,857	2,449	2,521	6,823	6,893	0	0	11,190	11,271
Pacific Contiguous	95,396	98,317	105,478	109,858	55,402	59,504	594	521	256,870	268,199
California	58,432	61,830	75,015	79,019	30,990	33,253	512	498	164,949	174,600
Oregon	12,792	12,720	10,994	11,021	8,105	9,350	18	17	31,909	33,108
Washington	24,172	23,767	19,469	19,818	16,307	16,900	64	5	60,012	60,491
Pacific Noncontiguous	3,060	3,090	3,742	3,786	3,169	3,264	0	0	9,971	10,140
Alaska	1,286	1,311	1,786	1,778	811	904	0	0	3,883	3,992
Hawaii	1,774	1,780	1,956	2,008	2,358	2,360	0	0	6,088	6,148
U.S. Total	973,386	1,006,166	908,937	930,611	637,577	668,884	5,204	5,123	2,525,103	2,610,784

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.
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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, August 2019 and 2018 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	975	1,031	759	852	171	211	4	5	1,909	2,099
Connecticut	266	298	184	204	35	42	2	3	487	548
Maine	78	76	48	53	21	27	0	0	146	156
Massachusetts	442	463	385	441	72	93	2	2	901	999
New Hampshire	86	88	61	66	22	25	0	0	168	179
Rhode Island	73	71	54	59	10	10	0	0	137	140
Vermont	30	35	28	29	12	13	0	0	71	77
Middle Atlantic	2,290	2,379	1,859	1,987	444	474	36	37	4,628	4,876
New Jersey	537	582	454	491	64	70	2	2	1,057	1,145
New York	1,027	1,073	1,102	1,150	83	99	30	31	2,243	2,354
Pennsylvania	726	724	303	345	297	305	3	4	1,328	1,377
East North Central	2,416	2,604	1,710	1,797	1,120	1,254	4	4	5,249	5,659
Illinois	569	651	409	439	243	268	3	3	1,225	1,362
Indiana	392	419	247	251	264	301	0	0	903	970
Michigan	538	555	419	414	188	196	0	0	1,145	1,164
Ohio	633	676	396	447	251	317	0	0	1,280	1,441
Wisconsin	283	303	239	246	175	173	0	0	697	721
West North Central	1,290	1,376	996	1,042	645	686	0	0	2,932	3,104
Iowa	191	200	131	133	173	176	0	0	495	509
Kansas	194	210	167	182	75	84	0	0	436	476
Minnesota	260	291	219	233	149	156	0	0	629	681
Missouri	446	470	303	313	80	96	0	0	830	879
Nebraska	110	110	82	82	79	92	0	0	271	284
North Dakota	39	42	50	53	68	59	0	0	157	155
South Dakota	49	52	44	45	21	22	0	0	114	119
South Atlantic	4,556	4,366	2,843	2,765	825	848	10	9	8,234	7,989
Delaware	66	63	39	40	12	18	0	0	116	121
District of Columbia	33	33	86	97	1	2	3	3	123	134
Florida	1,559	1,477	865	810	115	118	1	1	2,540	2,406
Georgia	799	765	469	454	197	189	1	1	1,467	1,409
Maryland	336	358	263	292	25	27	4	3	628	681
North Carolina	696	679	426	419	153	166	0	0	1,276	1,263
South Carolina	421	335	224	180	148	140	0	0	793	655
Virginia	538	550	410	409	101	110	1	2	1,050	1,071
West Virginia	109	105	60	65	72	78	0	0	242	249
East South Central	1,422	1,374	961	965	493	534	0	0	2,875	2,872
Alabama	446	411	267	259	186	188	0	0	898	858
Kentucky	284	281	186	184	125	142	0	0	595	607
Mississippi	228	218	142	145	87	90	0	0	457	453
Tennessee	464	464	366	377	95	114	0	0	925	954
West South Central	2,967	2,849	1,657	1,677	1,161	1,012	1	2	5,787	5,539
Arkansas	202	195	106	93	102	98	0	0	411	386
Louisiana	328	340	207	211	155	185	0	0	690	736
Oklahoma	292	275	168	178	97	95	0	0	557	549
Texas	2,146	2,039	1,175	1,194	807	634	1	1	4,130	3,868
Mountain	1,464	1,416	995	986	558	571	1	1	3,020	2,975
Arizona	604	587	351	357	91	98	0	0	1,046	1,043
Colorado	271	248	212	207	114	114	1	1	598	570
Idaho	75	74	46	48	74	76	0	0	196	199
Montana	48	47	45	42	24	29	0	0	116	118
Nevada	216	215	117	108	98	93	0	0	430	416
New Mexico	103	100	96	93	44	44	0	0	243	237
Utah	125	121	99	99	55	60	0	0	280	280
Wyoming	24	24	30	32	58	58	0	0	112	114
Pacific Contiguous	2,410	2,843	2,414	2,681	912	985	7	7	5,744	6,515
California	1,997	2,427	2,072	2,323	724	788	6	6	4,799	5,544
Oregon	165	167	128	141	73	78	0	0	367	387
Washington	248	249	214	217	115	118	1	0	578	584
Pacific Noncontiguous	116	114	125	123	104	106	0	0	345	342
Alaska	33	31	45	40	19	20	0	0	96	91
Hawaii	83	83	80	83	85	86	0	0	249	251
U.S. Total	19,907	20,351	14,319	14,874	6,433	6,680	64	65	40,722	41,970

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.
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Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through August 2019 and 2018 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	6,745	6,723	5,654	5,847	1,355	1,507	36	34	13,789	14,110
Connecticut	1,928	1,897	1,402	1,387	274	294	17	15	3,621	3,594
Maine	585	552	369	374	177	192	0	0	1,132	1,119
Massachusetts	2,923	2,978	2,797	3,002	563	667	15	15	6,298	6,663
New Hampshire	622	615	462	469	168	177	0	0	1,252	1,261
Rhode Island	447	425	414	409	75	76	3	3	939	914
Vermont	240	256	210	205	99	99	0	0	548	560
Middle Atlantic	14,517	14,982	12,607	13,276	3,212	3,480	290	296	30,626	32,034
New Jersey	3,244	3,197	3,190	3,235	467	496	18	19	6,918	6,948
New York	6,154	6,486	6,994	7,430	624	721	239	241	14,010	14,878
Pennsylvania	5,120	5,298	2,423	2,611	2,122	2,263	33	35	9,697	10,208
East North Central	16,968	17,736	12,459	12,773	8,525	9,335	32	28	37,984	39,871
Illinois	3,978	4,172	2,995	3,117	1,848	2,018	29	24	8,849	9,332
Indiana	2,760	2,891	1,732	1,733	2,036	2,217	2	1	6,530	6,843
Michigan	3,620	3,787	2,931	2,953	1,413	1,482	0	1	7,964	8,223
Ohio	4,424	4,731	3,051	3,223	1,990	2,413	2	2	9,466	10,369
Wisconsin	2,187	2,154	1,749	1,746	1,239	1,205	0	0	5,175	5,105
West North Central	8,641	9,259	6,736	7,032	4,400	4,630	3	3	19,779	20,924
Iowa	1,291	1,290	857	832	1,078	1,062	0	0	3,226	3,185
Kansas	1,180	1,351	1,070	1,184	535	594	0	0	2,785	3,129
Minnesota	1,995	2,059	1,611	1,649	1,082	1,125	2	2	4,689	4,834
Missouri	2,673	3,033	1,900	2,067	518	661	1	1	5,093	5,762
Nebraska	763	774	575	572	532	578	0	0	1,870	1,924
North Dakota	350	355	405	412	512	456	0	0	1,268	1,222
South Dakota	388	398	317	316	143	154	0	0	849	868
South Atlantic	29,919	29,728	19,957	19,781	5,897	6,280	74	68	55,846	55,857
Delaware	433	435	290	279	93	124	0	0	816	838
District of Columbia	229	222	651	655	11	11	22	20	913	908
Florida	9,969	9,583	6,085	5,864	841	879	5	4	16,900	16,330
Georgia	4,725	4,739	3,100	3,138	1,250	1,325	6	6	9,083	9,208
Maryland	2,517	2,575	1,974	2,079	193	212	29	26	4,712	4,891
North Carolina	4,683	4,669	2,916	2,843	1,106	1,172	1	1	8,706	8,684
South Carolina	2,682	2,722	1,518	1,531	1,068	1,130	0	0	5,269	5,384
Virginia	3,847	3,883	2,964	2,903	761	813	10	11	7,582	7,610
West Virginia	834	899	457	490	574	613	0	0	1,865	2,002
East South Central	9,284	9,459	6,589	6,694	3,699	3,906	0	0	19,572	20,059
Alabama	2,790	2,739	1,760	1,779	1,330	1,366	0	0	5,880	5,883
Kentucky	1,936	2,013	1,301	1,302	989	1,076	0	0	4,225	4,391
Mississippi	1,441	1,461	959	1,015	654	656	0	0	3,054	3,132
Tennessee	3,117	3,246	2,569	2,598	726	809	0	0	6,413	6,652
West South Central	16,911	17,274	10,537	11,255	6,914	7,233	9	11	34,371	35,773
Arkansas	1,236	1,315	689	654	691	694	0	0	2,616	2,664
Louisiana	1,984	2,102	1,435	1,475	1,212	1,349	1	1	4,632	4,926
Oklahoma	1,655	1,746	1,035	1,173	670	681	0	0	3,360	3,601
Texas	12,037	12,110	7,377	7,952	4,341	4,508	8	10	23,763	24,581
Mountain	8,248	8,304	6,372	6,444	3,605	3,673	12	10	18,237	18,431
Arizona	3,075	3,112	2,106	2,182	587	620	1	1	5,769	5,915
Colorado	1,611	1,586	1,418	1,406	786	797	7	5	3,822	3,795
Idaho	576	579	332	347	400	434	0	0	1,308	1,361
Montana	400	387	345	335	176	153	0	0	922	875
Nevada	1,086	1,131	658	647	512	508	0	0	2,256	2,287
New Mexico	593	596	614	613	317	317	0	0	1,524	1,526
Utah	691	701	662	669	371	377	4	4	1,728	1,751
Wyoming	215	211	237	244	456	466	0	0	908	921
Pacific Contiguous	15,085	15,486	15,128	15,594	5,369	5,649	52	44	35,634	36,773
California	11,359	11,760	12,451	12,866	4,065	4,340	45	42	27,919	29,008
Oregon	1,401	1,395	978	1,005	510	520	2	2	2,890	2,922
Washington	2,325	2,330	1,699	1,724	794	790	6	0	4,825	4,844
Pacific Noncontiguous	872	857	943	916	755	766	0	0	2,570	2,539
Alaska	292	286	357	325	139	160	0	0	788	772
Hawaii	579	571	586	591	617	605	0	0	1,783	1,767
U.S. Total	127,190	129,807	96,981	99,611	43,731	46,458	507	494	268,409	276,371

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	20.77	20.19	15.91	16.14	12.61	13.02	8.40	8.18	17.57	17.40
Connecticut	21.29	21.27	16.73	16.39	13.41	13.78	12.14	10.13	18.55	18.36
Maine	17.90	16.91	12.38	12.17	8.90	9.24	--	--	13.88	13.26
Massachusetts	21.54	20.80	16.24	16.96	13.97	14.62	5.41	5.59	18.14	18.19
New Hampshire	19.47	19.32	15.55	15.25	12.76	13.04	--	--	16.80	16.57
Rhode Island	21.76	18.70	15.49	15.79	14.61	14.88	17.03	16.93	18.21	17.06
Vermont	16.68	17.96	15.77	15.06	10.92	10.65	--	--	14.96	15.09
Middle Atlantic	16.09	16.24	12.94	13.03	6.62	6.93	11.26	10.78	12.99	13.15
New Jersey	15.79	15.25	12.75	12.56	10.80	10.43	8.97	8.91	13.95	13.60
New York	18.39	19.02	15.22	15.50	5.69	6.08	12.54	11.54	15.43	15.73
Pennsylvania	13.83	13.95	8.49	8.81	6.38	6.71	6.33	7.51	9.83	10.06
East North Central	13.42	13.32	10.07	10.12	6.93	7.06	6.86	6.86	10.25	10.26
Illinois	12.51	12.52	8.85	9.14	6.53	6.78	6.67	6.66	9.46	9.72
Indiana	12.25	12.53	10.72	10.61	7.19	7.29	10.45	9.98	9.84	9.87
Michigan	16.53	15.40	11.46	10.92	7.44	6.91	8.22	10.82	12.13	11.39
Ohio	12.45	12.90	9.31	9.90	6.14	6.92	7.94	7.76	9.54	10.05
Wisconsin	14.80	13.99	11.15	10.75	8.07	7.62	14.09	14.31	11.20	10.74
West North Central	13.14	13.28	10.56	10.57	8.13	7.92	10.27	10.91	10.78	10.75
Iowa	14.73	14.18	12.21	11.37	8.59	8.14	--	--	11.29	10.73
Kansas	12.96	13.95	10.51	11.10	7.29	7.62	--	--	10.60	11.21
Minnesota	13.91	13.78	11.00	10.75	8.16	7.76	9.46	9.94	11.05	10.81
Missouri	12.71	12.92	10.29	10.44	7.63	7.72	11.10	11.96	11.05	11.15
Nebraska	11.83	11.98	9.44	9.36	8.10	8.21	--	--	9.78	9.75
North Dakota	12.06	11.80	9.47	9.62	8.55	7.96	--	--	9.53	9.35
South Dakota	12.72	12.62	10.03	10.09	8.28	8.16	--	--	10.57	10.55
South Atlantic	12.11	11.71	9.28	9.08	6.74	6.49	8.04	8.02	10.21	9.87
Delaware	12.24	12.21	8.98	9.35	7.30	7.96	--	--	10.30	10.34
District of Columbia	12.39	12.56	11.12	12.34	7.82	8.53	8.66	9.46	11.32	12.25
Florida	11.90	11.33	9.32	8.86	7.58	7.61	8.12	7.78	10.62	10.14
Georgia	12.38	12.60	9.97	9.89	7.10	6.38	8.29	6.36	10.52	10.33
Maryland	12.46	13.05	9.59	10.11	7.75	7.92	7.51	7.66	10.80	11.30
North Carolina	11.71	11.29	8.96	8.71	6.56	6.54	7.83	7.90	9.78	9.46
South Carolina	12.56	10.36	10.17	8.08	6.11	5.32	--	--	9.94	8.10
Virginia	12.36	12.27	8.10	8.38	6.81	6.94	8.62	8.03	9.63	9.76
West Virginia	11.56	11.40	8.74	8.99	5.99	6.46	--	--	8.51	8.70
East South Central	11.40	11.19	10.66	10.43	5.89	5.90	--	--	9.63	9.39
Alabama	12.83	12.32	11.68	11.19	6.35	6.26	--	--	10.35	9.91
Kentucky	10.62	10.60	9.70	9.50	5.34	5.45	--	--	8.58	8.44
Mississippi	11.22	10.84	10.34	9.99	5.97	6.18	--	--	9.39	9.21
Tennessee	10.80	10.85	10.65	10.61	5.79	5.73	--	--	9.87	9.73
West South Central	11.26	10.96	8.42	8.31	6.76	5.64	6.49	8.10	9.15	8.63
Arkansas	10.08	10.01	8.70	7.59	6.39	5.83	13.43	11.68	8.51	7.95
Louisiana	9.57	9.92	8.55	8.83	5.20	5.66	8.76	9.34	7.82	8.10
Oklahoma	10.61	10.87	8.38	8.60	5.24	5.50	--	--	8.43	8.66
Texas	11.80	11.27	8.37	8.24	7.51	5.62	6.32	8.01	9.61	8.82
Mountain	12.18	12.16	10.02	9.97	6.94	7.17	9.53	9.51	10.06	10.08
Arizona	12.52	12.83	10.89	11.18	7.05	7.66	10.43	11.29	11.21	11.52
Colorado	12.70	12.43	10.68	10.44	7.53	7.52	8.84	8.89	10.60	10.36
Idaho	10.18	10.48	7.80	8.14	6.65	7.17	--	--	7.99	8.40
Montana	11.91	11.29	10.55	9.87	5.35	6.29	--	--	9.14	9.07
Nevada	11.79	11.40	8.59	8.16	8.50	8.10	10.27	9.05	9.92	9.55
New Mexico	13.00	13.48	10.51	10.69	5.37	5.81	--	--	9.60	10.01
Utah	11.17	10.85	8.78	8.43	6.37	6.80	10.69	10.47	8.98	8.83
Wyoming	11.97	11.75	9.59	9.55	6.90	6.60	--	--	8.27	8.02
Pacific Contiguous	17.21	17.51	16.31	16.34	11.38	11.14	9.59	9.18	15.57	15.68
California	19.86	19.85	19.05	18.74	15.27	15.17	9.64	9.19	18.64	18.55
Oregon	11.18	11.12	8.72	9.43	6.37	5.74	9.13	8.98	8.95	8.86
Washington	10.06	9.93	8.70	8.62	5.43	5.20	9.36	8.70	8.19	8.00
Pacific Noncontiguous	28.57	28.92	24.94	24.94	22.88	24.01	--	--	25.33	25.81
Alaska	23.56	22.51	19.96	18.50	16.30	17.69	--	--	20.09	19.48
Hawaii	31.16	32.39	28.93	30.00	25.21	26.23	--	--	28.18	29.27
U.S. Total	13.30	13.26	11.00	11.03	7.44	7.25	9.71	9.50	11.10	11.01

