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Preface

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

Background

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

Data sources

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

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Executive Summary

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Net Generation and Consumption of Fuels for June														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	78,564	101,509	-22.6%	60,160	77,886	17,865	22,987	14	21	525	615	0	0
Petroleum Liquids	Utility Scale Facilities	954	1,062	-10.2%	712	747	199	263	7	8	36	43	0	0
Petroleum Coke	Utility Scale Facilities	551	765	-27.9%	398	670	96	NM	0	0	57	77	0	0
Natural Gas	Utility Scale Facilities	136,853	130,823	4.6%	69,747	65,945	58,587	56,379	681	706	7,839	7,793	0	0
Other Gas	Utility Scale Facilities	972	1,010	-3.8%	23	13	321	317	0	0	628	680	0	0
Nuclear	Utility Scale Facilities	68,805	69,688	-1.3%	36,847	36,437	31,958	33,251	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	26,336	27,955	-5.8%	24,076	25,826	2,151	1,992	21	NM	88	114	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	37,998	38,909	-2.3%	4,527	4,076	30,858	32,090	291	298	2,322	2,445	0	0
... Wind	Utility Scale Facilities	23,400	24,376	-4.0%	3,456	2,993	19,918	21,360	15	15	11	NM	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	8,216	7,804	5.3%	647	565	7,493	7,147	65	81	11	11	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,285	3,573	-8.1%	242	320	810	887	4	8	2,228	2,359	0	0
... Other Biomass	Utility Scale Facilities	1,693	1,787	-5.3%	98	108	1,351	1,417	172	193	73	68	0	0
... Geothermal	Utility Scale Facilities	1,405	1,369	2.6%	84	90	1,286	1,279	34	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-385	-433	-11.1%	-299	-339	-86	-95	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,037	1,111	-6.7%	39	52	561	589	82	92	355	376	0	0
All Energy Sources	Utility Scale Facilities	351,685	372,398	-5.6%	196,230	211,313	142,509	147,792	1,096	1,148	11,850	12,144	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	3,638	3,060	18.9%	0	0	0	0	1,146	999	315	267	2,178	1,793
Estimated Total Solar Photovoltaic	All Facilities	11,415	10,347	10.3%	646	561	7,054	6,635	1,211	1,080	326	278	2,178	1,793
Estimated Total Solar	All Facilities	11,854	10,863	9.1%	647	565	7,493	7,147	1,211	1,080	326	278	2,178	1,793
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	44,115	56,031	-21.3%	33,489	42,467	10,438	13,339	4	6	184	219	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,680	1,826	-8.0%	1,299	1,343	325	421	18	19	38	43	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	200	312	-36.1%	151	269	34	24	0	0	15	19	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,002,542	972,150	3.1%	528,383	510,445	423,715	411,715	4,335	4,433	46,109	45,557	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,005	1,089	-7.7%	182	192	101	91	27	36	695	770	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	148	221	-33.1%	3	5	16	14	14	16	115	187	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	66	66	1.4%	1	1	7	1	0	0	58	63	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	100,934	99,605	1.3%	4,128	3,536	26,421	26,776	7,960	8,226	62,425	61,067	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	45,120	57,119	-21.0%	33,671	42,659	10,539	13,430	32	42	879	989	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,828	2,048	-10.7%	1,302	1,348	342	435	31	36	153	229	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	266	378	-29.6%	152	270	41	26	0	0	73	82	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,103,476	1,071,754	3.0%	532,512	513,981	450,135	438,490	12,295	12,659	108,534	106,624	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	117,051	122,208	-4.2%	92,880	101,926	23,600	19,603	50	65	521	614	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,625	28,212	-5.6%	16,902	18,547	8,105	8,031	339	390	1,280	1,244	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	518	685	-24.3%	383	527	7	55	1	2	127	100	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for June									
	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	June 2019	June 2018	Percentage Change	June 2019	June 2018	Percentage Change	June 2019	June 2018	Percentage Change
Residential	119,518	129,478	-7.7%	15,949	16,889	-5.6%	13.34	13.04	2.3%
Commercial	115,246	121,578	-5.2%	12,547	13,156	-4.6%	10.89	10.82	0.6%
Industrial	80,528	81,527	-1.2%	5,568	5,854	-4.9%	6.91	7.18	-3.8%
Transportation	626	628	-0.3%	63	64	-0.6%	10.13	10.16	-0.3%
All Sectors	315,918	333,212	-5.2%	34,127	35,963	-5.1%	10.80	10.79	0.1%