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Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD	August 2019 YTD	August 2018 YTD
New England	21.24	20.53	16.36	16.37	13.02	13.20	9.69	8.97	17.88	17.58
Connecticut	22.19	21.09	17.18	16.52	13.81	13.74	14.48	12.38	19.11	18.28
Maine	17.84	16.85	12.91	12.55	9.48	9.41	--	--	14.13	13.47
Massachusetts	22.12	21.64	16.58	17.17	14.45	14.92	6.50	6.55	18.41	18.53
New Hampshire	20.05	19.53	15.98	15.74	13.15	13.45	--	--	17.22	16.94
Rhode Island	21.61	19.87	16.76	16.28	15.79	15.13	18.68	17.02	18.67	17.65
Vermont	17.01	17.93	15.89	15.20	10.79	10.66	--	--	15.04	15.11
Middle Atlantic	15.76	15.98	12.17	12.44	6.61	7.02	11.21	11.08	12.40	12.68
New Jersey	16.08	15.49	12.47	12.30	10.49	10.15	8.68	9.16	13.72	13.35
New York	17.85	18.51	13.91	14.48	5.58	6.11	12.39	12.07	14.32	14.85
Pennsylvania	13.66	13.91	8.74	8.97	6.43	6.89	7.32	7.71	9.83	10.16
East North Central	13.32	13.28	10.18	10.20	6.96	7.09	7.23	6.81	10.19	10.20
Illinois	12.78	12.69	8.97	9.12	6.61	6.78	7.05	6.59	9.52	9.60
Indiana	12.34	12.17	10.80	10.55	7.35	7.29	10.94	10.39	9.88	9.69
Michigan	15.73	15.59	11.37	11.20	7.27	7.14	10.34	10.94	11.68	11.51
Ohio	12.33	12.70	9.74	10.10	6.32	7.04	7.25	7.25	9.59	10.02
Wisconsin	14.59	14.00	11.04	10.70	7.76	7.36	13.91	13.92	11.06	10.62
West North Central	12.01	12.15	9.79	9.94	7.47	7.38	8.93	9.21	9.91	9.98
Iowa	13.11	12.45	10.49	9.93	6.91	6.68	--	--	9.59	9.19
Kansas	12.68	13.51	10.22	10.77	7.28	7.60	--	--	10.27	10.86
Minnesota	13.37	13.09	10.61	10.37	7.91	7.50	9.77	9.60	10.71	10.37
Missouri	11.11	11.68	9.16	9.75	6.85	7.40	8.04	8.79	9.72	10.27
Nebraska	10.81	10.67	9.01	8.86	7.79	7.77	--	--	9.22	9.10
North Dakota	10.44	10.23	9.06	9.09	8.47	8.01	--	--	9.14	8.93
South Dakota	11.49	11.52	9.44	9.58	7.83	7.81	--	--	9.91	9.95
South Atlantic	11.99	11.74	9.38	9.32	6.39	6.54	8.02	7.80	10.05	9.93
Delaware	12.52	12.43	9.68	9.52	7.56	7.90	--	--	10.62	10.48
District of Columbia	12.94	12.65	12.03	11.82	8.25	8.27	9.94	9.29	12.12	11.88
Florida	11.91	11.51	9.50	9.19	7.70	7.66	8.24	8.22	10.64	10.30
Georgia	11.76	11.73	9.75	9.87	5.94	6.05	5.73	5.64	9.75	9.78
Maryland	13.15	13.27	10.09	10.41	7.80	8.31	7.45	7.34	11.34	11.57
North Carolina	11.56	11.04	8.82	8.59	6.19	6.37	8.18	8.05	9.52	9.26
South Carolina	12.59	12.52	10.25	10.19	5.96	6.02	--	--	9.75	9.69
Virginia	12.03	11.80	8.26	8.33	6.93	6.86	8.24	8.25	9.60	9.54
West Virginia	11.04	11.29	8.95	9.31	5.96	6.51	--	--	8.37	8.84
East South Central	11.40	11.11	10.70	10.50	5.79	5.83	--	--	9.46	9.29
Alabama	12.73	12.22	11.60	11.24	6.04	6.01	--	--	9.95	9.65
Kentucky	10.63	10.51	9.91	9.68	5.39	5.67	--	--	8.51	8.51
Mississippi	11.39	11.16	10.54	10.45	5.94	5.96	--	--	9.32	9.26
Tennessee	10.88	10.66	10.63	10.50	5.81	5.66	--	--	9.82	9.58
West South Central	11.14	10.74	8.10	8.30	5.49	5.49	6.66	8.40	8.43	8.35
Arkansas	9.86	9.92	8.72	7.94	6.01	5.76	12.10	11.40	8.19	7.94
Louisiana	9.52	9.68	8.80	8.99	5.26	5.40	9.21	9.82	7.69	7.81
Oklahoma	10.12	10.32	7.82	8.12	5.00	5.38	--	--	7.82	8.18
Texas	11.79	11.12	7.97	8.24	5.57	5.50	6.47	8.30	8.71	8.55
Mountain	11.97	11.97	9.64	9.63	6.38	6.55	9.42	9.49	9.52	9.58
Arizona	12.64	12.79	10.56	10.78	6.45	6.64	9.98	10.19	10.81	10.97
Colorado	12.33	12.10	10.26	9.96	7.34	7.48	8.92	8.90	10.15	10.00
Idaho	10.01	10.27	7.76	8.07	6.31	6.74	--	--	7.99	8.30
Montana	11.29	10.93	10.39	10.09	5.49	5.06	--	--	9.15	8.85
Nevada	11.95	11.83	7.96	7.82	6.13	6.32	8.33	8.34	8.78	8.84
New Mexico	12.66	12.75	9.99	10.07	5.47	5.88	--	--	9.17	9.45
Utah	10.60	10.54	8.43	8.33	6.04	6.01	10.60	10.62	8.41	8.34
Wyoming	11.22	11.36	9.69	9.66	6.68	6.76	--	--	8.12	8.17
Pacific Contiguous	15.81	15.75	14.34	14.20	9.69	9.49	8.82	8.48	13.87	13.71
California	19.44	19.02	16.60	16.28	13.12	13.05	8.74	8.45	16.93	16.61
Oregon	10.95	10.97	8.89	9.12	6.29	5.56	9.14	9.18	9.06	8.82
Washington	9.62	9.80	8.73	8.70	4.87	4.67	9.39	9.31	8.04	8.01
Pacific Noncontiguous	28.49	27.74	25.21	24.19	23.84	23.46	--	--	25.78	25.04
Alaska	22.73	21.82	19.99	18.30	17.09	17.74	--	--	20.29	19.33
Hawaii	32.66	32.10	29.98	29.41	26.16	25.65	--	--	29.28	28.74
U.S. Total	13.07	12.90	10.67	10.70	6.86	6.95	9.75	9.65	10.63	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 - August 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
Rolling 12 Months Ending in August					
2018	133,489,723	18,523,149	841,480	83	152,854,435
2019	134,765,949	18,628,473	886,079	82	154,280,583

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: August 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	6,503,564	6,389,743	906,469	895,158	19,682	23,033	6	7	7,429,721	7,307,941
Connecticut	1,512,312	1,504,240	154,361	153,882	4,113	4,300	3	4	1,670,789	1,662,426
Maine	726,894	721,482	100,999	99,134	2,850	3,091	0	0	830,743	823,707
Massachusetts	2,867,582	2,777,334	422,885	415,823	7,653	10,471	2	2	3,298,122	3,203,630
New Hampshire	629,277	625,903	108,882	108,438	3,159	3,192	0	0	741,318	737,533
Rhode Island	449,257	444,229	61,374	60,520	1,766	1,775	1	1	512,398	506,525
Vermont	318,242	316,555	57,968	57,361	141	204	0	0	376,351	374,120
Middle Atlantic	16,269,620	16,166,434	2,370,328	2,342,680	33,083	30,511	19	20	18,673,050	18,539,645
New Jersey	3,603,433	3,575,948	525,128	515,853	11,748	11,944	6	6	4,140,315	4,103,751
New York	7,240,088	7,195,098	1,126,337	1,109,183	6,531	6,889	8	8	8,372,964	8,311,178
Pennsylvania	5,426,099	5,395,388	718,863	717,644	14,804	11,678	5	6	6,159,771	6,124,716
East North Central	20,368,120	20,192,303	2,522,771	2,504,164	46,958	54,289	10	9	22,937,859	22,750,765
Illinois	5,332,832	5,294,573	620,572	617,658	3,999	5,734	3	3	5,957,406	5,917,968
Indiana	2,881,843	2,860,957	359,120	355,263	15,190	17,797	1	1	3,256,154	3,234,018
Michigan	4,409,811	4,370,356	550,429	543,503	NM	6,046	2	2	4,965,853	4,919,907
Ohio	5,001,155	4,962,744	632,455	632,727	17,092	18,756	2	2	5,650,704	5,614,229
Wisconsin	2,742,479	2,703,673	360,195	355,013	NM	5,956	2	1	3,107,742	3,064,643
West North Central	9,657,565	9,519,636	1,477,538	1,460,306	117,760	128,088	3	3	11,252,866	11,108,033
Iowa	1,406,709	1,388,287	247,354	239,683	NM	8,057	0	0	1,661,052	1,636,027
Kansas	1,290,747	1,268,798	236,421	234,786	25,984	24,701	0	0	1,553,152	1,528,285
Minnesota	2,455,102	2,427,132	295,461	296,640	NM	9,667	1	1	2,759,116	2,733,440
Missouri	2,840,711	2,797,683	386,836	386,169	6,596	8,065	2	2	3,234,145	3,191,919
Nebraska	868,624	852,989	162,182	155,011	57,646	64,500	0	0	1,088,452	1,072,500
North Dakota	387,246	383,309	74,055	75,301	8,858	9,020	0	0	470,159	467,630
South Dakota	408,426	401,438	75,229	72,716	NM	4,078	0	0	486,790	478,232
South Atlantic	28,502,534	28,005,003	3,844,942	3,794,375	79,454	84,878	13	13	32,426,943	31,884,269
Delaware	436,489	433,746	55,519	55,169	573	834	0	0	492,581	489,749
District of Columbia	282,653	275,431	26,456	26,409	1	1	3	3	309,113	301,844
Florida	9,623,328	9,438,317	1,260,155	1,230,266	20,610	21,617	2	2	10,904,095	10,690,202
Georgia	4,465,642	4,366,111	589,072	580,980	20,061	23,646	1	1	5,074,776	4,970,738
Maryland	2,356,070	2,334,644	255,296	254,247	8,777	8,799	5	5	2,620,148	2,597,695
North Carolina	4,656,988	4,563,047	706,380	692,640	9,845	10,118	1	1	5,373,214	5,265,806
South Carolina	2,346,158	2,299,265	373,698	378,033	4,261	4,630	0	0	2,724,117	2,681,928
Virginia	3,480,797	3,437,024	433,311	431,820	3,861	3,740	1	1	3,917,970	3,872,585
West Virginia	854,409	857,418	145,055	144,811	11,465	11,493	0	0	1,010,929	1,013,722
East South Central	8,578,077	8,411,667	1,418,333	1,409,088	22,080	26,759	0	0	10,018,490	9,847,514
Alabama	2,284,991	2,234,413	371,634	371,718	8,257	7,399	0	0	2,664,882	2,613,530
Kentucky	2,020,583	1,982,806	308,532	305,728	5,442	6,788	0	0	2,334,557	2,295,322
Mississippi	1,332,083	1,294,053	240,385	237,593	7,529	11,555	0	0	1,579,997	1,543,201
Tennessee	2,940,420	2,900,395	497,782	494,049	852	1,017	0	0	3,439,054	3,395,461
West South Central	16,399,340	16,477,970	2,257,862	2,379,011	323,220	211,268	6	6	18,980,428	19,068,255
Arkansas	1,405,500	1,391,939	193,583	196,909	41,052	42,530	2	2	1,640,137	1,631,380
Louisiana	2,121,440	2,090,389	295,154	294,359	18,617	19,826	1	1	2,435,212	2,404,575
Oklahoma	1,808,250	1,768,019	287,191	283,437	19,640	18,842	0	0	2,115,081	2,070,298
Texas	11,064,150	11,227,623	1,481,934	1,604,306	243,911	130,070	3	3	12,789,998	12,962,002
Mountain	9,986,799	9,844,264	1,416,881	1,417,330	93,270	98,678	5	5	11,496,955	11,360,277
Arizona	2,839,194	2,801,862	329,702	322,497	NM	7,798	2	2	3,175,317	3,132,159
Colorado	2,369,352	2,330,942	368,849	377,146	NM	16,198	1	1	2,753,186	2,724,287
Idaho	762,946	745,635	112,499	111,070	29,016	28,669	0	0	904,461	885,374
Montana	518,856	510,575	112,432	108,845	NM	12,187	0	0	641,301	631,607
Nevada	1,206,576	1,197,502	167,617	164,733	NM	3,601	1	1	1,377,732	1,365,837
New Mexico	912,724	891,332	140,448	144,089	NM	9,413	0	0	1,061,904	1,044,834
Utah	1,100,469	1,093,639	125,973	130,293	10,613	9,761	1	1	1,237,056	1,233,694
Wyoming	276,682	272,777	59,361	58,657	9,955	11,051	0	0	345,998	342,485
Pacific Contiguous	18,595,829	18,702,841	2,347,902	2,370,264	206,897	208,055	19	20	21,150,647	21,281,180
California	13,752,361	13,854,710	1,713,391	1,745,783	150,201	153,928	12	12	15,615,965	15,754,433
Oregon	1,780,554	1,750,277	241,627	237,373	27,171	25,954	2	2	2,049,354	2,013,606
Washington	3,062,914	3,097,854	392,884	387,108	29,525	28,173	5	6	3,485,328	3,513,141
Pacific Noncontiguous	729,758	724,361	114,853	113,824	NM	NM	0	0	846,869	840,417
Alaska	291,607	288,257	54,899	54,183	NM	NM	0	0	347,946	343,856
Hawaii	438,151	436,104	59,954	59,641	818	816	0	0	498,923	496,561
U.S. Total	135,591,206	134,434,222	18,677,879	18,686,200	944,662	867,791	81	83	155,213,828	153,988,296

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), July 2019 to August 2019

		As of End of July 2019	Activity During August 2019 as Reported to EIA		As of End of August 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*	*98,358.1*	*567.2*	*0.0*	*98,925.3*	*567.2*	*4,536.9*	*9,485.1*	*1,274.2*	*10,771.6*	*0.0*	*85.0*	*1,274.2*	*10,686.6*	*100,199.5*	*109,611.9*
..... *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	98,387.4	567.2	0.0	98,954.6	567.2	4,536.9	9,485.1	1,274.2	10,771.6	0.0	85.0	1,274.2	10,686.6	100,228.8	109,641.2
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*31,929.4*	*235.6*	*8.0*	*32,157.0*	*227.6*	*2,036.5*	*4,483.0*	*1,004.1*	*9,063.8*	*0.0*	*0.0*	*1,004.1*	*9,063.8*	*33,161.1*	*41,220.8*
..... *Solar Thermal without Energy Storage*	*Utility Scale Facilities*	*1,352.5*	*0.0*	*0.0*	*1,352.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1,352.5*	*1,352.5*
..... *Solar Thermal with Energy Storage*	*Utility Scale Facilities*	*405.4*	*0.0*	*0.0*	*405.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*405.4*	*405.4*
..... Solar Subtotal	Utility Scale Facilities	33,687.3	235.6	8.0	33,914.9	227.6	2,036.5	4,483.0	1,004.1	9,063.8	0.0	0.0	1,004.1	9,063.8	34,919.0	42,978.7
..... Conventional Hydroelectric	Utility Scale Facilities	79,882.0	0.0	103.8	79,778.2	-103.8	-93.6	26.7	4.0	226.3	0.7	12.9	3.3	213.4	79,781.5	79,991.6
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,518.6*	*0.0*	*0.0*	*8,518.6*	*0.0*	*-176.0*	*-230.1*	*8.5*	*130.5*	*89.3*	*89.3*	*-80.8*	*41.2*	*8,437.8*	*8,559.8*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,048.0*	*0.0*	*6.9*	*2,041.1*	*-6.9*	*-11.1*	*-14.6*	*1.4*	*5.0*	*10.5*	*75.4*	*-9.1*	*-70.4*	*2,032.0*	*1,970.7*
..... *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*	*0.0*	*0.0*	*737.7*	*0.0*	*-14.6*	*-15.0*	*1.7*	*47.7*	*0.0*	*6.5*	*1.7*	*41.2*	*739.4*	*778.9*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,493.6	0.0	6.9	13,486.7	-6.9	-246.5	-304.5	11.6	183.2	99.8	171.2	-88.2	12.0	13,398.5	13,498.7
..... 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***	***227,905.2***	***802.8***	***118.7***	***228,589.3***	***684.1***	***6,243.9***	***13,753.0***	***2,293.9***	***20,244.9***	***100.5***	***269.1***	***2,193.4***	***19,975.8***	***230,782.7***	***248,565.1***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*268,908.8*	*0.0*	*0.0*	*268,908.8*	*0.0*	*5,046.2*	*10,445.4*	*0.0*	*7,336.6*	*0.0*	*703.0*	*0.0*	*6,633.6*	*268,908.8*	*275,542.4*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*128,744.2*	*15.5*	*0.0*	*128,759.7*	*15.5*	*1,123.9*	*1,492.3*	*113.9*	*2,689.3*	*40.0*	*486.0*	*73.9*	*2,203.3*	*128,833.6*	*130,963.0*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*73,673.3*	*0.0*	*0.0*	*73,673.3*	*0.0*	*-168.3*	*-1,984.8*	*0.0*	*0.0*	*0.0*	*1,835.9*	*0.0*	*-1,835.9*	*73,673.3*	*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*	*291.2*	*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*	*49.1*	*0.0*	*0.0*	*0.0*	*49.1*	*175.0*	*224.1*
..... Natural Gas Subtotal	Utility Scale Facilities	476,506.4	15.5	0.0	476,521.9	15.5	6,285.0	10,250.3	133.5	10,308.3	40.0	3,048.7	93.5	7,259.6	476,615.4	483,781.5
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*234,356.7*	*0.0*	*0.0*	*234,356.7*	*0.0*	*-7,672.9*	*-10,295.1*	*0.0*	*68.0*	*100.0*	*9,534.9*	*-100.0*	*-9,466.9*	*234,256.7*	*224,889.8*
..... *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	0.0	235,112.7	0.0	-7,672.9	-10,295.1	0.0	68.0	100.0	9,534.9	-100.0	-9,466.9	235,012.7	225,645.8
..... Petroleum Coke	Utility Scale Facilities	1,532.2	0.0	0.0	1,532.2	0.0	67.0	67.0	0.0	0.0	67.0	67.0	-67.0	-67.0	1,465.2	1,465.2
..... Petroleum Liquids	Utility Scale Facilities	30,586.8	18.0	15.8	30,589.0	2.2	-164.0	-1,867.9	1.5	5.9	0.0	58.2	1.5	-52.3	30,590.5	30,536.7
..... 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***	***746,287.0***	***33.5***	***15.8***	***746,304.7***	***17.7***	***-1,479.9***	***-1,840.7***	***135.0***	***10,387.2***	***207.0***	***12,708.8***	***-72.0***	***-2,321.6***	***746,232.7***	***743,983.1***
..... 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	971.6	19.0	0.0	990.6	19.0	138.5	243.0	13.2	92.6	0.0	0.0	13.2	92.6	1,003.8	1,083.2
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,927.8***	***19.0***	***0.0***	***23,946.8***	***19.0***	***217.5***	***322.0***	***13.2***	***284.2***	***0.0***	***0.0***	***13.2***	***284.2***	***23,960.0***	***24,231.0***
... Nuclear	***Utility Scale Facilities***	***98,908.9***	***0.0***	***0.0***	***98,908.9***	***0.0***	***-524.0***	***-821.7***	***0.0***	***0.0***	***802.8***	***1,821.3***	***-802.8***	***-1,821.3***	***98,106.1***	***97,087.6***
... All Other	***Utility Scale Facilities***	***1,447.6***	***47.9***	***0.0***	***1,495.5***	***47.9***	***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**	**1,098,476.5**	**903.2**	**134.5**	**1,099,245.2**	**768.7**	**4,505.4**	**11,460.4**	**2,442.1**	**30,916.3**	**1,110.3**	**14,799.2**	**1,331.8**	**16,117.1**	**1,100,577.0**	**1,115,362.3**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*21,534.6*			*21,836.7*	*302.1*	*2,289.6*	*3,317.1*								
..... Estimated Total Solar Photovoltaic	All Facilities	53,464.0			53,993.7	529.7	4,326.1	7,800.1								
... Estimated Total Solar	***All Facilities***	***55,221.9***			***55,751.6***	***529.7***	***4,326.1***	***7,800.1***								

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 - August 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

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 - August 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

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, August 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	5,874.2	5,763.0	24,190.7	23,154.6	1,797.4	1,797.4	44.3	28.7	3,324.5	4,003.5	48.0	48.0	35,279.1	34,795.2
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	1,424.1	1,345.3	9,621.4	9,069.3	1,768.0	1,768.0	23.5	7.9	0.0	679.0	0.0	0.0	12,837.0	12,869.5
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	153.5	113.3	1,832.1	1,832.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,985.6	1,945.4
Vermont	663.7	639.2	97.9	97.9	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	764.6	740.1
Middle Atlantic	11,305.8	11,056.4	73,067.6	71,351.6	3,411.6	3,411.6	143.5	76.9	18,700.2	19,307.9	11.2	11.2	106,639.9	105,215.6
New Jersey	1,042.2	976.0	12,160.5	12,441.8	420.0	420.0	42.1	2.5	3,500.2	4,107.9	11.2	11.2	17,176.2	17,959.4
New York	7,403.3	7,230.5	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	41,235.0	41,017.7
Pennsylvania	2,860.3	2,849.9	33,940.0	31,960.2	1,583.0	1,583.0	48.4	48.4	9,797.0	9,797.0	0.0	0.0	48,228.7	46,238.5
East North Central	12,910.1	12,010.1	111,448.7	112,363.7	2,231.0	2,152.0	189.7	167.7	19,034.4	19,034.4	187.1	188.1	146,001.0	145,916.0
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	0.0	4,122.2	4,122.2	0.0	0.0	29,562.4	29,848.0
Ohio	1,066.3	933.8	25,170.9	25,070.9	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	28,404.2	28,171.7
Wisconsin	1,221.0	1,238.1	13,060.8	13,565.9	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,498.7	16,020.9
West North Central	30,548.9	26,927.7	59,277.1	60,836.5	657.0	657.0	17.1	3.2	5,443.4	5,443.4	22.8	22.8	95,966.3	93,890.6
Iowa	8,970.1	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	19,381.0	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	5,291.9	5,059.8	10,269.5	10,299.1	0.0	0.0	13.0	1.0	1,657.0	1,657.0	16.7	16.7	17,248.1	17,033.6
Missouri	1,579.0	1,578.9	17,643.9	18,391.2	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,072.1	21,819.3
Nebraska	2,329.9	1,805.8	6,202.0	6,202.0	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	9,301.9	8,777.8
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	20,814.9	19,168.4	161,081.2	161,943.2	7,905.2	7,905.2	76.5	72.5	24,706.6	24,706.6	408.7	408.7	214,993.1	214,204.6
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	2,413.2	52,911.8	52,553.5	0.0	0.0	14.0	14.0	3,626.0	3,626.0	348.7	348.7	60,108.8	58,955.4
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	1,211.5	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	14,617.8	14,763.0
North Carolina	6,862.8	6,198.8	22,127.1	22,120.5	86.0	86.0	1.0	1.0	5,149.6	5,149.6	54.0	54.0	34,280.5	33,609.9
South Carolina	2,336.1	2,135.8	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	23,592.3
Virginia	2,066.0	2,129.1	19,018.1	19,092.5	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,893.1	28,030.6
West Virginia	1,027.1	1,027.1	13,777.9	13,781.6	0.0	0.0	49.5	49.5	0.0	0.0	0.0	0.0	14,854.5	14,858.2
East South Central	8,909.6	8,727.4	62,692.3	64,952.7	1,616.3	1,616.3	1.0	1.0	11,449.1	10,984.1	1.4	1.4	84,669.7	86,282.9
Alabama	4,180.1	4,071.7	19,552.0	20,660.4	0.0	0.0	1.0	1.0	5,525.4	5,060.4	0.0	0.0	29,258.5	29,793.5
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	3,020.1	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	21,349.4	21,276.6
West South Central	40,814.9	36,697.1	140,206.3	138,995.0	286.0	286.0	131.7	98.3	8,910.7	8,910.7	560.4	512.5	190,910.0	185,499.6
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	8,463.1	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	26,823.1
Texas	29,451.3	25,854.6	89,846.7	89,605.4	0.0	0.0	119.2	97.8	4,960.0	4,960.0	224.0	224.0	124,601.2	120,741.8
Mountain	27,722.7	26,360.9	62,546.2	62,244.1	778.8	778.8	54.8	35.6	3,937.0	3,937.0	123.0	122.1	95,162.5	93,478.5
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	4,287.1	11,063.0	11,065.0	562.5	562.5	9.2	1.0	0.0	0.0	9.1	9.1	16,609.5	15,924.7
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	2,714.2	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	8,674.1	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	1,886.4	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	8,673.1	8,580.2
Pacific Contiguous	68,478.0	66,944.5	47,569.7	48,083.8	4,225.9	4,225.9	270.8	223.5	3,403.0	3,403.0	106.3	106.3	124,053.7	122,987.0
California	31,562.4	30,099.7	38,501.8	39,015.9	3,911.9	3,911.9	259.6	211.1	2,240.0	2,240.0	106.3	106.3	76,582.0	75,584.9
Oregon	12,245.1	12,227.7	4,326.1	4,326.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,576.2	16,558.8
Washington	24,670.5	24,617.1	4,741.8	4,741.8	314.0	314.0	6.2	7.4	1,163.0	1,163.0	0.0	0.0	30,895.5	30,843.3
Pacific Noncontiguous	1,210.2	1,180.8	4,224.9	4,220.2	0.0	0.0	108.2	87.2	0.0	0.0	26.6	26.6	5,569.9	5,514.8
Alaska	538.2	538.2	2,166.6	2,161.9	0.0	0.0	47.2	46.2	0.0	0.0	0.0	0.0	2,752.0	2,746.3
Hawaii	672.0	642.6	2,058.3	2,058.3	0.0	0.0	61.0	41.0	0.0	0.0	26.6	26.6	2,817.9	2,768.5
U.S. Total	228,589.3	214,836.3	746,304.7	748,145.4	22,909.2	22,830.2	1,037.6	794.6	98,908.9	99,730.6	1,495.5	1,447.7	1,099,245.2	1,087,784.8

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, August 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	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018
New England	1,424.8	1,403.8	1,006.5	862.0	0.0	0.0	1,962.3	1,959.5	1,480.6	1,537.7	0.0	0.0	5,874.2	5,763.0	2,422.9	2,187.2	3,429.4	3,049.2	3,429.4	3,049.2
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	474.9	395.3	561.7	460.1	561.7	460.1
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	54.6	41.4	60.2	47.0	60.2	47.0
Massachusetts	96.1	96.1	775.7	696.9	0.0	0.0	267.0	267.0	285.3	285.3	0.0	0.0	1,424.1	1,345.3	1,554.8	1,508.4	2,330.5	2,205.3	2,330.5	2,205.3
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	93.4	80.7	93.4	80.7	93.4	80.7
Rhode Island	72.8	51.8	37.9	18.7	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	153.5	113.3	131.3	63.5	169.2	82.2	169.2	82.2
Vermont	150.2	150.2	100.5	76.0	0.0	0.0	331.2	331.2	81.8	81.8	0.0	0.0	663.7	639.2	114.0	97.8	214.5	173.8	214.5	173.8
Middle Atlantic	3,363.3	3,283.4	1,207.8	1,021.4	0.0	0.0	5,473.2	5,473.2	1,261.5	1,278.4	0.0	0.0	11,305.8	11,056.4	3,335.0	2,867.1	4,542.8	3,888.5	4,542.8	3,888.5
New Jersey	7.6	7.6	805.0	728.8	0.0	0.0	12.3	12.3	217.3	227.3	0.0	0.0	1,042.2	976.0	1,586.0	1,401.4	2,391.0	2,130.2	2,391.0	2,130.2
New York	1,985.7	1,905.8	335.4	239.3	0.0	0.0	4,561.3	4,561.3	520.9	524.1	0.0	0.0	7,403.3	7,230.5	1,393.1	1,153.8	1,728.5	1,393.1	1,728.5	1,393.1
Pennsylvania	1,370.0	1,370.0	67.4	53.3	0.0	0.0	899.6	899.6	523.3	527.0	0.0	0.0	2,860.3	2,849.9	355.9	311.9	423.3	365.2	423.3	365.2
East North Central	10,332.1	9,461.7	482.4	435.6	0.0	0.0	859.9	859.9	1,235.7	1,252.9	0.0	0.0	12,910.1	12,010.1	537.4	363.6	1,019.8	799.2	1,019.8	799.2
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	144.2	64.5	184.8	105.1	184.8	105.1
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	87.0	69.1	308.5	265.8	308.5	265.8
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	84.4	61.0	184.6	159.2	184.6	159.2
Ohio	718.4	605.9	96.2	76.2	0.0	0.0	101.9	101.9	149.8	149.8	0.0	0.0	1,066.3	933.8	148.6	111.8	244.8	188.0	244.8	188.0
Wisconsin	438.4	439.1	23.9	23.9	0.0	0.0	393.6	393.6	365.1	381.5	0.0	0.0	1,221.0	1,238.1	73.1	57.2	97.0	81.1	97.0	81.1
West North Central	25,847.9	22,320.9	942.9	756.5	0.0	0.0	3,293.7	3,293.7	464.4	556.6	0.0	0.0	30,548.9	26,927.7	407.5	309.6	1,350.4	1,066.1	1,350.4	1,066.1
Iowa	8,791.8	7,140.2	10.5	8.9	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,970.1	7,316.9	107.6	84.4	118.1	93.3	118.1	93.3
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	23.4	17.4	33.6	21.6	33.6	21.6
Minnesota	3,850.5	3,703.9	841.1	665.8	0.0	0.0	205.9	205.9	394.4	484.2	0.0	0.0	5,291.9	5,059.8	72.0	55.0	913.1	720.8	913.1	720.8
Missouri	954.3	954.3	62.1	59.6	0.0	0.0	548.5	548.5	14.1	16.5	0.0	0.0	1,579.0	1,578.9	194.1	145.1	256.2	204.7	256.2	204.7
Nebraska	2,018.3	1,495.2	18.0	17.0	0.0	0.0	277.9	277.9	15.7	15.7	0.0	0.0	2,329.9	1,805.8	9.1	6.8	27.1	23.8	27.1	23.8
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	8,313.7	6,521.5	0.0	0.0	7,226.4	7,229.2	4,188.5	4,331.4	0.0	0.0	20,814.9	19,168.4	1,979.5	1,601.4	10,293.2	8,122.9	10,293.2	8,122.9
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	83.4	75.4	117.2	108.7	117.2	108.7
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	54.9	46.8	61.8	46.8	61.8	46.8
Florida	0.0	0.0	1,973.0	1,130.8	0.0	0.0	54.5	54.5	1,180.8	1,227.9	0.0	0.0	3,208.3	2,413.2	415.1	256.2	2,388.1	1,387.0	2,388.1	1,387.0
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	162.0	NM	1,175.9	NM	1,175.9
Maryland	190.0	190.0	290.6	263.4	0.0	0.0	590.0	590.0	140.9	140.0	0.0	0.0	1,211.5	1,183.4	763.4	688.3	1,054.0	951.7	1,054.0	951.7
North Carolina	208.0	208.0	4,090.3	3,428.8	0.0	0.0	2,004.0	2,002.0	560.5	560.0	0.0	0.0	6,862.8	6,198.8	168.2	130.8	4,258.5	3,559.6	4,258.5	3,559.6
South Carolina	0.0	0.0	485.7	280.6	0.0	0.0	1,323.9	1,328.7	526.5	526.5	0.0	0.0	2,336.1	2,135.8	222.3	183.0	708.0	463.6	708.0	463.6
Virginia	0.0	0.0	393.8	370.7	0.0	0.0	866.0	866.0	806.2	892.4	0.0	0.0	2,066.0	2,129.1	83.9	52.5	477.7	423.2	477.7	423.2
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	8.3	6.3	8.3	6.3	8.3	6.3
East South Central	29.1	29.1	559.2	471.7	0.0	0.0	7,055.3	7,055.5	1,266.0	1,171.1	0.0	0.0	8,909.6	8,727.4	100.9	90.7	660.1	562.4	660.1	562.4
Alabama	0.0	0.0	194.1	179.4	0.0	0.0	3,291.8	3,292.0	694.2	600.3	0.0	0.0	4,180.1	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	25.7	21.0	52.0	47.3	52.0	47.3
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	8.3	6.6	168.9	167.2	168.9	167.2
Tennessee	29.1	29.1	178.2	105.4	0.0	0.0	2,616.6	2,616.6	196.2	196.2	0.0	0.0	3,020.1	2,947.3	58.4	56.3	236.6	161.7	236.6	161.7
West South Central	34,477.8	30,639.6	2,112.1	1,758.4	0.0	0.0	2,991.4	2,989.4	1,233.6	1,309.7	0.0	0.0	40,814.9	36,697.1	777.1	586.8	2,889.2	2,345.2	2,889.2	2,345.2
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	21.9	13.8	131.9	113.8	131.9	113.8
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	143.1	136.7	144.2	137.8	144.2	137.8
Oklahoma	8,070.7	7,494.8	30.5	30.5	0.0	0.0	863.6	861.6	76.2	76.2	0.0	0.0	9,041.0	8,463.1	11.3	6.7	41.8	37.2	41.8	37.2
Texas	26,407.1	23,144.8	1,970.5	1,626.8	0.0	0.0	670.0	670.0	403.7	413.0	0.0	0.0	29,451.3	25,854.6	600.9	429.5	2,571.4	2,056.3	2,571.4	2,056.3
Mountain	9,786.3	8,834.9	5,985.1	5,634.3	473.9	473.9	10,653.4	10,650.0	175.7	174.3	648.3	593.5	27,722.7	26,360.9	2,589.0	2,228.1	8,574.1	7,862.4	9,048.0	8,336.3
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	1,363.0	1,218.2	3,180.7	2,995.0	3,476.1	3,290.4
Colorado	3,703.7	3,103.7	546.9	468.3	0.0	0.0	686.4	686.4	28.7	28.7	0.0	0.0	4,965.7	4,287.1	376.1	347.1	923.0	815.4	923.0	815.4
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	37.1	21.7	279.1	261.7	279.1	261.7
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	16.2	12.9	33.2	29.9	33.2	29.9
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	375.2	273.1	2,204.2	1,994.8	2,382.7	2,173.3
New Mexico	2,035.9	1,764.5	581.4	553.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,714.2	2,407.8	156.6	128.5	738.0	681.9	738.0	681.9
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	259.1	222.9	1,118.2	1,080.0	1,118.2	1,080.0
Wyoming	1,487.3	1,487.3	92.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,886.4	1,794.4	5.6	3.8	97.6	3.8	97.6	3.8
Pacific Contiguous	12,340.8	12,143.6	11,423.2	10,111.4	1,284.0	1,284.0	39,759.6	39,744.6	1,906.8	1,905.2	1,763.6	1,755.7	68,478.0	66,944.5	9,029.5	7,684.3	20,452.7	17,795.7	21,736.7	19,079.7
California	6,057.5	5,860.3	11,083.2	9,828.8	1,284.0	1,284.0	10,185.9	10,184.3	1,207.7	1,206.1	1,744.1	1,736.2	31,562.4	30,099.7	8,677.7	7,418.7	19,760.9	17,247.5	21,044.9	18,531.5
Oregon	3,210.2	3,210.2	320.3	282.1	0.0	0.0	8,380.4	8,401.2	314.7	314.7	19.5	19.5	12,245.1	12,227.7	189.4	148.7	509.7	430.8	509.7	430.8
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,193.3	21,159.1	384.4	384.4	0.0	0.0	24,670.5	24,617.1	162.4	116.9	182.1	117.4	182.1	117.4
Pacific Noncontiguous	266.2	266.2	124.1	101.2	0.0	0.0	503.0	496.5	273.9	273.9	43.0	43.0	1,210.2	1,180.8	657.9	600.7	782.0	701.9	782.0	701.9
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	4.4	2.8	4.4	2.8	4.4	2.8
Hawaii	205.6	205.6	124.1	101.2	0.0	0.0	32.4	25.9	266.9	266.9	43.0	43.0	672.0	642.6	653.6	597.9	777.7	699.1	777.7	699.1
U.S. Total	98,954.6	89,469.5	32,157.0	27,674.0	1,757.9	1,757.9	79,778.2	79,751.5	13,486.7	13,791.2	2,454.9	2,392.2	228,589.3	214,836.3	21,836.7	18,519.6	53,993.7	46,193.6	55,751.6	47,951.5

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, August 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	
	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 2018	August 2019	August 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	29,467.4	7,861.6	7,913.2	14,461.5	14,501.9	11,959.7	13,827.7	78.6	11.6	5,353.1	5,499.1	130.7	130.7	73,067.6	71,351.6
New Jersey	8,544.7	8,529.9	2,826.3	2,830.4	46.9	46.9	463.0	609.0	11.6	11.6	239.0	385.0	29.0	29.0	12,160.5	12,441.8
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	12,014.9	1,862.3	1,909.8	4,749.4	4,791.3	9,865.2	11,587.2	67.0	0.0	1,555.3	1,555.3	101.7	101.7	33,940.0	31,960.2
East North Central	21,674.3	20,811.3	26,659.8	26,771.4	5,742.8	5,563.6	53,575.9	55,412.3	247.6	247.6	2,455.4	2,464.6	1,092.9	1,092.9	111,448.7	112,363.7
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	6,058.5	58.4	58.4	635.5	635.5	0.0	0.0	13,060.8	13,565.9
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	3,867.7	3,888.9	8.4	8.4	59,277.1	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	1,106.4	1,113.5	0.0	0.0	17,643.9	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	32,034.9	6,824.2	7,399.1	52,053.2	54,760.3	142.8	142.8	8,932.6	10,622.9	135.0	135.0	161,081.2	161,943.2
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	7,886.2	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	52,553.5
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	2,339.7	2,345.5	0.0	0.0	19,018.1	19,092.5
West Virginia	0.0	0.0	1,093.4	1,089.6	115.5	123.0	12,558.0	12,558.0	0.0	0.0	11.0	11.0	0.0	0.0	13,777.9	13,781.6
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	14,539.2	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	140,206.3	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	9,784.4	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	89,846.7	89,605.4
Mountain	22,510.8	22,510.8	9,149.1	8,625.6	3,615.4	3,832.4	26,765.5	26,765.5	52.0	52.0	349.9	354.3	103.5	103.5	62,546.2	62,244.1
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	4,440.0	4,440.0	0.0	0.0	166.4	168.4	0.0	0.0	11,063.0	11,065.0
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	12,066.7	11,562.5	6,958.4	7,811.6	1,982.0	1,982.0	17.0	17.0	471.4	471.4	221.4	221.4	47,569.7	48,083.8
California	19,834.3	19,999.4	11,213.5	10,709.3	6,702.4	7,555.6	57.0	57.0	17.0	17.0	456.2	456.2	221.4	221.4	38,501.8	39,015.9
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	2,600.5	6.4	6.4	4,224.9	4,220.2
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	733.3	728.6	0.0	0.0	2,166.6	2,161.9
Hawaii	0.0	0.0	0.0	0.0	0.0	0.0	180.0	180.0	0.0	0.0	1,871.9	1,871.9	6.4	6.4	2,058.3	2,058.3
U.S. Total	268,908.8	258,463.4	128,759.7	127,267.4	78,853.4	80,540.8	235,112.7	245,407.8	1,532.2	1,465.2	30,589.0	32,456.9	2,548.9	2,543.9	746,304.7	748,145.4

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

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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	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

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

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	9	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	9	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	9	60571	AEP Onsite Partners	IPP	Lady Slipper Solar Array	MN	62414	PV1	4.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.5
2019	9	60877	Antelope DSR 3 LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	20.0
2019	9	15399	Avangrid Renewables LLC	IPP	Coyote Ridge	SD	61047	WT1	98.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	98.0
2019	9	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	9	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	9	62662	Butter Solar, LLC	IPP	Arcadia Solar	WI	62744	A1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	9	62662	Butter Solar, LLC	IPP	Cashton Solar	WI	62858	CAS3	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	9	62662	Butter Solar, LLC	IPP	Cumberland Solar	WI	62849	CUM4	2.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.5
2019	9	62662	Butter Solar, LLC	IPP	Elroy Solar	WI	62868	ELR5	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	9	62662	Butter Solar, LLC	IPP	Fennimore Solar	WI	62847	FEN6	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	9	62662	Butter Solar, LLC	IPP	Forest City Solar	IA	62861	FOR7	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	9	62662	Butter Solar, LLC	IPP	New Lisbon Solar	WI	62848	NEW9	2.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.5
2019	9	62662	Butter Solar, LLC	IPP	St. Charles Solar	MN	62869	STC10	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7474	0.8	Other Waste Biomass	AB	ST	(TS) Construction complete, but not yet in commercial operation	0.8
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7475	0.8	Other Waste Biomass	AB	ST	(TS) Construction complete, but not yet in commercial operation	0.8
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7476	0.1	Other Waste Biomass	AB	ST	(TS) Construction complete, but not yet in commercial operation	0.1
2019	9	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	9	61610	Delaware River Solar, LLC	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	9	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	9	61610	Delaware River Solar, LLC	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	9	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	9	61610	Delaware River Solar, LLC	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	9	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	9	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	9	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	9	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	9	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	9	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	158.0
2019	9	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	352.8
2019	9	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	9	58959	Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	97.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPBE	2.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPSE	4.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.5
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPBF	2.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPSF	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPBM	2.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPSM	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	9	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
2019	9	60025	Greenbacker Renewable Energy Corporation	IPP	Jamesville Road Solar, LLC	NC	62329	JMVLR	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	9	60025	Greenbacker Renewable Energy Corporation	IPP	Sol Phoenix	MD	62331	SOLPH	2.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.5
2019	9	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	10.0
2019	9	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	11	9.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.8
2019	9	9130	Hutchinson Utilities Comm	Electric Utility	Hutchinson Plant #1	MN	1980	12	9.8	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.8
2019	9	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	9	62666	KDC Solar CSCP LLC	IPP	KDC Solar CSCP LLC	NJ	62746	CSCP	3.4	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.4
2019	9	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	9	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	9	62838	LSE Dorado, LLC	IPP	Goose Pond Solar	MA	62992	GPNOR	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	9	62838	LSE Dorado, LLC	IPP	Goose Pond Solar	MA	62992	GPSOU	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	9	60987	Lanikuhana Solar LLC	IPP	Lanikuhana Solar LLC	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	14.7
2019	9	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	9	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	9	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	9	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARMS	1.6	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.6
2019	9	56990	NJR Clean Energy Ventures Corporation	IPP	Milford Solar Farm (NJ) LLC	NJ	62637	MILFD	7.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	7.5
2019	9	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	9	62706	NY Baldwin I, LLC	IPP	Breesport Road Community Solar Farm	NY	62157	235	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	62630	NY Mooers I, LLC	IPP	Boas Rd #1 Community Solar Farm	NY	62530	496	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	62631	NY Mooers II, LLC	IPP	Boas Rd #2 Community Solar Farm	NY	62531	1010	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	62632	NY Mooers III, LLC	IPP	Boas Rd #3 Community Solar Farm	NY	62532	1011	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	13484	New York Methodist Hospital	IPP	New York Methodist Hospital	NY	52091	CCHEG	1.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.5
2019	9	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	9	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	9	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L1	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	9	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L2	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	9	62644	OEE XXVIII LLC	Industrial	LafargeHolcim - Paulding Wind Project	OH	62752	L3	1.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	9	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	9	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	9	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	9	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	9	61661	Panda Solar NC 8, LLC	IPP	Panda Solar NC 8, LLC	NC	62126	20052	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	9	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	9	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	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPA	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPB	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	9	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPC	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	9	61771	Ranchero Wind Farm LLC	IPP	Ranchero Wind Farm LLC	TX	62259	RAN	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2019	9	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	9	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	9	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	9	61677	Sol Systems	IPP	Wendell Solar Farm LLC	NC	62595	10424	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	9	61916	Spencer-Tioga Solar, LLC	IPP	Pasto Solar	NY	62389	PASTO	16.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	16.0
2019	9	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	9	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	9	61533	Techren Solar II LLC	IPP	Techren Solar II LLC	NV	61930	TECH2	200.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	200.0
2019	9	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	9	61883	USS DVL Solar CSG	IPP	USS DVL Solar CSG	MN	62360	USDVL	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	9	61522	Viridity Energy Solutions, Inc.	IPP	VEC Energy Storage	VT	62907	VEC	1.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.9