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

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

Net Generation and Consumption of Fuels for January through June														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	470,131	541,676	-13.2%	350,565	405,444	116,144	132,146	152	163	3,271	3,922	0	0
Petroleum Liquids	Utility Scale Facilities	5,556	9,821	-43.4%	3,864	5,650	1,400	3,801	54	86	237	284	0	0
Petroleum Coke	Utility Scale Facilities	3,918	4,209	-6.9%	2,888	3,319	719	518	4	4	307	369	0	0
Natural Gas	Utility Scale Facilities	697,203	657,356	6.1%	342,214	325,465	304,056	282,673	4,044	3,944	46,889	45,274	0	0
Other Gas	Utility Scale Facilities	6,064	5,999	1.1%	88	110	2,058	1,914	0	0	3,918	3,975	0	0
Nuclear	Utility Scale Facilities	400,005	402,613	-0.6%	212,588	210,066	187,417	192,547	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	153,790	162,960	-5.6%	139,555	149,988	13,575	12,124	127	143	533	704	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	228,275	226,719	0.7%	28,201	25,888	184,628	184,625	1,713	1,606	13,733	14,600	0	0
... Wind	Utility Scale Facilities	154,338	153,003	0.9%	22,193	20,277	131,976	132,565	107	103	62	57	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	36,042	33,846	6.5%	3,324	2,631	32,377	30,858	293	312	48	45	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	19,517	20,892	-6.6%	1,618	1,725	4,712	5,121	38	35	13,148	14,011	0	0
... Other Biomass	Utility Scale Facilities	10,003	10,782	-7.2%	583	741	7,895	8,397	1,050	1,156	475	488	0	0
... Geothermal	Utility Scale Facilities	8,376	8,197	2.2%	483	513	7,668	7,684	225	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-1,977	-2,553	-22.5%	-1,497	-2,052	-481	-501	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	6,118	6,452	-5.2%	220	273	3,241	3,355	479	508	2,179	2,317	0	0
All Energy Sources	Utility Scale Facilities	1,969,083	2,015,252	-2.3%	1,078,685	1,124,152	812,757	813,202	6,573	6,454	71,067	71,445	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	17,520	14,609	19.9%	0	0	0	0	5,646	4,844	1,504	1,294	10,370	8,471
Estimated Total Solar Photovoltaic	All Facilities	51,950	46,618	11.4%	3,297	2,602	30,793	29,050	5,938	5,156	1,551	1,338	10,370	8,471
Estimated Total Solar	All Facilities	53,561	48,455	10.5%	3,324	2,631	32,377	30,858	5,938	5,156	1,551	1,338	10,370	8,471
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	262,279	298,615	-12.2%	194,447	221,960	66,634	75,189	43	47	1,154	1,419	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	9,697	16,959	-42.8%	7,065	10,277	2,281	6,247	104	148	246	286	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,463	1,588	-7.9%	1,152	1,330	225	173	1	1	85	85	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	5,041,026	4,863,823	3.6%	2,581,021	2,501,024	2,158,799	2,071,897	25,344	24,676	275,862	266,227	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	6,484	7,207	-10.0%	1,118	1,201	540	628	233	256	4,593	5,122	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,327	1,563	-15.1%	41	69	127	173	256	209	904	1,112	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	402	404	-0.6%	7	7	49	43	5	5	340	349	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	621,028	604,516	2.7%	21,311	19,725	163,216	162,327	50,344	51,084	386,157	371,380	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	268,763	305,822	-12.1%	195,565	223,161	67,174	75,817	277	303	5,748	6,541	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	11,023	18,522	-40.5%	7,106	10,346	2,407	6,420	360	357	1,150	1,398	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,865	1,993	-6.4%	1,159	1,336	275	216	7	6	424	434	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	5,662,054	5,468,340	3.5%	2,602,331	2,520,749	2,322,016	2,234,224	75,688	75,759	662,019	637,607	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through June									
	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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	Percentage Change
Residential	671,843	697,301	-3.7%	87,055	89,243	-2.5%	12.96	12.80	1.2%
Commercial	650,961	661,603	-1.6%	68,565	69,920	-1.9%	10.53	10.57	-0.4%
Industrial	465,076	463,048	0.4%	31,130	31,671	-1.7%	6.69	6.84	-2.2%
Transportation	3,879	3,846	0.8%	377	370	1.8%	9.73	9.63	1.0%
All Sectors	1,791,758	1,825,799	-1.9%	187,127	191,205	-2.1%	10.44	10.47	-0.3%