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	9	62711	Wabasha Solar LLC	IPP	Wabasha Solar	MN	62800	WAB	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	9	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	45.9
2019	9	62712	Winona Solar I LLC	IPP	Winona Solar	MN	62799	WIN	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	10	61012	AES Distributed Energy	IPP	Palmer	MA	62135	PAL01	3.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.5
2019	10	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	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT5	0.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	0.1
2019	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT6	0.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	0.1
2019	10	60146	Ameresco Federal Solutions	IPP	NASA Wallops Flight Facility Solar	VA	62948	CRPT7	0.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	0.1
2019	10	61973	Black Hills Electric Generation LLC	IPP	Busch Ranch II Wind Farm	CO	62445	WT	59.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	59.4
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	8245	City of Hastings - (NE)	Electric Utility	Hastings Community Solar Farm	NE	62833	PV	0.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
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	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	10	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	10	56769	Consolidated Edison Development Inc.	IPP	CED Northampton Solar LLC	MA	62695	NSMA	4.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.3
2019	10	61060	Cypress Creek Renewables	IPP	Griffin Solar	TX	62953	1080	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	10	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	10	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	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	Gaskill Rd Community Solar Farm	NY	62474	928	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	10	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	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	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	10	62061	GD West Greenwich Victory I, LLC	IPP	GD West Greenwich Victory I, LLC	RI	62568	GDVIC	1.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.8
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	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	10	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	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	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
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	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	16.5
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	(T) Regulatory approvals received. Not under construction	1.0
2019	10	62833	Novel Herickhoff Solar LLC CSG	IPP	Novel Herickhoff Solar CSG	MN	62967	HERIC	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
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	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
2019	10	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
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	62847	Novel Pederson Solar LLC CSG	IPP	Novel Pederson Solar CSG	MN	62983	PED	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	10	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
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	61699	SR Meridian II	IPP	Meridian II	MS	62164	MRDII	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	60531	Standard Solar	IPP	Sugarhill Road - Solitude Solar CSG	NY	62788	X0040	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	10	61884	USS Brude Solar CSG	IPP	USS Brude Solar CSG	MN	62361	USBRU	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	10	61840	USS Rapidan Solar	IPP	USS Rapidan Solar CSG	MN	62338	USRAP	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	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	61541	1634 Solar, LLC	IPP	1634 Solar	SC	61935	3	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	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	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
2019	11	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
2019	11	62063	Blue Summit III Wind, LLC	IPP	Blue Summit III Wind	TX	62566	BS3	200.2	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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, LLC	IPP	CalCity Solar	CA	63054	CALTR	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2019	11	62084	DG Florham Park Solar LLC	IPP	DG Florham Park Solar LLC	NJ	62586	BASF	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Chambers Road Solar	NY	62860	263	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	Hickory Grove #1	NY	62831	25	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Hickory Grove #2	NY	62832	309	1.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	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	11	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	11	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	102.0
2019	11	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	102.0
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
2019	11	58970	Ecoplexus, Inc	IPP	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	11	61857	Five Forks Solar	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
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	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	61401	North 301 Solar	IPP	North 301 Solar	NC	61778	N301	26.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	26.9
2019	11	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
2019	11	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
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	62832	Novel Herber Solar LLC CSG	IPP	Novel Herber Solar CSG	MN	62966	HERB	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	(T) Regulatory approvals received. Not under construction	1.0
2019	11	62830	Novel Reber Solar LLC CSG	IPP	Novel Reber Solar CSG	MN	62962	REBER	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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	(U) Under construction, less than or equal to 50 percent complete	200.0
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	59770	Shorthorn Holdings, LLC	IPP	Shorthorn Holdings	SC	60028	PV1	15.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	15.4
2019	11	2770	Terra-Gen Operating Co-Wind	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	131.1
2019	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	12	61012	AES Distributed Energy	IPP	25 Ashdown Road Solar, LLC	NY	62998	ASHDO	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	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	Finchville Solar, LLC	NY	62999	FINCH	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	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	(U) Under construction, less than or equal to 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	60600	Adams Solar, LLC	IPP	Adams Solar	NC	60949	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(P) Planned for installation, but regulatory approvals not initiated	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	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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	59474	BQ Energy LLC	IPP	Yeoman Creek	IL	61910	YEOM	8.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	8.8
2019	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	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKA2	103.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	103.4
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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	60290	Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.0
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	(T) Regulatory approvals received. Not under construction	6.3
2019	12	60370	DG AMP Solar, LLC	IPP	DG AMP Rittman Rd	OH	62941	AMPRR	2.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.6
2019	12	62800	DG Edison New Jersey LLC	IPP	DG Iron Mountain	NJ	62957	IRNMT	5.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.4
2019	12	62801	DG Linden New Jersey LLC	IPP	DG Infineum	NJ	62958	INFNM	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(U) Under construction, less than or equal to 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	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	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
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	62845	ESA Four Oaks 2 NC LLC	IPP	ESA Four Oaks 2 NC LLC	NC	62996	PGR08	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	Neenach Solar Center	CA	60826	ECA03	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
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	(U) Under construction, less than or equal to 50 percent complete	20.0
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	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	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	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	(U) Under construction, less than or equal to 50 percent complete	449.5
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	59685	JPMorgan Chase Bank	Commercial	South Campus Solar	DE	59922	G1789	1.8	Solar Photovoltaic	SUN	PV	(OT) Other	1.8
2019	12	61960	Lapetus Energy Project LLC	IPP	Lapetus	TX	62448	LAP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	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	(TS) Construction complete, but not yet in commercial operation	2.4
2019	12	62842	Lightsource Renewable Energy Asset Management, LLC	IPP	Grants CDEC 2	NM	62995	NMGR1	4.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	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

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	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	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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	4.4
2019	12	62009	Palmer Solar LLC	IPP	Palmer Solar	CO	62495	20181	60.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	60.0
2019	12	61758	Prevailing Wind Park, LLC	IPP	Prevailing Wind Park	SD	62247	PWPSD	220.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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	(T) Regulatory approvals received. Not under construction	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	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	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
2019	12	62766	Somerville Solar, LLC	IPP	Somerville Solar	TN	62900	PV	2.3	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.3
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	58658	Sunlight Partners	IPP	Brooke Solar	NC	60140	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2019	12	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
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	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	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	62641	Warsaw Solar LLC	IPP	Warsaw Solar CSG	MN	62709	SC	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	12	60599	Washington Solar, LLC	IPP	Washington Solar	NC	60948	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	59316	Whitetail Solar LLC	IPP	Whitetail Solar	SC	59569	PV1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	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	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	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	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	(T) Regulatory approvals received. Not under construction	5.0
2020	1	13478	Entergy New Orleans, LLC	Electric Utility	New Orleans Power	LA	60928	1	250.0	Natural Gas Fired Combustion Turbine	NG	GT	(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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	74.5
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	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	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	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	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	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	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	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	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	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	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

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	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
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	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
2020	3	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	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	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	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	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	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	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	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	(U) Under construction, less than or equal to 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	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	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	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	58658	Sunlight Partners	IPP	Blue Bird Solar	NC	60177	PV1	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2020	3	58658	Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.0
2020	3	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	3	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	3	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	3	58658	Sunlight Partners	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	3	62826	Syncarpha Puddon I, LLC	IPP	Syncarpha Puddon I	MA	62969	SYP1B	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	62826	Syncarpha Puddon I, LLC	IPP	Syncarpha Puddon I	MA	62969	SYP1S	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC1	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC10	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC2	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC3	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC4	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	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	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	3	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	3	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	3	24211	Tucson Electric Power Co	Electric Utility	H Wilson Sundt Generating Station	AZ	126	RIC9	18.2	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	23.5
2020	3	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	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	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	61060	Cypress Creek Renewables	IPP	Willard Solar	NC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	4	61610	Delaware River Solar, LLC	IPP	County Route 11 Community Solar Farm	NY	62507	1419	4.1	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. 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	(L) Regulatory approvals pending. 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	(U) Under construction, less than or equal to 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	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

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	61298	Pine Gate Renewables	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	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	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	62822	Syncarpha Blandford, LLC	IPP	Syncarpha Blandford	MA	62975	SYBLB	3.5	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.5
2020	4	62822	Syncarpha Blandford, LLC	IPP	Syncarpha Blandford	MA	62975	SYBLS	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.9
2020	4	62819	Syncarpha Halifax, LLC	IPP	Syncarpha Halifax	MA	62973	SYHAB	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	4	62819	Syncarpha Halifax, LLC	IPP	Syncarpha Halifax	MA	62973	SYHAS	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2020	4	62814	Syncarpha Leicester, LLC	IPP	Syncarpha Leicester	MA	62972	SYLEB	1.9	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	1.9
2020	4	62814	Syncarpha Leicester, LLC	IPP	Syncarpha Leicester	MA	62972	SYLES	2.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.6
2020	4	62820	Syncarpha Millbury, LLC	IPP	Syncarpha Millbury	MA	62974	SYMIB	3.8	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.8
2020	4	62820	Syncarpha Millbury, LLC	IPP	Syncarpha Millbury	MA	62974	SYMIS	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	4	62821	Syncarpha Northampton, LLC	IPP	Syncarpha Northampton	MA	62976	SYNOB	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	4	62821	Syncarpha Northampton, LLC	IPP	Syncarpha Northampton	MA	62976	SYNOS	3.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.6
2020	4	62824	Syncarpha Northbridge I, LLC	IPP	Syncarpha Northbridge I	MA	62977	SYN1B	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	4	62824	Syncarpha Northbridge I, LLC	IPP	Syncarpha Northbridge I	MA	62977	SYN1S	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	4	62825	Syncarpha Northbridge II, LLC	IPP	Syncarpha Northbridge II	MA	62978	SYN2B	3.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
2020	4	62825	Syncarpha Northbridge II, LLC	IPP	Syncarpha Northbridge II	MA	62978	SYN2S	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	4	62827	Syncarpha Puddon II, LLC	IPP	Syncarpha Puddon II	MA	62970	SYP2B	4.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	4	62827	Syncarpha Puddon II, LLC	IPP	Syncarpha Puddon II	MA	62970	SYP2S	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2020	4	62812	Syncarpha Tewksbury, LLC	IPP	Syncarpha Tewksbury	MA	62968	SYTKB	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.0
2020	4	62812	Syncarpha Tewksbury, LLC	IPP	Syncarpha Tewksbury	MA	62968	SYTKS	2.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.8
2020	4	62813	Syncarpha Westminster, LLC	IPP	Syncarpha Westminster	MA	62971	SYWEB	2.9	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	2.9
2020	4	62813	Syncarpha Westminster, LLC	IPP	Syncarpha Westminster	MA	62971	SYWES	4.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.7
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	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	5	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	5	61610	Delaware River Solar, LLC	IPP	Frey Rd #1 Community Solar Farm	NY	62504	1159	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. 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	(L) Regulatory approvals pending. 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	(L) Regulatory approvals pending. 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	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	(T) Regulatory approvals received. Not under construction	3.2
2020	5	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	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	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	(P) Planned for installation, but regulatory approvals not initiated	5.0
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	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	6	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	6	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	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	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	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	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	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	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	(L) Regulatory approvals pending. Not under construction	1.2
2020	6	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	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	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	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	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	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	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	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
2020	6	61790	McCormick Solar	IPP	McCormick Solar	SC	62279	57	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
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	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	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	6	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	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	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	6	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	6	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	6	58761	White Camp Solar LLC	IPP	White Camp Solar	TX	58888	WCAMP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	6	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	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	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	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
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	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	8	49893	Invenergy Services LLC	IPP	Millican Solar Energy LLC	OR	63050	GEN1	60.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	60.0
2020	8	49893	Invenergy Services LLC	IPP	Prineville Solar Energy LLC	OR	63049	GEN1	40.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	40.0
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	7277	Calpine Corporation	IPP	Buckeye Geothermal Power Plant	CA	57180	1	49.9	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	56.9
2020	9	7277	Calpine Corporation	IPP	Wild Horse Power Plant	CA	57181	1	40.0	Geothermal	GEO	ST	(L) Regulatory approvals pending. Not under construction	48.0
2020	9	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	(T) Regulatory approvals received. Not under construction	130.1
2020	9	62726	Mountain Breeze Wind, LLC	IPP	Mountain Breeze Wind, LLC	CO	62840	MTBRZ	170.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. 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	62743	RoxWind LLC	IPP	RoxWind	ME	62857	WIND1	15.3	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	15.3
2020	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
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	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG3	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	9	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	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG2	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	9	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	(P) Planned for installation, but regulatory approvals not initiated	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	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

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	56615	First Solar Project Development	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	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	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	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	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	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	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	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	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	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	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	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	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	62647	Belcher Solar LLC	IPP	Desper Solar	VA	62730	1	88.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	88.2
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
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	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	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

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	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	Cove Mountain Solar	UT	62469	GEN01	58.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	58.0
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	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	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

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	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 Power, 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	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	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	Stamey Solar	IPP	Stamey 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	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	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	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

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	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	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	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	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	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
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	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	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	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

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	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	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	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	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	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	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	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
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	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	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

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	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	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	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
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

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	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
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	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	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
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
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	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	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	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	1	1.3	Landfill Gas	LFG	IC
2019	9	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	2	1.3	Landfill Gas	LFG	IC
2019	9	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	3	1.3	Landfill Gas	LFG	IC
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
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
2019	10	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	7	480.0	Natural Gas Steam Turbine	NG	ST
2019	10	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG1	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	1752	Biola University	Commercial	Biola University Hybrid	CA	54296	EG2	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	10	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
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	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	10	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	1	189.0	Conventional Steam Coal	BIT	ST
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	2	189.0	Conventional Steam Coal	BIT	ST
2019	11	6526	FirstEnergy Generation Corp	IPP	FirstEnergy Bruce Mansfield	PA	6094	3	830.0	Conventional Steam Coal	RC	ST
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	5517	Dynegy Midwest Generation Inc	IPP	Havana	IL	891	6	411.0	Conventional Steam Coal	RC	ST
2019	12	5517	Dynegy Midwest Generation Inc	IPP	Hennepin Power Station	IL	892	1	68.0	Conventional Steam Coal	RC	ST
2019	12	5517	Dynegy Midwest Generation Inc	IPP	Hennepin Power Station	IL	892	2	218.0	Conventional Steam Coal	RC	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	520	Illinois Power Generating Co	IPP	Coffeen	IL	861	1	330.0	Conventional Steam Coal	RC	ST
2019	12	520	Illinois Power Generating Co	IPP	Coffeen	IL	861	2	565.0	Conventional Steam Coal	RC	ST
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	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

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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
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
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	9	9379	Inter-Power/AhlCon Partners, L.P.	IPP	Colver Power Project	PA	10143	COLV	110.0	Conventional Steam Coal	WC	ST
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	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	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

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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
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
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

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	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
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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2023	12	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
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

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	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
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

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
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

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

	Coal		Natural Gas								Petroleum					
Year/Month			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%

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%

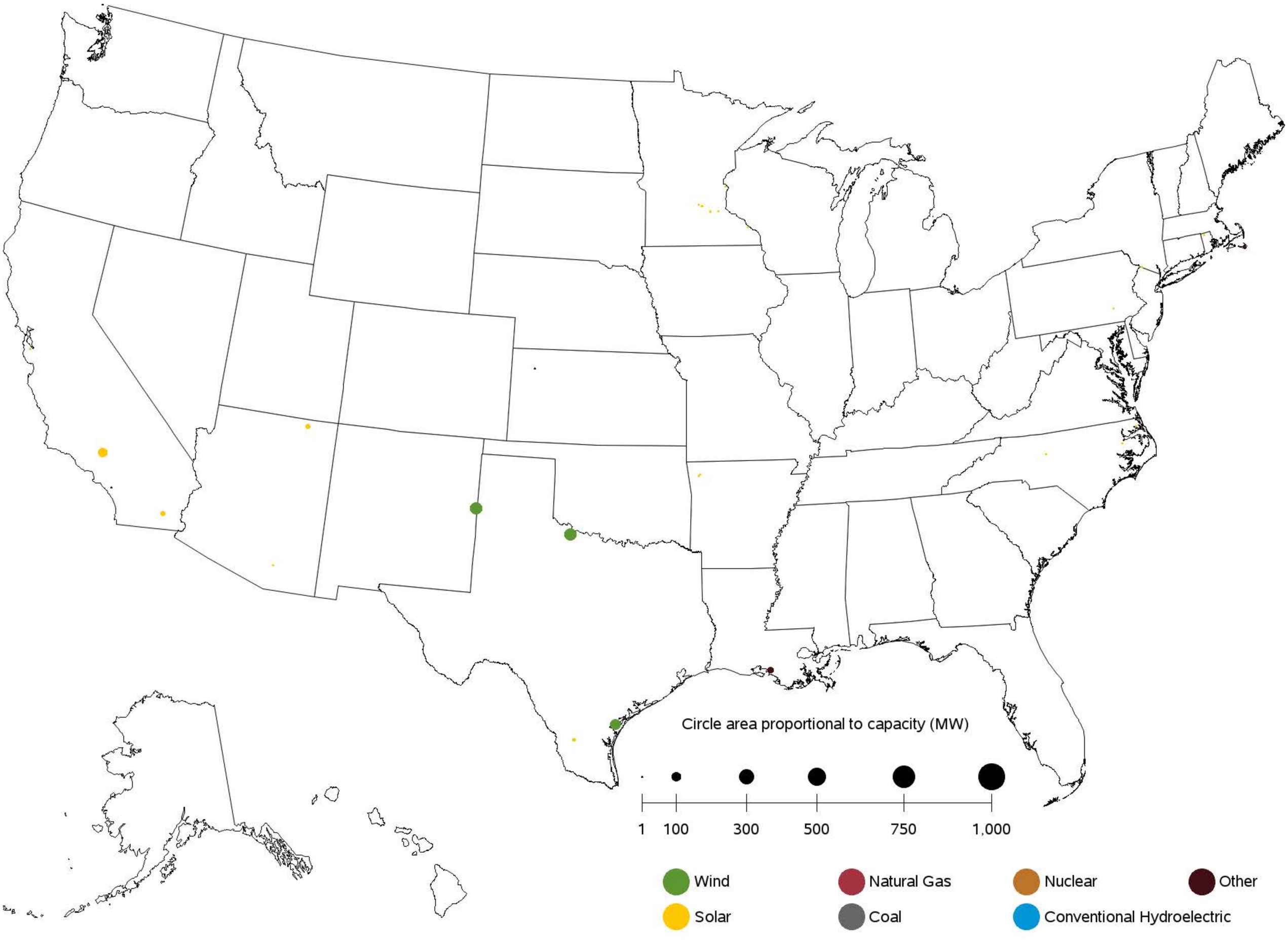
Values for 2018 and prior years are final. Values for 2019 are preliminary.
Time adjusted capacity for month rows is the summer capacity of generators in operation for the entire month; units that began operation during the month or that retired during the month are excluded. Time adjusted capacity for 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%

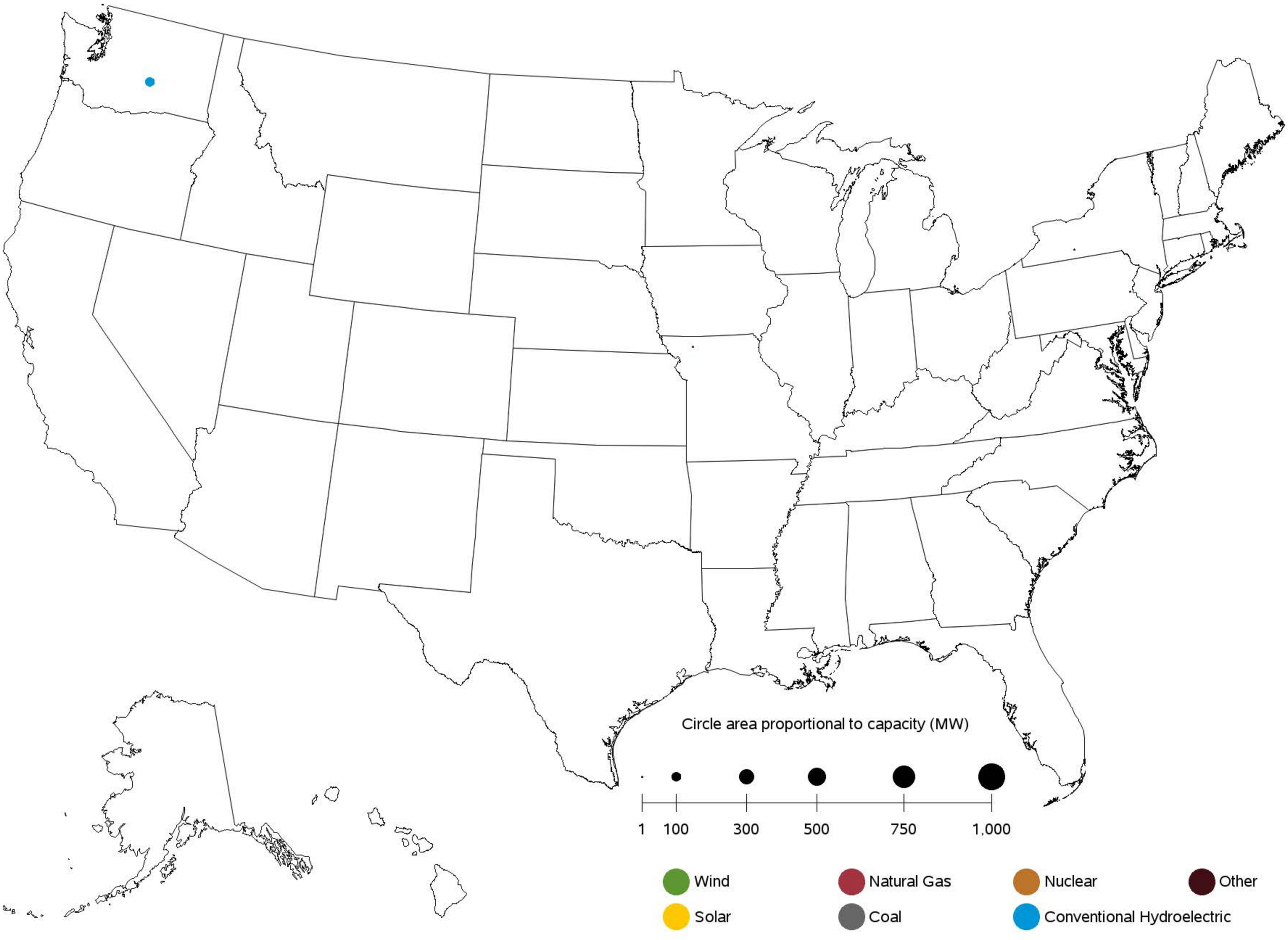
Values for 2018 and prior years are final. Values for 2019 are preliminary.
Time adjusted capacity for month rows is the summer capacity of generators in operation for the entire month; units that began operation during the month or that retired during the month are excluded. Time adjusted capacity for 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 August 2019



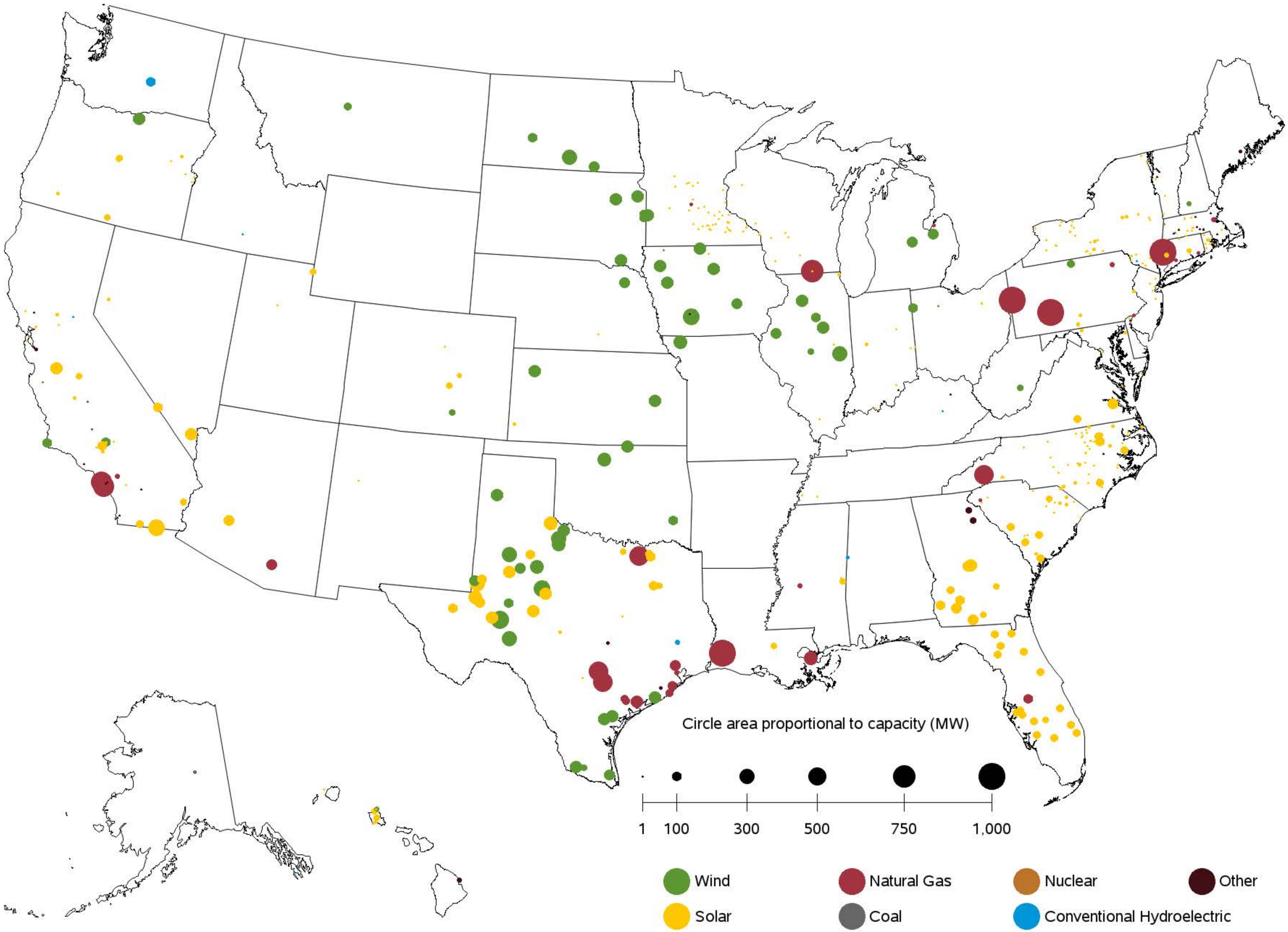
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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



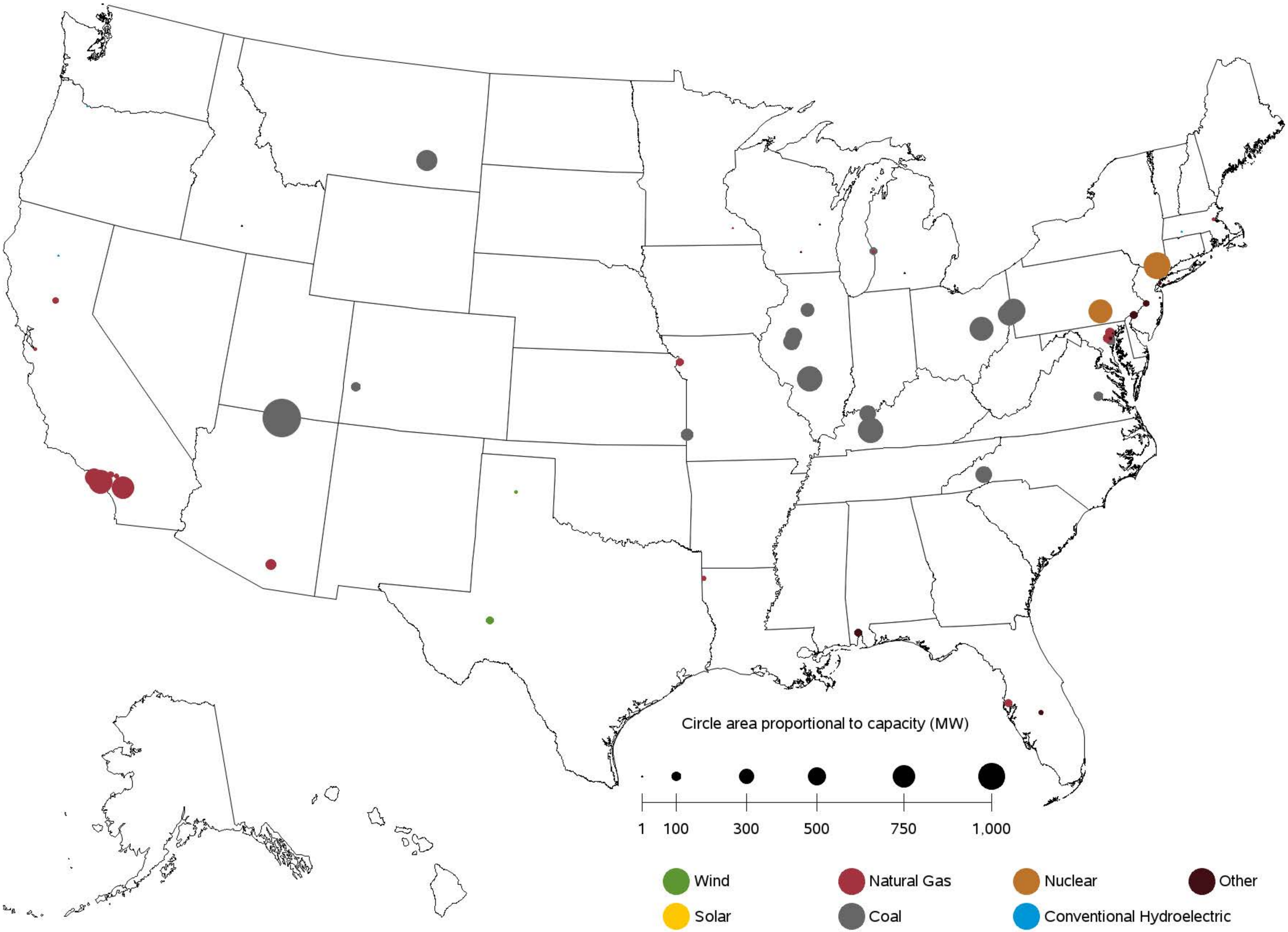
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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

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 - August 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
Year to Date					
2017	4,230	5,347	1,442	0	11,019
2018	3,927	5,398	1,417	0	10,742
2019	4,019	5,143	1,360	0	10,522
Rolling 12 Months Ending in August					
2018	4,742	6,870	1,722	0	13,334
2019	6,195	7,948	2,071	0	16,215

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 - August 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
Year to Date					
2017	947	1,216	270	0	2,433
2018	805	1,253	271	0	2,328
2019	866	1,178	279	0	2,323
Rolling 12 Months Ending in August					
2018	981	1,586	345	0	2,912
2019	1,326	1,819	414	0	3,558

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 - August 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
Rolling 12 Months Ending in August					
2018	1,342,417	126,648	607	0	1,469,672
2019	1,347,383	126,043	597	0	1,474,023

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 - August 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
Year to Date					
2017	22.39	22.75	18.70	--	22.08
2018	20.49	23.21	19.10	--	21.68
2019	21.54	22.91	20.51	--	22.08
Rolling 12 Months Ending in August					
2018	20.68	23.09	20.04	--	21.84
2019	21.41	22.88	19.96	--	21.95

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-August 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

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, August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**5**	**16**	**0**	**2**	**0**	**0**	**17**
Connecticut	0	44	0	2	0	0	43
Maine	21	23	0	13	0	0	19
Massachusetts	0	15	0	3	0	0	30
New Hampshire	0	43	0	0	0	0	49
Rhode Island	0	105	0	7	0	0	0
Vermont	0	150	0	0	0	0	31
Middle Atlantic	**3**	**17**	**30**	**1**	**14**	**0**	**3**
New Jersey	0	70	0	2	0	0	0
New York	0	19	0	2	0	0	2
Pennsylvania	3	23	58	1	20	0	17
East North Central	**1**	**10**	**9**	**1**	**5**	**0**	**22**
Illinois	0	16	0	5	0	0	42
Indiana	1	3	0	2	9	0	138
Michigan	2	8	0	2	0	0	40
Ohio	1	26	16	2	15	0	92
Wisconsin	0	72	0	4	0	0	31
West North Central	**1**	**12**	**0**	**5**	**0**	**0**	**15**
Iowa	0	15	0	6	0	0	50
Kansas	0	7	0	16	0	0	0
Minnesota	4	57	0	8	0	0	45
Missouri	0	27	0	6	0	0	236
Nebraska	4	123	0	21	0	0	42
North Dakota	0	17	0	23	0	0	26
South Dakota	0	42	0	21	0	0	19
South Atlantic	**0**	**4**	**6**	**1**	**0**	**0**	**13**
Delaware	0	58	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	5	0	1	0	0	67
Georgia	1	38	38	3	0	0	18
Maryland	0	15	0	2	0	0	5
North Carolina	0	17	0	2	0	0	14
South Carolina	0	23	0	2	0	0	36
Virginia	0	3	0	2	0	0	38
West Virginia	1	0	0	7	0	0	23
East South Central	**0**	**4**	**0**	**1**	**101**	**0**	**8**
Alabama	1	81	0	2	302	0	12
Kentucky	0	2	0	3	0	0	11
Mississippi	0	2	0	2	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**7**	**0**	**1**	**6**	**0**	**23**
Arkansas	0	0	0	4	0	0	33
Louisiana	0	27	0	2	12	0	26
Oklahoma	0	1	0	2	0	0	37
Texas	0	14	15	1	4	0	110
Mountain	**1**	**7**	**0**	**1**	**9**	**0**	**8**
Arizona	0	4	0	0	0	0	6
Colorado	0	117	0	2	0	0	31
Idaho	74	0	0	10	0	0	16
Montana	4	104	0	25	0	0	15
Nevada	0	0	0	0	0	0	3
New Mexico	0	39	0	2	0	0	139
Utah	0	2	0	2	0	0	53
Wyoming	3	1	0	16	12	0	50
Pacific Contiguous	**0**	**16**	**0**	**1**	**2**	**0**	**2**
California	0	20	0	1	3	0	4
Oregon	0	0	0	3	0	0	8
Washington	0	35	0	4	0	0	2
Pacific Noncontiguous	**12**	**1**	**0**	**16**	**0**	**0**	**37**
Alaska	35	4	0	16	0	0	39
Hawaii	0	1	0	0	0	0	82
U.S. Total	**0**	**1**	**3**	**0**	**4**	**0**	**3**

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

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

Total (All Sectors) by Census Division and State, August 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**	**7**	**4**	**0**	**0**	**1**
Connecticut	0	0	0	26	9	0	0	1
Maine	0	0	0	67	7	0	0	7
Massachusetts	0	0	0	8	5	0	1	3
New Hampshire	0	0	0	0	11	0	0	2
Rhode Island	0	0	0	38	13	0	0	7
Vermont	0	0	0	22	12	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**0**
New Jersey	0	0	0	8	5	0	0	1
New York	0	0	0	13	6	0	1	1
Pennsylvania	0	0	0	29	7	0	0	1
East North Central	**0**	**0**	**0**	**9**	**4**	**0**	**2**	**1**
Illinois	0	0	0	19	6	0	0	1
Indiana	0	0	0	14	8	0	0	1
Michigan	0	0	0	19	7	0	10	1
Ohio	0	0	0	22	6	0	0	1
Wisconsin	0	0	0	40	9	0	25	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**4**	**1**
Iowa	0	0	0	68	5	0	0	2
Kansas	0	0	0	71	2	0	0	2
Minnesota	0	0	0	7	7	0	3	3
Missouri	0	0	0	25	9	0	0	1
Nebraska	0	0	0	43	7	0	0	3
North Dakota	0	0	0	0	7	0	22	2
South Dakota	0	0	0	170	16	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	34	22	0	0	4
District of Columbia	0	0	0	94	20	0	0	11
Florida	0	0	0	1	2	0	0	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	10	10	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	9	4	0	0	1
Virginia	0	0	0	8	4	0	0	1
West Virginia	0	0	0	0	19	0	0	1
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	26	14	0	0	1
Mississippi	0	0	0	3	3	0	0	1
Tennessee	0	0	0	12	6	0	0	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	4	5	0	0	2
Louisiana	0	0	0	183	6	0	0	1
Oklahoma	0	0	0	35	2	0	0	1
Texas	0	0	0	2	1	0	5	1
Mountain	**0**	**11**	**0**	**2**	**2**	**0**	**2**	**1**
Arizona	0	0	0	2	3	0	0	0
Colorado	0	0	0	7	2	0	0	1
Idaho	0	58	0	8	10	0	0	8
Montana	0	0	0	40	16	0	0	5
Nevada	0	12	0	2	5	0	0	1
New Mexico	0	0	0	7	3	0	0	1
Utah	0	27	0	5	5	0	6	1
Wyoming	0	0	0	0	13	0	0	3
Pacific Contiguous	**0**	**5**	**0**	**1**	**1**	**0**	**1**	**1**
California	0	5	0	1	1	0	2	1
Oregon	0	42	0	10	5	0	0	3
Washington	0	0	0	55	7	0	0	1
Pacific Noncontiguous	**0**	**40**	**0**	**11**	**10**	**0**	**0**	**5**
Alaska	0	0	0	0	46	0	0	12
Hawaii	0	40	0	11	10	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.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

Total (All Sectors) by Census Division and State, Year-to-Date through August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**5**	**16**	**0**	**2**	**0**	**0**	**17**
Connecticut	0	44	0	2	0	0	43
Maine	21	23	0	13	0	0	19
Massachusetts	0	15	0	3	0	0	30
New Hampshire	0	43	0	0	0	0	49
Rhode Island	0	105	0	7	0	0	0
Vermont	0	150	0	0	0	0	31
Middle Atlantic	**3**	**17**	**30**	**1**	**14**	**0**	**3**
New Jersey	0	70	0	2	0	0	0
New York	0	19	0	2	0	0	2
Pennsylvania	3	23	58	1	20	0	17
East North Central	**1**	**10**	**9**	**1**	**5**	**0**	**22**
Illinois	0	16	0	5	0	0	42
Indiana	1	3	0	2	9	0	138
Michigan	2	8	0	2	0	0	40
Ohio	1	26	16	2	15	0	92
Wisconsin	0	72	0	4	0	0	31
West North Central	**1**	**12**	**0**	**5**	**0**	**0**	**15**
Iowa	0	15	0	6	0	0	50
Kansas	0	7	0	16	0	0	0
Minnesota	4	57	0	8	0	0	45
Missouri	0	27	0	6	0	0	236
Nebraska	4	123	0	21	0	0	42
North Dakota	0	17	0	23	0	0	26
South Dakota	0	42	0	21	0	0	19
South Atlantic	**0**	**4**	**6**	**1**	**0**	**0**	**13**
Delaware	0	58	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	5	0	1	0	0	67
Georgia	1	38	38	3	0	0	18
Maryland	0	15	0	2	0	0	5
North Carolina	0	17	0	2	0	0	14
South Carolina	0	23	0	2	0	0	36
Virginia	0	3	0	2	0	0	38
West Virginia	1	0	0	7	0	0	23
East South Central	**0**	**4**	**0**	**1**	**101**	**0**	**8**
Alabama	1	81	0	2	302	0	12
Kentucky	0	2	0	3	0	0	11
Mississippi	0	2	0	2	0	0	0
Tennessee	0	1	0	2	0	0	11
West South Central	**0**	**7**	**0**	**1**	**6**	**0**	**23**
Arkansas	0	0	0	4	0	0	33
Louisiana	0	27	0	2	12	0	26
Oklahoma	0	1	0	2	0	0	37
Texas	0	14	15	1	4	0	110
Mountain	**1**	**7**	**0**	**1**	**9**	**0**	**8**
Arizona	0	4	0	0	0	0	6
Colorado	0	117	0	2	0	0	31
Idaho	74	0	0	10	0	0	16
Montana	4	104	0	25	0	0	15
Nevada	0	0	0	0	0	0	3
New Mexico	0	39	0	2	0	0	139
Utah	0	2	0	2	0	0	53
Wyoming	3	1	0	16	12	0	50
Pacific Contiguous	**0**	**16**	**0**	**1**	**2**	**0**	**2**
California	0	20	0	1	3	0	4
Oregon	0	0	0	3	0	0	8
Washington	0	35	0	4	0	0	2
Pacific Noncontiguous	**12**	**1**	**0**	**16**	**0**	**0**	**37**
Alaska	35	4	0	16	0	0	39
Hawaii	0	1	0	0	0	0	82
U.S. Total	**0**	**1**	**3**	**0**	**4**	**0**	**3**