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	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal (1000 tons)	44,676	48,533	39.26	39.26	237	259	273,580	280,975	39.96	39.42
Petroleum Liquids (1000 barrels)	1,120	1,346	82.15	90.40	122	148	7,273	11,801	82.85	82.97
Petroleum Coke (1000 tons)	130	260	62.61	77.61	5	5	881	1,450	65.47	70.96
Natural Gas (1000 Mcf)	942,261	897,864	2.67	3.21	575	563	4,826,567	4,518,768	3.32	3.62

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal (1000 tons)	33,285	36,117	40.91	40.34	167	179	201,014	207,585	41.33	40.31
Petroleum Liquids (1000 barrels)	848	986	80.17	89.15	86	99	5,446	7,065	82.46	83.08
Petroleum Coke (1000 tons)	130	260	62.61	77.61	5	5	881	1,450	65.47	70.96
Natural Gas (1000 Mcf)	476,918	450,427	2.84	3.38	297	291	2,348,830	2,214,941	3.49	3.81

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal (1000 tons)	10,824	11,737	33.55	35.21	57	64	68,846	69,280	35.21	35.99
Petroleum Liquids (1000 barrels)	250	344	89.05	94.38	27	41	1,672	4,539	84.21	82.92
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	403,165	384,422	2.41	2.96	231	224	2,090,158	1,937,055	3.11	3.44

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal (1000 tons)	0	0	66.38	--	1	0	5	6	65.75	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)	776	650	3.36	3.67	3	3	4,613	4,374	3.44	3.68

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal (1000 tons)	567	679	51.38	51.83	12	16	3,715	4,104	53.41	52.15
Petroleum Liquids (1000 barrels)	21	17	79.96	84.39	9	8	155	198	82.15	79.93
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	61,402	62,365	2.71	3.22	44	45	382,965	362,398	3.20	3.25

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.

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	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal	864,524	931,118	2.03	2.05	237	259	5,283,946	5,383,451	2.07	2.06
Petroleum Liquids	6,735	8,103	13.66	15.01	122	148	43,980	71,145	13.70	13.73
Petroleum Coke	3,740	7,382	2.18	2.73	5	5	25,189	40,908	2.29	2.52
Natural Gas	972,385	927,153	2.59	3.11	575	563	4,984,976	4,665,842	3.21	3.51
Fossil Fuels	1,847,385	1,873,756	2.36	2.61	719	726	10,338,091	10,161,346	2.65	2.77

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal	645,744	693,365	2.11	2.10	167	179	3,891,593	3,985,596	2.13	2.10
Petroleum Liquids	5,129	5,985	13.26	14.68	86	99	33,119	42,879	13.56	13.68
Petroleum Coke	3,740	7,382	2.18	2.73	5	5	25,189	40,908	2.29	2.52
Natural Gas	491,980	464,827	2.76	3.27	297	291	2,424,848	2,285,764	3.38	3.70
Fossil Fuels	1,146,592	1,171,559	2.44	2.63	397	404	6,374,749	6,355,148	2.67	2.75

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal	207,073	223,656	1.75	1.85	57	64	1,315,306	1,312,291	1.84	1.90
Petroleum Liquids	1,476	2,011	15.09	16.11	27	41	9,906	27,028	14.21	13.85
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	416,414	397,507	2.33	2.87	231	224	2,160,980	2,002,362	3.01	3.33
Fossil Fuels	624,963	623,174	2.15	2.49	273	272	3,486,192	3,341,681	2.55	2.78

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal	2	0	2.90	--	1	0	117	130	2.90	2.92
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	807	670	3.23	3.57	3	3	4,782	4,499	3.32	3.58
Fossil Fuels	810	670	3.22	3.57	3	3	4,899	4,629	3.31	3.56

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
Coal	11,705	14,097	2.49	2.50	12	16	76,929	85,435	2.58	2.51
Petroleum Liquids	131	107	13.04	13.54	9	8	955	1,238	13.37	12.80
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	63,184	64,149	2.63	3.13	44	45	394,367	373,216	3.11	3.15
Fossil Fuels	75,020	78,352	2.63	3.03	46	47	472,250	459,888	3.05	3.06

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-June 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	1,146,393	15,742	8,830	1,468,013	12,191	807,078	291,724	66,604	354,445	-5,905	12,695	4,177,810	29,543	92,555	96,147
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	118,939	5,291	952	110,046	994	74,649	25,596	3,407	33,882	-547	1,115	374,324	1,615	4,894	5,022
February	81,922	780	738	96,002	990	64,790	25,533	4,113	30,561	-315	1,001	306,115	1,762	5,684	5,875
March	80,612	811	648	104,933	1,064	67,033	25,951	5,203	34,103	-490	1,113	320,982	2,427	7,373	7,630
April	73,383	854	691	99,446	940	59,133	27,490	6,249	32,891	-377	1,038	301,739	2,736	8,670	8,984
May	85,311	1,022	415	116,107	1,000	67,320	30,434	7,070	30,331	-390	1,074	339,694	3,010	9,650	10,080
June	101,509	1,062	765	130,823	1,010	69,688	27,955	7,804	31,106	-433	1,111	372,398	3,060	10,347	10,863
July	115,477	970	922	167,250	1,105	72,456	24,014	6,938	22,937	-644	1,116	412,542	3,147	9,705	10,085
August	115,216	1,041	873	162,377	1,225	72,282	21,400	6,981	26,326	-747	1,007	407,981	3,018	9,590	9,999
Sept	96,742	1,039	835	142,772	1,001	64,725	18,665	6,469	24,283	-603	800	356,728	2,681	8,720	9,150
October	87,452	989	484	124,171	930	59,397	18,781	5,223	27,536	-492	1,091	325,563	2,400	7,349	7,624
November	93,005	952	699	107,109	933	63,948	22,176	3,958	28,890	-343	1,081	322,409	1,914	5,705	5,873
December	96,825	930	807	106,978	998	71,657	23,728	3,188	31,599	-522	1,147	337,334	1,774	4,870	4,962
Year 2019															
January	101,019	1,316	820	118,935	994	73,701	24,544	3,652	31,905	-323	1,129	357,690	1,938	5,479	5,590
February	80,008	790	722	110,428	1,015	64,715	22,031	3,913	29,121	-389	925	313,278	2,085	5,867	5,999
March	78,454	802	637	112,574	1,143	65,080	25,400	6,020	32,469	-409	1,018	323,187	2,968	8,728	8,988
April	60,099	772	450	102,936	947	60,581	25,422	6,949	36,110	-103	957	295,119	3,309	9,924	10,257
May	71,988	922	737	115,478	994	67,124	30,058	7,292	32,847	-368	1,053	328,124	3,582	10,538	10,874
June	78,564	954	551	136,853	972	68,805	26,336	8,216	29,782	-385	1,037	351,685	3,638	11,415	11,854
Year to Date															
2017	573,140	5,762	4,546	576,992	6,130	386,841	171,699	25,364	171,575	-2,894	6,382	1,925,537	11,708	35,372	37,072
2018	541,676	9,821	4,209	657,356	5,999	402,613	162,960	33,846	192,873	-2,553	6,452	2,015,252	14,609	46,618	48,455
2019	470,131	5,556	3,918	697,203	6,064	400,005	153,790	36,042	192,234	-1,977	6,118	1,969,083	17,520	51,950	53,561
Rolling 12 Months Ending in June															
2018	1,174,371	16,472	8,639	1,376,779	12,338	820,721	291,594	61,768	354,290	-6,154	13,167	4,123,986	26,892	85,252	88,660
2019	1,074,848	11,477	8,538	1,507,860	12,256	804,470	282,554	68,799	353,806	-5,329	12,361	4,131,640	32,454	97,888	101,253