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

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

Total (All Sectors) by Census Division and State, Year-to-Date through August 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**	**7**	**4**	**0**	**0**	**1**
Connecticut	0	0	0	26	9	0	0	1
Maine	0	0	0	67	7	0	0	7
Massachusetts	0	0	0	8	5	0	1	3
New Hampshire	0	0	0	0	11	0	0	2
Rhode Island	0	0	0	38	13	0	0	7
Vermont	0	0	0	22	12	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**0**
New Jersey	0	0	0	8	5	0	0	1
New York	0	0	0	13	6	0	1	1
Pennsylvania	0	0	0	29	7	0	0	1
East North Central	**0**	**0**	**0**	**9**	**4**	**0**	**2**	**1**
Illinois	0	0	0	19	6	0	0	1
Indiana	0	0	0	14	8	0	0	1
Michigan	0	0	0	19	7	0	10	1
Ohio	0	0	0	22	6	0	0	1
Wisconsin	0	0	0	40	9	0	25	2
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**4**	**1**
Iowa	0	0	0	68	5	0	0	2
Kansas	0	0	0	71	2	0	0	2
Minnesota	0	0	0	7	7	0	3	3
Missouri	0	0	0	25	9	0	0	1
Nebraska	0	0	0	43	7	0	0	3
North Dakota	0	0	0	0	7	0	22	2
South Dakota	0	0	0	170	16	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	34	22	0	0	4
District of Columbia	0	0	0	94	20	0	0	11
Florida	0	0	0	1	2	0	0	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	10	10	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	9	4	0	0	1
Virginia	0	0	0	8	4	0	0	1
West Virginia	0	0	0	0	19	0	0	1
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**0**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	26	14	0	0	1
Mississippi	0	0	0	3	3	0	0	1
Tennessee	0	0	0	12	6	0	0	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**2**	**1**
Arkansas	0	0	0	4	5	0	0	2
Louisiana	0	0	0	183	6	0	0	1
Oklahoma	0	0	0	35	2	0	0	1
Texas	0	0	0	2	1	0	5	1
Mountain	**0**	**11**	**0**	**2**	**2**	**0**	**2**	**1**
Arizona	0	0	0	2	3	0	0	0
Colorado	0	0	0	7	2	0	0	1
Idaho	0	58	0	8	10	0	0	8
Montana	0	0	0	40	16	0	0	5
Nevada	0	12	0	2	5	0	0	1
New Mexico	0	0	0	7	3	0	0	1
Utah	0	27	0	5	5	0	6	1
Wyoming	0	0	0	0	13	0	0	3
Pacific Contiguous	**0**	**5**	**0**	**1**	**1**	**0**	**1**	**1**
California	0	5	0	1	1	0	2	1
Oregon	0	42	0	10	5	0	0	3
Washington	0	0	0	55	7	0	0	1
Pacific Noncontiguous	**0**	**40**	**0**	**11**	**10**	**0**	**0**	**5**
Alaska	0	0	0	0	46	0	0	12
Hawaii	0	40	0	11	10	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, August 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**0**	**.**	**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	3	22	.	2
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	1	.	0
New York	0	0	1	.	0
Pennsylvania	0	1	0	.	0
East North Central	**3**	**1**	**9**	**.**	**2**
Illinois	5	3	0	.	3
Indiana	10	1	0	.	3
Michigan	5	7	115	.	5
Ohio	7	1	9	.	3
Wisconsin	13	5	18	.	7
West North Central	**1**	**0**	**2**	**.**	**0**
Iowa	2	1	11	.	1
Kansas	4	2	0	.	2
Minnesota	2	2	2	.	1
Missouri	1	0	2	.	0
Nebraska	5	12	11	.	4
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	4	1	10	.	2
District of Columbia	0	0	0	.	0
Florida	3	3	1	.	2
Georgia	108	18	0	.	58
Maryland	1	1	1	.	1
North Carolina	5	1	0	.	3
South Carolina	3	2	0	.	2
Virginia	6	3	3	.	4
West Virginia	0	0	0	.	0
East South Central	**4**	**6**	**0**	**.**	**3**
Alabama	0	0	0	.	0
Kentucky	5	7	0	.	4
Mississippi	8	16	0	.	8
Tennessee	0	0	0	.	0
West South Central	**2**	**1**	**0**	**.**	**1**
Arkansas	10	5	0	.	7
Louisiana	2	1	0	.	2
Oklahoma	13	3	0	.	9
Texas	2	1	2	.	2
Mountain	**0**	**0**	**1**	**.**	**0**
Arizona	0	0	0	.	0
Colorado	1	0	15	.	1
Idaho	1	1	0	.	1
Montana	6	2	0	.	4
Nevada	0	0	0	.	0
New Mexico	2	1	26	.	1
Utah	1	1	0	.	1
Wyoming	10	7	0	.	8
Pacific Contiguous	**0**	**0**	**0**	**.**	**0**
California	0	0	0	.	0
Oregon	1	1	3	.	1
Washington	1	2	14	.	1
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	2	3	0	.	1
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, August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**62**	**0**	**51**	**0**	**0**	**32**
Connecticut	0	45	0	0	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	110	0	56	0	0	64
New Hampshire	0	73	0	0	0	0	48
Rhode Island	0	0	0	0	0	0	0
Vermont	0	162	0	0	0	0	59
Middle Atlantic	**0**	**36**	**0**	**3**	**0**	**0**	**1**
New Jersey	0	0	0	58	0	0	0
New York	0	36	0	3	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**3**	**0**	**0**	**24**
Illinois	0	52	0	14	0	0	52
Indiana	1	3	0	5	0	0	138
Michigan	2	8	0	5	0	0	42
Ohio	10	40	0	6	0	0	92
Wisconsin	0	73	0	5	0	0	33
West North Central	**1**	**12**	**0**	**6**	**0**	**0**	**15**
Iowa	0	16	0	7	0	0	50
Kansas	0	7	0	16	0	0	0
Minnesota	4	61	0	8	0	0	58
Missouri	0	27	0	10	0	0	236
Nebraska	4	123	0	21	0	0	42
North Dakota	0	17	0	23	0	0	26
South Dakota	0	42	0	21	0	0	19
South Atlantic	**0**	**3**	**0**	**1**	**0**	**0**	**14**
Delaware	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	67
Georgia	0	27	0	3	0	0	18
Maryland	0	40	0	0	0	0	0
North Carolina	0	16	0	2	0	0	14
South Carolina	0	24	0	2	0	0	34
Virginia	0	3	0	2	0	0	35
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	12
Kentucky	0	2	0	3	0	0	10
Mississippi	0	2	0	2	0	0	0
Tennessee	0	1	0	3	0	0	11
West South Central	**0**	**7**	**0**	**2**	**0**	**0**	**32**
Arkansas	0	0	0	5	0	0	34
Louisiana	0	27	0	3	0	0	0
Oklahoma	0	1	0	3	0	0	37
Texas	0	14	0	3	0	0	132
Mountain	**1**	**8**	**0**	**1**	**0**	**0**	**7**
Arizona	0	4	0	1	0	0	6
Colorado	0	117	0	1	0	0	34
Idaho	0	0	0	11	0	0	16
Montana	0	660	0	32	0	0	15
Nevada	0	0	0	0	0	0	0
New Mexico	0	39	0	3	0	0	139
Utah	0	3	0	2	0	0	53
Wyoming	3	1	0	25	0	0	52
Pacific Contiguous	**0**	**19**	**0**	**2**	**0**	**0**	**2**
California	0	22	0	1	0	0	4
Oregon	0	0	0	6	0	0	7
Washington	0	367	0	5	0	0	2
Pacific Noncontiguous	**54**	**1**	**0**	**16**	**0**	**0**	**41**
Alaska	54	4	0	16	0	0	42
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**0**	**0**	**3**

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

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

Electric Utilities by Census Division and State, August 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**	**27**	**9**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	5
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	35	37	0	0	34
New Hampshire	0	0	0	0	0	0	0	19
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	38	14	0	0	20
Middle Atlantic	**0**	**0**	**0**	**26**	**26**	**0**	**0**	**1**
New Jersey	0	0	0	26	26	0	0	19
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**	**14**	**10**	**0**	**17**	**1**
Illinois	0	0	0	50	21	0	0	6
Indiana	0	0	0	22	11	0	0	1
Michigan	0	0	0	14	15	0	0	2
Ohio	0	0	0	81	119	0	0	5
Wisconsin	0	0	0	0	17	0	18	2
West North Central	**0**	**0**	**0**	**53**	**5**	**0**	**6**	**1**
Iowa	0	0	0	83	5	0	0	2
Kansas	0	0	0	170	7	0	0	3
Minnesota	0	0	0	134	14	0	0	3
Missouri	0	0	0	0	34	0	0	1
Nebraska	0	0	0	162	38	0	0	4
North Dakota	0	0	0	0	12	0	22	2
South Dakota	0	0	0	0	29	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**
Delaware	0	0	0	92	92	0	0	9
Florida	0	0	0	1	1	0	0	0
Georgia	0	0	0	10	10	0	0	1
Maryland	0	0	0	80	80	0	0	0
North Carolina	0	0	0	11	11	0	0	1
South Carolina	0	0	0	150	6	0	0	1
Virginia	0	0	0	20	10	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**24**	**16**	**0**	**0**	**1**
Alabama	0	0	0	42	42	0	0	1
Kentucky	0	0	0	26	17	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	194	194	0	0	1
West South Central	**0**	**0**	**0**	**32**	**8**	**0**	**0**	**1**
Arkansas	0	0	0	185	185	0	0	2
Louisiana	0	0	0	183	183	0	0	2
Oklahoma	0	0	0	35	8	0	0	2
Texas	0	0	0	82	27	0	0	2
Mountain	**0**	**37**	**0**	**7**	**6**	**0**	**13**	**1**
Arizona	0	0	0	8	8	0	0	0
Colorado	0	0	0	101	3	0	0	1
Idaho	0	0	0	0	58	0	0	11
Montana	0	0	0	0	55	0	0	13
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	15	15	0	0	1
Utah	0	37	0	0	37	0	21	1
Wyoming	0	0	0	0	19	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**1**
California	0	0	0	10	4	0	0	2
Oregon	0	0	0	93	5	0	0	4
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**7**
Alaska	0	0	0	0	80	0	0	13
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**8**	**0**	**2**	**3**	**0**	**3**	**0**

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

Electric Utilities by Census Division and State, Year-to-Date through August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**62**	**0**	**51**	**0**	**0**	**32**
Connecticut	0	45	0	0	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	110	0	56	0	0	64
New Hampshire	0	73	0	0	0	0	48
Rhode Island	0	0	0	0	0	0	0
Vermont	0	162	0	0	0	0	59
Middle Atlantic	**0**	**36**	**0**	**3**	**0**	**0**	**1**
New Jersey	0	0	0	58	0	0	0
New York	0	36	0	3	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**3**	**0**	**0**	**24**
Illinois	0	52	0	14	0	0	52
Indiana	1	3	0	5	0	0	138
Michigan	2	8	0	5	0	0	42
Ohio	10	40	0	6	0	0	92
Wisconsin	0	73	0	5	0	0	33
West North Central	**1**	**12**	**0**	**6**	**0**	**0**	**15**
Iowa	0	16	0	7	0	0	50
Kansas	0	7	0	16	0	0	0
Minnesota	4	61	0	8	0	0	58
Missouri	0	27	0	10	0	0	236
Nebraska	4	123	0	21	0	0	42
North Dakota	0	17	0	23	0	0	26
South Dakota	0	42	0	21	0	0	19
South Atlantic	**0**	**3**	**0**	**1**	**0**	**0**	**14**
Delaware	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	67
Georgia	0	27	0	3	0	0	18
Maryland	0	40	0	0	0	0	0
North Carolina	0	16	0	2	0	0	14
South Carolina	0	24	0	2	0	0	34
Virginia	0	3	0	2	0	0	35
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	12
Kentucky	0	2	0	3	0	0	10
Mississippi	0	2	0	2	0	0	0
Tennessee	0	1	0	3	0	0	11
West South Central	**0**	**7**	**0**	**2**	**0**	**0**	**32**
Arkansas	0	0	0	5	0	0	34
Louisiana	0	27	0	3	0	0	0
Oklahoma	0	1	0	3	0	0	37
Texas	0	14	0	3	0	0	132
Mountain	**1**	**8**	**0**	**1**	**0**	**0**	**7**
Arizona	0	4	0	1	0	0	6
Colorado	0	117	0	1	0	0	34
Idaho	0	0	0	11	0	0	16
Montana	0	660	0	32	0	0	15
Nevada	0	0	0	0	0	0	0
New Mexico	0	39	0	3	0	0	139
Utah	0	3	0	2	0	0	53
Wyoming	3	1	0	25	0	0	52
Pacific Contiguous	**0**	**19**	**0**	**2**	**0**	**0**	**2**
California	0	22	0	1	0	0	4
Oregon	0	0	0	6	0	0	7
Washington	0	367	0	5	0	0	2
Pacific Noncontiguous	**54**	**1**	**0**	**16**	**0**	**0**	**41**
Alaska	54	4	0	16	0	0	42
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**0**	**0**	**3**

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

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

Electric Utilities by Census Division and State, Year-to-Date through August 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**	**27**	**9**	**0**	**0**	**14**
Connecticut	0	0	0	0	0	0	0	5
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	35	37	0	0	34
New Hampshire	0	0	0	0	0	0	0	19
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	38	14	0	0	20
Middle Atlantic	**0**	**0**	**0**	**26**	**26**	**0**	**0**	**1**
New Jersey	0	0	0	26	26	0	0	19
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**	**14**	**10**	**0**	**17**	**1**
Illinois	0	0	0	50	21	0	0	6
Indiana	0	0	0	22	11	0	0	1
Michigan	0	0	0	14	15	0	0	2
Ohio	0	0	0	81	119	0	0	5
Wisconsin	0	0	0	0	17	0	18	2
West North Central	**0**	**0**	**0**	**53**	**5**	**0**	**6**	**1**
Iowa	0	0	0	83	5	0	0	2
Kansas	0	0	0	170	7	0	0	3
Minnesota	0	0	0	134	14	0	0	3
Missouri	0	0	0	0	34	0	0	1
Nebraska	0	0	0	162	38	0	0	4
North Dakota	0	0	0	0	12	0	22	2
South Dakota	0	0	0	0	29	0	0	10
South Atlantic	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**
Delaware	0	0	0	92	92	0	0	9
Florida	0	0	0	1	1	0	0	0
Georgia	0	0	0	10	10	0	0	1
Maryland	0	0	0	80	80	0	0	0
North Carolina	0	0	0	11	11	0	0	1
South Carolina	0	0	0	150	6	0	0	1
Virginia	0	0	0	20	10	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**24**	**16**	**0**	**0**	**1**
Alabama	0	0	0	42	42	0	0	1
Kentucky	0	0	0	26	17	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	194	194	0	0	1
West South Central	**0**	**0**	**0**	**32**	**8**	**0**	**0**	**1**
Arkansas	0	0	0	185	185	0	0	2
Louisiana	0	0	0	183	183	0	0	2
Oklahoma	0	0	0	35	8	0	0	2
Texas	0	0	0	82	27	0	0	2
Mountain	**0**	**37**	**0**	**7**	**6**	**0**	**13**	**1**
Arizona	0	0	0	8	8	0	0	0
Colorado	0	0	0	101	3	0	0	1
Idaho	0	0	0	0	58	0	0	11
Montana	0	0	0	0	55	0	0	13
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	15	15	0	0	1
Utah	0	37	0	0	37	0	21	1
Wyoming	0	0	0	0	19	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**1**
California	0	0	0	10	4	0	0	2
Oregon	0	0	0	93	5	0	0	4
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**34**	**0**	**0**	**7**
Alaska	0	0	0	0	80	0	0	13
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**8**	**0**	**2**	**3**	**0**	**3**	**0**

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

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

Independent Power Producers by Census Division and State, August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**24**	**0**	**2**	**0**	**0**	**18**
Connecticut	0	47	0	2	0	0	44
Maine	0	15	0	17	0	0	19
Massachusetts	0	26	0	3	0	0	34
New Hampshire	0	702	0	0	0	0	81
Rhode Island	0	105	0	7	0	0	0
Vermont	0	0	0	0	0	0	35
Middle Atlantic	**3**	**18**	**0**	**1**	**0**	**0**	**16**
New Jersey	0	71	0	2	0	0	0
New York	0	22	0	2	0	0	18
Pennsylvania	3	25	0	1	0	0	17
East North Central	**0**	**21**	**16**	**1**	**5**	**0**	**68**
Illinois	0	16	0	6	0	0	63
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	137
Ohio	0	28	16	2	19	0	0
Wisconsin	0	0	0	0	0	0	133
West North Central	**0**	**102**	**0**	**7**	**0**	**0**	**91**
Iowa	0	40	0	171	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	250	0	18	0	0	101
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**14**	**0**	**2**	**0**	**0**	**16**
Delaware	0	58	0	5	0	0	0
Florida	0	47	0	6	0	0	0
Georgia	0	166	0	7	0	0	329
Maryland	0	15	0	3	0	0	5
North Carolina	0	105	0	6	0	0	133
South Carolina	0	0	0	14	0	0	135
Virginia	0	8	0	2	0	0	123
West Virginia	5	0	0	10	0	0	47
East South Central	**0**	**65**	**0**	**0**	**0**	**0**	**299**
Alabama	0	88	0	0	0	0	0
Kentucky	0	0	0	0	0	0	299
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**78**	**0**	**1**	**0**	**0**	**25**
Arkansas	0	0	0	0	0	0	71
Louisiana	0	0	0	6	0	0	26
Oklahoma	0	0	0	0	0	0	0
Texas	0	78	0	1	0	0	0
Mountain	**4**	**10**	**0**	**2**	**0**	**0**	**41**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	8	0	0	83
Idaho	0	0	0	20	0	0	55
Montana	4	28	0	8	0	0	136
Nevada	0	0	0	0	0	0	101
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**	**13**	**0**	**1**	**0**	**0**	**23**
California	0	0	0	1	0	0	24
Oregon	0	0	0	1	0	0	103
Washington	0	20	0	5	0	0	77
Pacific Noncontiguous	**3**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	24	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**11**	**0**	**3**	**0**	**11**

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

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

Independent Power Producers by Census Division and State, August 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**	**7**	**5**	**0**	**0**	**1**
Connecticut	0	0	0	27	9	0	0	1
Maine	0	0	0	67	10	0	0	8
Massachusetts	0	0	0	8	5	0	1	3
New Hampshire	0	0	0	0	14	0	0	2
Rhode Island	0	0	0	38	13	0	0	7
Vermont	0	0	0	27	19	0	0	21
Middle Atlantic	**0**	**0**	**0**	**7**	**5**	**0**	**0**	**0**
New Jersey	0	0	0	9	6	0	0	1
New York	0	0	0	13	6	0	0	1
Pennsylvania	0	0	0	32	8	0	0	1
East North Central	**0**	**0**	**0**	**12**	**4**	**0**	**14**	**0**
Illinois	0	0	0	20	6	0	0	1
Indiana	0	0	0	17	9	0	0	1
Michigan	0	0	0	40	8	0	17	1
Ohio	0	0	0	23	7	0	0	1
Wisconsin	0	0	0	43	13	0	0	1
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**3**
Iowa	0	0	0	104	10	0	0	5
Kansas	0	0	0	76	2	0	0	2
Minnesota	0	0	0	7	7	0	0	7
Missouri	0	0	0	26	10	0	0	3
Nebraska	0	0	0	40	7	0	0	7
North Dakota	0	0	0	0	7	0	0	7
South Dakota	0	0	0	170	19	0	0	19
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Delaware	0	0	0	36	25	0	0	4
District of Columbia	0	0	0	94	94	0	0	94
Florida	0	0	0	8	3	0	1	5
Georgia	0	0	0	5	4	0	0	6
Maryland	0	0	0	10	10	0	0	1
North Carolina	0	0	0	3	2	0	0	3
South Carolina	0	0	0	9	9	0	0	8
Virginia	0	0	0	8	5	0	0	2
West Virginia	0	0	0	0	19	0	0	4
East South Central	**0**	**0**	**0**	**6**	**6**	**0**	**0**	**0**
Alabama	0	0	0	10	10	0	0	0
Kentucky	0	0	0	179	46	0	0	11
Mississippi	0	0	0	3	3	0	0	0
Tennessee	0	0	0	12	13	0	0	12
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	4	6	0	0	1
Louisiana	0	0	0	0	22	0	0	6
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	2	1	0	0	1
Mountain	**0**	**13**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	3
Idaho	0	58	0	8	12	0	0	12
Montana	0	0	0	40	17	0	0	4
Nevada	0	13	0	2	5	0	0	4
New Mexico	0	0	0	7	3	0	0	2
Utah	0	37	0	5	5	0	0	4
Wyoming	0	0	0	0	17	0	0	11
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	5	0	1	2	0	0	1
Oregon	0	42	0	10	7	0	0	3
Washington	0	0	0	56	13	0	0	3
Pacific Noncontiguous	**0**	**40**	**0**	**12**	**13**	**0**	**0**	**3**
Alaska	0	0	0	0	109	0	0	26
Hawaii	0	40	0	12	13	0	0	3
U.S. Total	**0**	**6**	**0**	**1**	**1**	**0**	**0**	**0**

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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 August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**24**	**0**	**2**	**0**	**0**	**18**
Connecticut	0	47	0	2	0	0	44
Maine	0	15	0	17	0	0	19
Massachusetts	0	26	0	3	0	0	34
New Hampshire	0	702	0	0	0	0	81
Rhode Island	0	105	0	7	0	0	0
Vermont	0	0	0	0	0	0	35
Middle Atlantic	**3**	**18**	**0**	**1**	**0**	**0**	**16**
New Jersey	0	71	0	2	0	0	0
New York	0	22	0	2	0	0	18
Pennsylvania	3	25	0	1	0	0	17
East North Central	**0**	**21**	**16**	**1**	**5**	**0**	**68**
Illinois	0	16	0	6	0	0	63
Indiana	0	0	0	0	0	0	0
Michigan	0	0	0	1	0	0	137
Ohio	0	28	16	2	19	0	0
Wisconsin	0	0	0	0	0	0	133
West North Central	**0**	**102**	**0**	**7**	**0**	**0**	**91**
Iowa	0	40	0	171	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	250	0	18	0	0	101
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**3**	**14**	**0**	**2**	**0**	**0**	**16**
Delaware	0	58	0	5	0	0	0
Florida	0	47	0	6	0	0	0
Georgia	0	166	0	7	0	0	329
Maryland	0	15	0	3	0	0	5
North Carolina	0	105	0	6	0	0	133
South Carolina	0	0	0	14	0	0	135
Virginia	0	8	0	2	0	0	123
West Virginia	5	0	0	10	0	0	47
East South Central	**0**	**65**	**0**	**0**	**0**	**0**	**299**
Alabama	0	88	0	0	0	0	0
Kentucky	0	0	0	0	0	0	299
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**78**	**0**	**1**	**0**	**0**	**25**
Arkansas	0	0	0	0	0	0	71
Louisiana	0	0	0	6	0	0	26
Oklahoma	0	0	0	0	0	0	0
Texas	0	78	0	1	0	0	0
Mountain	**4**	**10**	**0**	**2**	**0**	**0**	**41**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	8	0	0	83
Idaho	0	0	0	20	0	0	55
Montana	4	28	0	8	0	0	136
Nevada	0	0	0	0	0	0	101
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**	**13**	**0**	**1**	**0**	**0**	**23**
California	0	0	0	1	0	0	24
Oregon	0	0	0	1	0	0	103
Washington	0	20	0	5	0	0	77
Pacific Noncontiguous	**3**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	24	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**11**	**0**	**3**	**0**	**11**

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

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

Independent Power Producers by Census Division and State, Year-to-Date through August 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**	**7**	**5**	**0**	**0**	**1**
Connecticut	0	0	0	27	9	0	0	1
Maine	0	0	0	67	10	0	0	8
Massachusetts	0	0	0	8	5	0	1	3
New Hampshire	0	0	0	0	14	0	0	2
Rhode Island	0	0	0	38	13	0	0	7
Vermont	0	0	0	27	19	0	0	21
Middle Atlantic	**0**	**0**	**0**	**7**	**5**	**0**	**0**	**0**
New Jersey	0	0	0	9	6	0	0	1
New York	0	0	0	13	6	0	0	1
Pennsylvania	0	0	0	32	8	0	0	1
East North Central	**0**	**0**	**0**	**12**	**4**	**0**	**14**	**0**
Illinois	0	0	0	20	6	0	0	1
Indiana	0	0	0	17	9	0	0	1
Michigan	0	0	0	40	8	0	17	1
Ohio	0	0	0	23	7	0	0	1
Wisconsin	0	0	0	43	13	0	0	1
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**3**
Iowa	0	0	0	104	10	0	0	5
Kansas	0	0	0	76	2	0	0	2
Minnesota	0	0	0	7	7	0	0	7
Missouri	0	0	0	26	10	0	0	3
Nebraska	0	0	0	40	7	0	0	7
North Dakota	0	0	0	0	7	0	0	7
South Dakota	0	0	0	170	19	0	0	19
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Delaware	0	0	0	36	25	0	0	4
District of Columbia	0	0	0	94	94	0	0	94
Florida	0	0	0	8	3	0	1	5
Georgia	0	0	0	5	4	0	0	6
Maryland	0	0	0	10	10	0	0	1
North Carolina	0	0	0	3	2	0	0	3
South Carolina	0	0	0	9	9	0	0	8
Virginia	0	0	0	8	5	0	0	2
West Virginia	0	0	0	0	19	0	0	4
East South Central	**0**	**0**	**0**	**6**	**6**	**0**	**0**	**0**
Alabama	0	0	0	10	10	0	0	0
Kentucky	0	0	0	179	46	0	0	11
Mississippi	0	0	0	3	3	0	0	0
Tennessee	0	0	0	12	13	0	0	12
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	4	6	0	0	1
Louisiana	0	0	0	0	22	0	0	6
Oklahoma	0	0	0	0	2	0	0	1
Texas	0	0	0	2	1	0	0	1
Mountain	**0**	**13**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	3
Idaho	0	58	0	8	12	0	0	12
Montana	0	0	0	40	17	0	0	4
Nevada	0	13	0	2	5	0	0	4
New Mexico	0	0	0	7	3	0	0	2
Utah	0	37	0	5	5	0	0	4
Wyoming	0	0	0	0	17	0	0	11
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	5	0	1	2	0	0	1
Oregon	0	42	0	10	7	0	0	3
Washington	0	0	0	56	13	0	0	3
Pacific Noncontiguous	**0**	**40**	**0**	**12**	**13**	**0**	**0**	**3**
Alaska	0	0	0	0	109	0	0	26
Hawaii	0	40	0	12	13	0	0	3
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, August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**8**	**0**	**10**	**0**	**0**	**0**
Connecticut	0	664	0	15	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	9	0	15	0	0	0
New Hampshire	0	4	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**	**94**	**0**	**10**	**0**	**0**	**0**
New Jersey	0	0	0	24	0	0	0
New York	0	102	0	13	0	0	0
Pennsylvania	0	28	0	0	0	0	0
East North Central	**8**	**41**	**0**	**6**	**0**	**0**	**0**
Illinois	25	267	0	16	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	307	0	8	0	0	0
Ohio	0	0	0	3	0	0	0
Wisconsin	0	418	0	13	0	0	0
West North Central	**0**	**46**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	1	0	0	0
Minnesota	0	51	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	708	0	0	0	0	0
South Atlantic	**0**	**6**	**0**	**4**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	33	0	0	0	0	0
Maryland	0	0	0	3	0	0	0
North Carolina	0	280	0	53	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**	**19**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	19	0	0	0
West South Central	**0**	**0**	**0**	**12**	**0**	**0**	**0**
Arkansas	0	0	0	87	0	0	0
Louisiana	0	0	0	20	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	14	0	0	0
Mountain	**0**	**553**	**0**	**9**	**0**	**0**	**0**
Arizona	0	553	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	37	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**14**	**0**	**3**	**0**	**0**	**392**
California	0	17	0	3	0	0	392
Oregon	0	0	0	23	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**36**	**5**	**0**	**0**	**0**	**0**	**117**
Alaska	36	45	0	0	0	0	117
Hawaii	0	0	0	0	0	0	0
U.S. Total	**12**	**8**	**0**	**3**	**0**	**0**	**85**

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, August 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**	**96**	**8**	**0**	**0**	**8**
Connecticut	0	0	0	230	230	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	103	30	0	0	13
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**20**	**5**	**0**	**3**	**6**
New Jersey	0	0	0	21	10	0	0	7
New York	0	0	0	76	7	0	6	9
Pennsylvania	0	0	0	96	6	0	0	2
East North Central	**0**	**0**	**0**	**67**	**20**	**0**	**0**	**5**
Illinois	0	0	0	124	174	0	0	15
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	159	8	0	0	7
Ohio	0	0	0	138	35	0	0	3
Wisconsin	0	0	0	114	46	0	0	18
West North Central	**0**	**0**	**0**	**0**	**18**	**0**	**34**	**5**
Iowa	0	0	0	0	20	0	0	4
Kansas	0	0	0	0	120	0	0	120
Minnesota	0	0	0	0	37	0	34	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	489	0	0	489
South Dakota	0	0	0	0	0	0	0	708
South Atlantic	**0**	**0**	**0**	**21**	**8**	**0**	**0**	**3**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	87	31	0	0	22
Georgia	0	0	0	144	144	0	0	48
Maryland	0	0	0	73	35	0	0	3
North Carolina	0	0	0	22	21	0	0	22
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	215	5	0	0	2
East South Central	**0**	**0**	**0**	**108**	**108**	**0**	**0**	**18**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	108	108	0	0	18
West South Central	**0**	**0**	**0**	**33**	**19**	**0**	**0**	**12**
Arkansas	0	0	0	0	0	0	0	47
Louisiana	0	0	0	0	0	0	0	20
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	144	29	0	0	13
Mountain	**0**	**0**	**0**	**25**	**5**	**0**	**0**	**5**
Arizona	0	0	0	66	66	0	0	7
Colorado	0	0	0	66	66	0	0	29
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	29	4	0	0	4
New Mexico	0	0	0	0	249	0	0	37
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**20**	**7**	**0**	**0**	**3**
California	0	0	0	20	7	0	0	3
Oregon	0	0	0	0	32	0	0	19
Washington	0	0	0	0	69	0	0	66
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**
Alaska	0	0	0	0	0	0	0	62
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**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 August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**8**	**0**	**10**	**0**	**0**	**0**
Connecticut	0	664	0	15	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	9	0	15	0	0	0
New Hampshire	0	4	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**	**94**	**0**	**10**	**0**	**0**	**0**
New Jersey	0	0	0	24	0	0	0
New York	0	102	0	13	0	0	0
Pennsylvania	0	28	0	0	0	0	0
East North Central	**8**	**41**	**0**	**6**	**0**	**0**	**0**
Illinois	25	267	0	16	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	307	0	8	0	0	0
Ohio	0	0	0	3	0	0	0
Wisconsin	0	418	0	13	0	0	0
West North Central	**0**	**46**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	1	0	0	0
Minnesota	0	51	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	708	0	0	0	0	0
South Atlantic	**0**	**6**	**0**	**4**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	33	0	0	0	0	0
Maryland	0	0	0	3	0	0	0
North Carolina	0	280	0	53	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**	**19**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	19	0	0	0
West South Central	**0**	**0**	**0**	**12**	**0**	**0**	**0**
Arkansas	0	0	0	87	0	0	0
Louisiana	0	0	0	20	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	14	0	0	0
Mountain	**0**	**553**	**0**	**9**	**0**	**0**	**0**
Arizona	0	553	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	37	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**14**	**0**	**3**	**0**	**0**	**392**
California	0	17	0	3	0	0	392
Oregon	0	0	0	23	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**36**	**5**	**0**	**0**	**0**	**0**	**117**
Alaska	36	45	0	0	0	0	117
Hawaii	0	0	0	0	0	0	0
U.S. Total	**12**	**8**	**0**	**3**	**0**	**0**	**85**

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 August 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**	**96**	**8**	**0**	**0**	**8**
Connecticut	0	0	0	230	230	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	103	30	0	0	13
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**20**	**5**	**0**	**3**	**6**
New Jersey	0	0	0	21	10	0	0	7
New York	0	0	0	76	7	0	6	9
Pennsylvania	0	0	0	96	6	0	0	2
East North Central	**0**	**0**	**0**	**67**	**20**	**0**	**0**	**5**
Illinois	0	0	0	124	174	0	0	15
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	159	8	0	0	7
Ohio	0	0	0	138	35	0	0	3
Wisconsin	0	0	0	114	46	0	0	18
West North Central	**0**	**0**	**0**	**0**	**18**	**0**	**34**	**5**
Iowa	0	0	0	0	20	0	0	4
Kansas	0	0	0	0	120	0	0	120
Minnesota	0	0	0	0	37	0	34	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	489	0	0	489
South Dakota	0	0	0	0	0	0	0	708
South Atlantic	**0**	**0**	**0**	**21**	**8**	**0**	**0**	**3**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	87	31	0	0	22
Georgia	0	0	0	144	144	0	0	48
Maryland	0	0	0	73	35	0	0	3
North Carolina	0	0	0	22	21	0	0	22
South Carolina	0	0	0	0	0	0	0	0
Virginia	0	0	0	215	5	0	0	2
East South Central	**0**	**0**	**0**	**108**	**108**	**0**	**0**	**18**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	108	108	0	0	18
West South Central	**0**	**0**	**0**	**33**	**19**	**0**	**0**	**12**
Arkansas	0	0	0	0	0	0	0	47
Louisiana	0	0	0	0	0	0	0	20
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	144	29	0	0	13
Mountain	**0**	**0**	**0**	**25**	**5**	**0**	**0**	**5**
Arizona	0	0	0	66	66	0	0	7
Colorado	0	0	0	66	66	0	0	29
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	29	4	0	0	4
New Mexico	0	0	0	0	249	0	0	37
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**20**	**7**	**0**	**0**	**3**
California	0	0	0	20	7	0	0	3
Oregon	0	0	0	0	32	0	0	19
Washington	0	0	0	0	69	0	0	66
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**
Alaska	0	0	0	0	0	0	0	62
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**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, August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**73**	**89**	**0**	**8**	**0**	**0**	**98**
Connecticut	0	0	0	10	0	0	0
Maine	73	87	0	19	0	0	98
Massachusetts	0	0	0	7	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	8,433	0	29	0	0	0
Middle Atlantic	**20**	**13**	**30**	**6**	**14**	**0**	**61**
New Jersey	0	0	0	7	0	0	0
New York	0	10	0	6	0	0	61
Pennsylvania	20	16	58	9	20	0	0
East North Central	**4**	**8**	**0**	**5**	**7**	**0**	**70**
Illinois	4	0	0	13	0	0	0
Indiana	0	2	0	6	9	0	0
Michigan	35	95	0	14	0	0	302
Ohio	0	0	0	17	0	0	0
Wisconsin	14	0	0	12	0	0	72
West North Central	**2**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	1	0	0	7	0	0	0
Kansas	0	0	0	101	0	0	0
Minnesota	8	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	5	0	0	0	0	0	0
North Dakota	33	0	0	0	0	0	0
South Atlantic	**49**	**47**	**38**	**4**	**0**	**0**	**33**
Delaware	0	0	0	0	0	0	0
Florida	157	92	0	9	0	0	0
Georgia	120	61	38	15	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	29	109	0	24	0	0	527
South Carolina	0	0	0	0	0	0	0
Virginia	0	706	0	8	0	0	0
West Virginia	0	0	0	0	0	0	34
East South Central	**24**	**97**	**0**	**7**	**101**	**0**	**0**
Alabama	184	125	0	12	302	0	0
Kentucky	0	0	0	9	0	0	0
Mississippi	0	0	0	19	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**4**	**15**	**1**	**9**	**0**	**0**
Arkansas	0	0	0	15	0	0	0
Louisiana	0	0	0	1	12	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	19	15	1	9	0	0
Mountain	**15**	**0**	**0**	**4**	**10**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	74	0	0	28	0	0	0
Montana	158	0	0	406	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	15	0	0	11	12	0	0
Pacific Contiguous	**0**	**57**	**0**	**1**	**3**	**0**	**0**
California	0	0	0	1	3	0	0
Oregon	0	0	0	33	0	0	0
Washington	0	59	0	30	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**180**
Alaska	0	8	0	0	0	0	0
Hawaii	0	0	0	0	0	0	180
U.S. Total	**5**	**13**	**14**	**1**	**5**	**0**	**26**

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, August 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**	**58**	**8**	**0**	**0**	**6**
Connecticut	0	0	0	661	661	0	0	10
Maine	0	0	0	0	8	0	0	8
Massachusetts	0	0	0	0	272	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	29
Middle Atlantic	**0**	**0**	**0**	**61**	**8**	**0**	**0**	**5**
New Jersey	0	0	0	90	90	0	0	4
New York	0	0	0	0	18	0	0	7
Pennsylvania	0	0	0	83	9	0	0	7
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**3**
Illinois	0	0	0	0	0	0	0	4
Indiana	0	0	0	0	30	0	0	5
Michigan	0	0	0	0	10	0	0	7
Ohio	0	0	0	0	15	0	0	9
Wisconsin	0	0	0	0	11	0	44	8
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Iowa	0	0	0	0	0	0	0	2
Kansas	0	0	0	0	0	0	0	82
Minnesota	0	0	0	0	0	0	0	3
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	5
North Dakota	0	0	0	0	0	0	0	20
South Atlantic	**0**	**0**	**0**	**119**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	70	0	0	0
Florida	0	0	0	136	7	0	0	4
Georgia	0	0	0	0	5	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	6
South Carolina	0	0	0	174	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	15
East South Central	**0**	**0**	**0**	**94**	**3**	**0**	**0**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	18	0	0	12
Mississippi	0	0	0	0	4	0	0	5
Tennessee	0	0	0	94	6	0	0	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	6	0	0	6
Louisiana	0	0	0	0	6	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	6	1
Mountain	**0**	**0**	**0**	**111**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	174	3	0	0	7
Montana	0	0	0	0	0	0	0	28
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**	**52**	**7**	**0**	**2**	**2**
California	0	0	0	52	11	0	2	1
Oregon	0	0	0	0	13	0	0	12
Washington	0	0	0	0	10	0	0	9
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**172**	**0**	**0**	**16**
Alaska	0	0	0	0	172	0	0	5
Hawaii	0	0	0	0	0	0	0	26
U.S. Total	**0**	**0**	**0**	**32**	**2**	**0**	**1**	**1**