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 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-June 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	274,952	63,012	3,592	41,411	11,336	7,163	2,854	16,728	291,724	712,773	29,543	92,555	96,147
Year 2017													
January	19,840	1,940	90	3,505	1,050	617	280	1,383	26,788	55,494	1,246	3,186	3,276
February	21,198	2,419	136	3,186	910	528	256	1,239	23,643	53,515	1,384	3,804	3,939
March	24,993	3,949	297	3,457	1,007	557	290	1,385	29,272	65,205	1,972	5,921	6,218
April	24,613	4,385	310	3,149	956	544	254	1,337	29,390	64,939	2,195	6,580	6,891
May	22,450	5,261	402	3,189	989	604	267	1,283	32,384	66,829	2,423	7,684	8,086
June	19,809	5,710	465	3,439	956	588	251	1,214	30,222	62,655	2,487	8,197	8,662
July	15,960	5,442	311	3,703	948	604	261	1,355	26,491	55,077	2,555	7,996	8,308
August	13,621	5,093	341	3,753	945	617	246	1,345	21,851	47,812	2,480	7,573	7,914
Sept	17,855	4,766	349	3,294	914	558	224	1,297	19,067	48,325	2,225	6,991	7,340
October	25,306	4,507	314	3,306	921	558	238	1,229	18,284	54,663	1,990	6,497	6,811
November	24,082	3,278	131	3,430	951	571	272	1,289	20,565	54,569	1,561	4,839	4,970
December	24,575	3,267	123	3,738	995	606	276	1,571	22,377	57,528	1,472	4,739	4,861
Year 2018													
January	26,862	3,279	128	3,759	989	590	275	1,407	25,596	62,885	1,615	4,894	5,022
February	24,096	3,922	191	3,379	941	561	259	1,326	25,533	60,208	1,762	5,684	5,875
March	27,283	4,945	258	3,535	999	599	272	1,414	25,951	65,257	2,427	7,373	7,630
April	26,783	5,935	314	3,096	941	570	256	1,246	27,490	66,630	2,736	8,670	8,984
May	23,603	6,640	430	3,550	932	574	238	1,434	30,434	67,835	3,010	9,650	10,080
June	24,376	7,287	517	3,573	927	630	230	1,369	27,955	66,864	3,060	10,347	10,863
July	16,014	6,558	380	3,690	945	640	212	1,436	24,014	53,890	3,147	9,705	10,085
August	19,530	6,572	409	3,570	951	632	214	1,429	21,400	54,707	3,018	9,590	9,999
Sept	17,977	6,039	430	3,284	880	563	191	1,388	18,665	49,417	2,681	8,720	9,150
October	21,147	4,949	275	3,277	929	597	240	1,347	18,781	51,541	2,400	7,349	7,624
November	22,457	3,790	168	3,284	936	588	227	1,397	22,176	55,024	1,914	5,705	5,873
December	24,825	3,096	92	3,414	967	619	239	1,535	23,728	58,515	1,774	4,870	4,962
Year 2019													
January	25,165	3,541	111	3,529	928	600	226	1,456	24,544	60,100	1,938	5,479	5,590
February	23,047	3,782	131	3,165	844	526	201	1,339	22,031	55,065	2,085	5,867	5,999
March	26,036	5,760	260	3,241	909	559	244	1,480	25,400	63,889	2,968	8,728	8,988
April	30,217	6,615	334	2,988	840	534	217	1,315	25,422	68,481	3,309	9,924	10,257
May	26,474	6,956	336	3,309	884	599	198	1,382	30,058	70,197	3,582	10,538	10,874
June	23,400	7,777	439	3,285	902	595	196	1,405	26,336	64,334	3,638	11,415	11,854
Year to Date													
2017	132,904	23,665	1,699	19,927	5,868	3,438	1,598	7,840	171,699	368,637	11,708	35,372	37,072
2018	153,003	32,008	1,837	20,892	5,728	3,524	1,530	8,197	162,960	389,679	14,609	46,618	48,455
2019	154,338	34,431	1,611	19,517	5,307	3,413	1,282	8,376	153,790	382,065	17,520	51,950	53,561
Rolling 12 Months Ending in June													
2018	274,402	58,360	3,407	42,117	11,403	7,038	3,047	16,283	291,594	707,652	26,892	85,252	88,660
2019	276,287	65,434	3,365	40,036	10,916	7,053	2,606	16,908	282,554	705,159	32,454	97,888	101,253

Wood and Wood-derived fuels include wood/wood waste solids (including paper pellets, railroad ties, utility poles, wood chips, bark, and wood waste solids), wood waste liquids (red liquor, sludge wood, spent sulfite liquor, and other wood-based liquids), and black liquor.
Other Waste Biomass includes sludge waste, agricultural byproducts, other biomass solids, other biomass liquids, and other biomass gases (including digester gases, methane, and other biomass gases).
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 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-June 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	860,325	9,805	6,817	714,303	151	424,251	265,480	5,252	43,026	-4,785	587	2,325,212
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	88,647	2,359	770	55,197	26	39,366	23,664	288	4,417	-475	42	214,299
February	61,029	609	575	46,841	17	33,941	23,504	335	3,931	-226	40	170,598
March	58,552	585	491	50,592	16	35,262	23,793	453	4,181	-408	49	173,565
April	55,319	619	477	48,319	28	30,580	25,150	500	3,869	-295	42	164,609
May	64,011	730	336	58,571	11	34,479	28,051	490	3,350	-309	47	189,767
June	77,886	747	670	65,945	13	36,437	25,826	565	3,510	-339	52	211,313
July	88,147	652	716	82,694	15	38,293	21,964	512	2,721	-522	57	235,250
August	87,383	700	686	78,287	24	38,885	19,240	521	2,972	-626	58	228,131
Sept	73,136	763	639	68,926	3	34,377	16,649	496	3,052	-500	50	197,592
October	65,038	733	378	59,631	0	31,364	16,703	450	3,411	-405	46	177,349
November	69,011	673	477	50,518	0	33,043	19,806	342	3,552	-254	52	177,220
December	72,165	633	601	48,783	0	38,223	21,130	300	4,059	-426	51	185,519
Year 2019												
January	75,053	837	634	56,421	12	39,806	22,016	373	4,087	-247	41	199,033
February	59,594	552	564	53,702	22	34,243	19,887	400	3,524	-310	32	172,210
March	56,546	582	464	54,214	31	34,213	22,922	595	4,298	-309	32	173,588
April	44,051	524	276	49,847	0	32,063	23,079	652	4,934	-26	34	155,434
May	55,159	658	552	58,283	0	35,416	27,576	658	4,154	-305	41	182,191
June	60,160	712	398	69,747	23	36,847	24,076	647	3,880	-299	39	196,230
Year to Date												
2017	426,130	4,253	3,431	280,054	80	203,997	157,262	1,528	21,729	-2,410	256	1,096,308
2018	405,444	5,650	3,319	325,465	110	210,066	149,988	2,631	23,257	-2,052	273	1,124,152
2019	350,565	3,864	2,888	342,214	88	212,588	139,555	3,324	24,877	-1,497	220	1,078,685
Rolling 12 Months Ending in June												
2018	872,953	9,964	6,600	669,246	179	430,554	268,403	4,451	44,292	-5,089	570	2,302,123
2019	805,445	8,019	6,386	731,052	129	426,773	255,047	5,946	44,645	-4,230	534	2,279,745