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

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

Industrial Sector by Census Division and State, Year-to-Date through August 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**73**	**89**	**0**	**8**	**0**	**0**	**98**
Connecticut	0	0	0	10	0	0	0
Maine	73	87	0	19	0	0	98
Massachusetts	0	0	0	7	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	8,433	0	29	0	0	0
Middle Atlantic	**20**	**13**	**30**	**6**	**14**	**0**	**61**
New Jersey	0	0	0	7	0	0	0
New York	0	10	0	6	0	0	61
Pennsylvania	20	16	58	9	20	0	0
East North Central	**4**	**8**	**0**	**5**	**7**	**0**	**70**
Illinois	4	0	0	13	0	0	0
Indiana	0	2	0	6	9	0	0
Michigan	35	95	0	14	0	0	302
Ohio	0	0	0	17	0	0	0
Wisconsin	14	0	0	12	0	0	72
West North Central	**2**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	1	0	0	7	0	0	0
Kansas	0	0	0	101	0	0	0
Minnesota	8	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	5	0	0	0	0	0	0
North Dakota	33	0	0	0	0	0	0
South Atlantic	**49**	**47**	**38**	**4**	**0**	**0**	**33**
Delaware	0	0	0	0	0	0	0
Florida	157	92	0	9	0	0	0
Georgia	120	61	38	15	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	29	109	0	24	0	0	527
South Carolina	0	0	0	0	0	0	0
Virginia	0	706	0	8	0	0	0
West Virginia	0	0	0	0	0	0	34
East South Central	**24**	**97**	**0**	**7**	**101**	**0**	**0**
Alabama	184	125	0	12	302	0	0
Kentucky	0	0	0	9	0	0	0
Mississippi	0	0	0	19	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**4**	**15**	**1**	**9**	**0**	**0**
Arkansas	0	0	0	15	0	0	0
Louisiana	0	0	0	1	12	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	19	15	1	9	0	0
Mountain	**15**	**0**	**0**	**4**	**10**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	74	0	0	28	0	0	0
Montana	158	0	0	406	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	15	0	0	11	12	0	0
Pacific Contiguous	**0**	**57**	**0**	**1**	**3**	**0**	**0**
California	0	0	0	1	3	0	0
Oregon	0	0	0	33	0	0	0
Washington	0	59	0	30	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**180**
Alaska	0	8	0	0	0	0	0
Hawaii	0	0	0	0	0	0	180
U.S. Total	**5**	**13**	**14**	**1**	**5**	**0**	**26**

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 August 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**	**58**	**8**	**0**	**0**	**6**
Connecticut	0	0	0	661	661	0	0	10
Maine	0	0	0	0	8	0	0	8
Massachusetts	0	0	0	0	272	0	0	8
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	29
Middle Atlantic	**0**	**0**	**0**	**61**	**8**	**0**	**0**	**5**
New Jersey	0	0	0	90	90	0	0	4
New York	0	0	0	0	18	0	0	7
Pennsylvania	0	0	0	83	9	0	0	7
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**2**	**3**
Illinois	0	0	0	0	0	0	0	4
Indiana	0	0	0	0	30	0	0	5
Michigan	0	0	0	0	10	0	0	7
Ohio	0	0	0	0	15	0	0	9
Wisconsin	0	0	0	0	11	0	44	8
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**
Iowa	0	0	0	0	0	0	0	2
Kansas	0	0	0	0	0	0	0	82
Minnesota	0	0	0	0	0	0	0	3
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	5
North Dakota	0	0	0	0	0	0	0	20
South Atlantic	**0**	**0**	**0**	**119**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	70	0	0	0
Florida	0	0	0	136	7	0	0	4
Georgia	0	0	0	0	5	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	6
South Carolina	0	0	0	174	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	15
East South Central	**0**	**0**	**0**	**94**	**3**	**0**	**0**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	18	0	0	12
Mississippi	0	0	0	0	4	0	0	5
Tennessee	0	0	0	94	6	0	0	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	6	0	0	6
Louisiana	0	0	0	0	6	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	6	1
Mountain	**0**	**0**	**0**	**111**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	174	3	0	0	7
Montana	0	0	0	0	0	0	0	28
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**	**52**	**7**	**0**	**2**	**2**
California	0	0	0	52	11	0	2	1
Oregon	0	0	0	0	13	0	0	12
Washington	0	0	0	0	10	0	0	9
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**172**	**0**	**0**	**16**
Alaska	0	0	0	0	172	0	0	5
Hawaii	0	0	0	0	0	0	0	26
U.S. Total	**0**	**0**	**0**	**32**	**2**	**0**	**1**	**1**

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

Table A.6.A. Relative Standard Error for Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, August 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**3**	**0**	**0**
Connecticut	0	1	3	0	1
Maine	1	1	2	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	4	7	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	0
Indiana	1	3	2	0	1
Michigan	1	2	4	0	1
Ohio	1	1	1	0	1
Wisconsin	2	4	6	0	3
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	8	6	0	4
Kansas	2	1	8	0	2
Minnesota	2	5	8	0	3
Missouri	1	3	7	0	2
Nebraska	2	8	10	0	4
North Dakota	3	5	10	0	5
South Dakota	4	10	14	0	5
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	1	2	6	0	1
District of Columbia	0	0	0	0	0
Florida	1	1	6	0	1
Georgia	2	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	4	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	5	0	1
West Virginia	0	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	2	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	2	5	3	0	2
Montana	3	8	5	0	4
Nevada	1	2	1	0	1
New Mexico	3	8	8	0	4
Utah	2	5	3	0	2
Wyoming	4	9	5	0	4
Pacific Contiguous	**0**	**1**	**3**	**0**	**1**
California	0	1	2	0	1
Oregon	2	4	9	0	3
Washington	2	5	8	0	3
Pacific Noncontiguous	**1**	**5**	**5**	**0**	**3**
Alaska	4	12	18	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 August 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	2	5	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	2	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	11	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	0
West Virginia	0	1	0	0	0
East South Central	**0**	**1**	**1**	**0**	**1**
Alabama	1	1	2	0	1
Kentucky	1	3	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	4	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**	**1**	**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, August 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**2**	**1**	**1**	**0**	**1**
Connecticut	6	1	1	0	3
Maine	1	1	2	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	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	1	1	1	0	1
Indiana	2	3	2	0	1
Michigan	1	1	4	0	1
Ohio	1	1	1	0	0
Wisconsin	1	3	7	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	5	6	0	3
Kansas	3	2	6	0	2
Minnesota	2	4	9	0	3
Missouri	1	3	5	0	1
Nebraska	2	6	11	0	4
North Dakota	3	4	9	0	4
South Dakota	3	7	14	0	4
South Atlantic	**1**	**1**	**1**	**0**	**0**
Delaware	2	3	8	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	1	4	0	1
Maryland	0	1	0	0	0
North Carolina	2	1	4	0	1
South Carolina	2	2	3	0	1
Virginia	1	1	4	0	1
West Virginia	1	2	0	0	0
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	4	5	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	3	3	4	0	2
Louisiana	2	2	2	0	1
Oklahoma	2	2	5	0	2
Texas	2	1	2	0	1
Mountain	**0**	**2**	**2**	**0**	**1**
Arizona	0	2	5	0	1
Colorado	2	5	8	0	3
Idaho	2	4	3	0	2
Montana	3	6	7	0	3
Nevada	0	2	1	0	1
New Mexico	3	8	13	0	4
Utah	2	6	4	0	3
Wyoming	4	7	6	0	4
Pacific Contiguous	**0**	**1**	**2**	**0**	**0**
California	0	1	1	0	0
Oregon	2	3	10	0	2
Washington	2	3	8	0	2
Pacific Noncontiguous	**1**	**3**	**3**	**0**	**1**
Alaska	4	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 August 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	2	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	0	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	2	6	12	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	3	5	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	4	0	0
Georgia	1	1	3	0	1
Maryland	0	1	1	0	0
North Carolina	1	1	3	0	1
South Carolina	1	1	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	5	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	6	0	2
Nevada	0	2	1	0	1
New Mexico	2	6	9	0	3
Utah	1	5	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**

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

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**0**	**1**
Connecticut	4	1	2	0	2
Maine	0	1	2	0	1
Massachusetts	0	1	4	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	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	0
Indiana	1	3	2	0	1
Michigan	0	2	4	0	1
Ohio	0	1	1	0	0
Wisconsin	1	3	6	0	2
West North Central	**0**	**2**	**3**	**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	8	0	4
South Dakota	1	8	14	0	4
South Atlantic	**0**	**0**	**2**	**0**	**0**
Delaware	1	2	6	0	1
District of Columbia	0	0	0	0	0
Florida	0	1	5	0	0
Georgia	1	1	4	0	1
Maryland	0	0	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	1	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	6	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	9	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

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, August 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	5.91	--	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	23.72	6.00	--	1.03
New Jersey	26.51	--	--	1.04
New York	--	5.80	--	1.03
Pennsylvania	23.61	6.00	--	1.04
East North Central	20.14	5.80	27.86	1.05
Illinois	17.73	5.80	--	1.02
Indiana	22.10	5.76	--	1.07
Michigan	18.59	5.82	27.84	1.06
Ohio	25.08	5.79	--	1.06
Wisconsin	18.05	5.86	28.05	1.03
West North Central	16.56	5.80	26.85	1.07
Iowa	17.66	5.78	26.85	1.09
Kansas	17.25	5.80	--	1.02
Minnesota	17.69	5.75	--	1.09
Missouri	17.79	5.78	--	1.05
Nebraska	16.98	--	--	1.07
North Dakota	12.98	5.82	--	1.00
South Dakota	16.57	6.00	--	--
South Atlantic	23.64	5.82	28.20	1.03
Delaware	--	5.84	--	1.04
District of Columbia	--	--	--	--
Florida	23.53	5.80	28.20	1.03
Georgia	20.09	5.93	--	1.03
Maryland	24.96	5.81	--	1.04
North Carolina	25.02	5.80	--	1.03
South Carolina	24.69	5.87	--	1.03
Virginia	22.67	5.87	--	1.05
West Virginia	25.04	5.81	--	1.06
East South Central	20.51	5.77	--	1.03
Alabama	18.92	5.50	--	1.03
Kentucky	21.94	5.80	--	1.03
Mississippi	12.78	5.80	--	1.03
Tennessee	22.95	5.76	--	1.01
West South Central	16.26	5.83	28.74	1.03
Arkansas	17.45	--	--	1.02
Louisiana	16.85	5.90	28.74	1.03
Oklahoma	17.12	5.80	--	1.05
Texas	15.80	5.80	--	1.03
Mountain	18.79	5.82	--	1.05
Arizona	19.57	5.78	--	1.03
Colorado	18.65	--	--	1.12
Idaho	--	--	--	1.00
Montana	16.97	5.92	--	1.03
Nevada	19.65	5.83	--	1.05
New Mexico	18.55	5.66	--	1.03
Utah	21.73	5.85	--	1.05
Wyoming	17.54	5.85	--	1.05
Pacific Contiguous	17.13	6.00	--	1.04
California	--	--	--	1.04
Oregon	17.88	--	--	1.05
Washington	16.74	6.00	--	1.09
Pacific Noncontiguous	18.80	6.02	--	1.00
Alaska	14.39	5.80	--	1.00
Hawaii	20.95	6.02	--	--
U.S. Total	19.18	5.95	28.29	1.04

'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%	2.31%
Total	**0.08%**	**0.63%**	**0.28%**
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	423,831	-2.29%
Total	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,271**	**0.48%**	**4,177,810**	**4,170,912**	**-0.17%**
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 Energy Production, Conversion & Distribution (EPCD), Energy Information Administration (EIA), U.S. Department of Energy. Quality statistics begin with the collection of the correct data. To assure this, ERUS performs routine reviews of the data collected and the forms on which it is collected. Additionally, to assure that the data are collected from the correct parties, ERUS routinely reviews the frames for each data collection.

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

Reliability of data

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

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

Although no direct measurement of the biases due to non-sampling errors can be obtained, precautionary steps were taken in all phases of the frame development and data collection, processing, and tabulation processes, in an effort to minimize their influence. See the Data Processing and Data System Editing section for each EIA form for an in-depth discussion of how the sampling and non-sampling errors are handled in each case.

Relative Standard Error: The relative standard error (RSE) statistic, usually given as a percentage, describes the magnitude of sampling error that might reasonably be incurred. The RSE is the square

root of the estimated variance, divided by the variable of interest. The variable of interest may be the ratio of two variables, or a single variable.

The sampling error may be less than the non-sampling error. In fact, large RSE estimates found in preliminary work with these data have often indicated non-sampling errors, which were then identified and corrected. Non-sampling errors may be attributed to many sources, including the response errors, definitional difficulties, differences in the interpretation of questions, mistakes in recording or coding data obtained, and other errors of collection, response, or coverage. These non-sampling errors also occur in complete censuses.

Using the Central Limit Theorem, which applies to sums and means such as are applicable here, there is approximately a 68 percent chance that the true total or mean is within one RSE of the estimated total or mean. Note that reported RSEs are always estimates themselves, and are usually, as here, reported as percentages. As an example, suppose that a net generation from coal value is estimated to be 1,507 million kilowatthours with an estimated RSE of 4.9 percent. This means that, ignoring any non-sampling error, there is approximately a 68 percent chance that the true million kilowatthour value is within approximately 4.9 percent of 1,507 million kilowatthours (that is, between 1,433 and 1,581 million kilowatthours). Also under the Central Limit Theorem, there is approximately a 95 percent chance that the true mean or total is within 2 RSEs of the estimated mean or total.

Note that there are times when a model may not apply, such as in the case of a substantial reclassification of sales, when the relationship between the variable of interest and the regressor data does not hold. In such a case, the new information may represent only itself, and such numbers are added to model results when estimating totals. Further, there are times when sample data may be known to be in error, or are not reported. Such cases are treated as if they were never part of the model-based sample, and values are imputed. Experiments were done to see if nonresponse should be treated differently, but it was decided to treat those cases the same as out-of-sample cases.

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

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

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

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

Data revision procedure

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

- Annual survey data are disseminated either as preliminary or final when first appearing in a data product. Data initially released as preliminary will be so noted in the data product. These data are typically released as final by the next dissemination of the same product; however, if final data are available at an earlier interval they may be released in another product.
- All monthly survey data are first disseminated as preliminary. These data are revised after the prior year's data are finalized and are disseminated as revised preliminary. No revisions are made to the published data before this or subsequent to these data being finalized unless significant errors are discovered.
- After data are disseminated as final, further revisions will be considered if they make a difference of 1 percent or greater at the national level. Revisions for differences that do not meet the 1 percent or greater threshold will be determined by the Office Director. In either case, the proposed revision will be subject to the EIA revision policy concerning how it affects other EIA products.
- The magnitudes of changes due to revisions experienced in the past will be included periodically in the data products, so that the reader can assess the accuracy of the data.

Data sources for Electric Power Monthly

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

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

- Form EIA 861, "Annual Electric Power Industry Report."

For access to these forms and their instructions, please see:
http://www.eia.gov/cneaf/electricity/page/forms.html.

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

- FERC Form 423, "Monthly Report of Cost and Quality of Fuels for Electric Plants,"
- Form EIA-423, "Monthly Cost and Quality of Fuels for Electric Plants Report,"
- Form EIA-759, "Monthly Power Plant Report,"
- Form EIA-860A, "Annual Electric Generator Report–Utility,"
- Form EIA-860B, "Annual Electric Generator Report–Nonutility,"
- Form EIA-900, "Monthly Nonutility Power Report,"
- Form EIA-906, "Power Plant Report," and
- Form EIA-920, "Combined Heat and Power Plant Report."

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

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

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

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

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 November 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 January 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 (see Table 1):

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 U.S. Environmental Protection Agency (USEPA). For data years 2001 through 2009, the MSW composition was based on the USEPA annual publication, *Municipal Solid Waste in the United States: Facts and Figures*. The compositions developed for the 2009 data year were carried forward for the 2010 through 2018 data years. The most updated composition and categorization of MSW (for the 2019 data year) were also derived from a USEPA publication: *Advancing Sustainable Materials Management: Facts and Figures Report: 2015 Data Tables*. The updated composition values were applied in the October EPM 2019 on the preliminary 2019 values and will be applied going forward in future data years until EIA revises the MSW composition ratios again. The Btu contents of the components of MSW were obtained from various sources.

The numbers in Tables 1 and 2 illustrate two interrelated trends in the composition of the MSW stream. First, the heat content (per unit weight) of the waste stream has been steadily increasing

over time due to higher concentrations of non-biogenic materials. Second, the shares of energy contributed to the waste stream by biogenic and non-biogenic components have been changing over time with the percentage of biogenic materials falling and the share of non-biogenic materials rising.

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 was attributed 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	…	2018	2019
Biogenic	57	56	55	55	56	57	55	54	51	51	51	45
Non-biogenic	43	44	45	45	44	43	46	46	49	49	49	55

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

	2001	2002	2003	2004	2005	2006	2007	2008	2009	…	2018	2019
Biogenic	77	77	76	76	75	67	65	65	64	64	64	61
Non-biogenic	23	23	24	24	25	34	35	35	36	36	36	39

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

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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, U.S. census region and U.S. 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

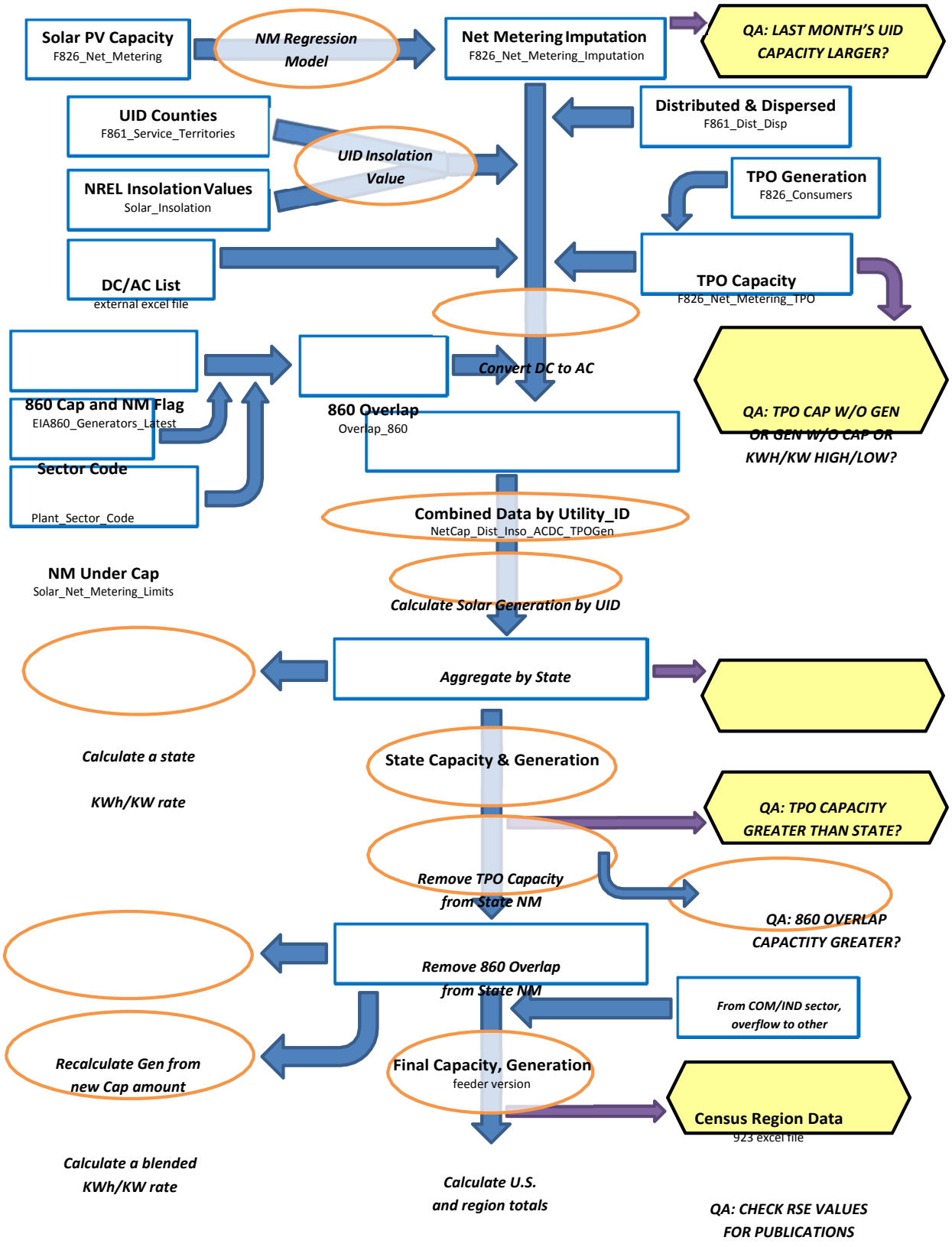
TMY3 (1991-2005) Weather Stations by MSA

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, October 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.