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2009-June 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	278,210	5,263	1,263	651,354	3,847	382,827	24,600	60,629	279,760	-1,119	6,406	1,693,041
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	29,504	2,805	116	46,057	303	35,283	1,798	3,087	26,708	-72	580	146,169
February	20,197	122	106	41,328	309	30,849	1,895	3,737	24,120	-89	549	123,123
March	21,359	177	100	46,383	330	31,770	2,012	4,698	27,241	-82	570	134,557
April	17,451	191	154	43,137	306	28,553	2,196	5,683	26,495	-82	535	124,619
May	20,649	244	23	49,389	349	32,841	2,232	6,506	24,259	-81	532	136,942
June	22,987	263	NM	56,379	317	33,251	1,992	7,147	24,944	-95	589	147,792
July	26,663	256	135	75,464	348	34,163	1,918	6,349	17,456	-123	593	163,223
August	27,171	293	124	74,840	369	33,398	2,037	6,378	20,663	-121	442	165,593
Sept	22,985	229	125	65,221	315	30,348	1,899	5,897	18,730	-103	311	145,957
October	21,843	212	43	56,160	259	28,033	1,950	4,715	21,578	-87	564	135,269
November	23,396	228	177	47,778	299	30,904	2,226	3,576	22,763	-88	559	131,818
December	24,007	244	142	49,219	342	33,434	2,446	2,856	24,804	-96	582	137,979
Year 2019												
January	25,311	420	129	53,209	365	33,895	2,413	3,244	25,162	-76	574	144,646
February	19,831	189	111	48,633	351	30,472	2,045	3,475	23,191	-79	500	128,719
March	21,336	173	126	49,878	345	30,867	2,366	5,364	25,559	-100	528	136,443
April	15,514	198	125	44,928	337	28,518	2,237	6,234	28,745	-78	503	127,261
May	16,288	222	131	48,821	338	31,708	2,363	6,568	26,229	-63	575	133,179
June	17,865	199	96	58,587	321	31,958	2,151	7,493	23,365	-86	561	142,509
Year to Date												
2017	142,997	1,241	724	248,163	1,910	182,844	13,521	23,571	134,549	-483	3,223	752,260
2018	132,146	3,801	518	282,673	1,914	192,547	12,124	30,858	153,766	-501	3,355	813,202
2019	116,144	1,400	719	304,056	2,058	187,417	13,575	32,377	152,251	-481	3,241	812,757
Rolling 12 Months Ending in June												
2018	293,348	5,841	NM	607,430	3,982	390,167	21,637	56,662	278,180	-1,064	6,659	1,664,116
2019	262,208	2,863	1,464	672,737	3,990	377,697	26,050	62,149	278,245	-1,099	6,292	1,692,596

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 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-June 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	327	147	7	8,343	0	0	240	629	2,605	0	1,020	13,318	9,756	10,386	10,386
Year 2017															
January	41	13	1	681	0	0	27	17	232	0	84	1,098	420	438	438
February	32	8	1	597	0	0	15	27	206	0	78	963	458	485	485
March	33	9	1	652	0	0	15	42	233	0	86	1,071	629	671	671
April	20	5	0	574	0	0	23	46	222	0	87	976	699	745	745
May	19	7	0	619	0	0	24	53	245	0	101	1,069	770	823	823
June	21	5	0	718	0	0	15	61	225	0	89	1,135	777	838	838
July	25	7	0	786	0	0	14	58	237	0	99	1,227	808	866	866
August	23	8	1	766	0	0	17	55	231	0	100	1,202	788	843	843
Sept	27	6	1	701	0	0	14	52	216	0	90	1,107	709	761	761
October	24	6	1	661	0	0	29	47	217	0	94	1,079	632	679	679
November	29	7	1	611	0	0	23	34	228	0	88	1,020	502	536	536
December	35	23	1	674	0	0	23	29	238	0	91	1,114	492	521	521
Year 2018															
January	44	NM	1	673	0	0	23	28	226	0	85	1,124	547	575	575
February	32	8	1	635	0	0	23	35	202	0	73	1,008	599	635	635
March	26	8	1	651	0	0	NM	45	224	0	84	1,063	813	858	858
April	22	9	0	634	0	0	25	57	210	0	82	1,040	900	957	957
May	19	9	0	644	0	0	NM	65	216	0	91	1,070	986	1,052	1,052
June	21	8	0	706	0	0	NM	81	217	0	92	1,148	999	1,080	1,080
July	25	12	0	821	0	0	NM	68	214	0	91	1,251	1,032	1,100	1,100
August	30	10	0	831	0	0	NM	70	219	0	91	1,269	989	1,059	1,059
Sept	29	8	1	749	0	0	14	66	200	0	80	1,148	890	957	957
October	24	8	1	673	0	0	NM	50	217	0	84	1,070	786	836	836
November	27	12	1	641	0	0	NM	34	204	0	78	1,014	624	659	659
December	29	10	1	685	0	0	17	28	255	0	89	1,114	591	618	618
Year 2019															
January	35	14	1	717	0	0	NM	31	267	0	85	1,169	647	678	678
February	29	9	1	661	0	0	NM	33	237	0	72	1,060	688	721	721
March	33	9	1	689	0	0	NM	53	263	0	80	1,148	959	1,012	1,012
April	23	8	1	632	0	0	NM	55	217	0	79	1,035	1,067	1,122	1,122
May	18	8	0	665	0	0	NM	56	210	0	81	1,065	1,139	1,195	1,195
June	14	7	0	681	0	0	21	65	226	0	82	1,096	1,146	1,211	1,211
Year to Date															
2017	165	47	4	3,842	0	0	119	246	1,363	0	525	6,311	3,753	3,999	3,999
2018	163	86	4	3,944	0	0	143	312	1,294	0	508	6,454	4,844	5,156	5,156
2019	152	54	4	4,044	0	0	127	293	1,420	0	479	6,573	5,646	5,938	5,938
Rolling 12 Months Ending in June															
2018	326	NM	8	8,144	0	0	NM	587	2,661	0	1,070	13,203	8,776	9,363	9,363
2019	315	115	8	8,444	0	0	NM	610	2,731	0	991	13,438	10,558	11,168	11,168

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2009-June 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	7,531	527	743	94,012	8,193	0	1,403	92	29,055	0	4,682	146,239	2,641	2,733	2,733
Year 2017															
January	720	43	61	7,907	696	0	126	1	2,405	0	382	12,341	123	124	124
February	632	38	60	7,052	668	0	115	2	2,209	0	364	11,142	137	139	139
March	644	38	82	7,515	702	0	131	3	2,342	0	411	11,868	197	200	200
April	573	35	58	7,266	701	0	146	4	2,265	0	410	11,457	213	217	217
May	616	34	57	7,428	704	0	155	4	2,293	0	396	11,686	239	242	242
June	662	33	71	7,765	668	0	124	5	2,420	0	416	12,164	241	246	246
July	653	34	78	8,367	679	0	115	5	2,540	0	486	12,956	252	257	257
August	655	33	83	8,067	774	0	93	5	2,560	0	484	12,754	246	251	251
Sept	615	34	52	7,191	715	0	75	4	2,281	0	386	11,354	223	227	227
October	637	38	56	7,366	673	0	84	4	2,310	0	370	11,537	201	204	204
November	610	47	61	7,453	649	0	121	3	2,361	0	405	11,710	156	158	158
December	651	55	58	8,242	713	0	99	3	2,550	0	419	12,790	138	141	141
Year 2018															
January	744	82	66	8,119	665	0	112	4	2,531	0	408	12,732	146	150	150
February	664	41	55	7,197	665	0	112	5	2,309	0	339	11,387	154	160	160
March	676	41	56	7,307	718	0	122	7	2,457	0	410	11,796	220	227	227
April	591	35	59	7,356	607	0	119	8	2,316	0	379	11,471	240	248	248
May	632	40	55	7,503	640	0	125	9	2,507	0	405	11,915	266	275	275
June	615	43	77	7,793	680	0	114	11	2,435	0	376	12,144	267	278	278
July	641	50	71	8,271	742	0	113	9	2,546	0	376	12,819	276	286	286
August	633	37	63	8,419	832	0	106	11	2,472	0	416	12,989	268	278	278
Sept	592	38	70	7,876	682	0	103	10	2,301	0	359	12,031	245	255	255
October	547	37	63	7,707	671	0	115	8	2,331	0	397	11,876	223	231	231
November	572	39	44	8,172	634	0	127	6	2,370	0	391	12,357	176	182	182
December	623	43	63	8,292	656	0	135	4	2,480	0	426	12,723	159	163	163
Year 2019															
January	620	45	56	8,587	617	0	95	5	2,389	0	429	12,842	168	173	173
February	554	40	46	7,432	641	0	81	5	2,169	0	321	11,290	178	183	183
March	538	39	45	7,794	766	0	92	8	2,348	0	378	12,008	255	263	263
April	510	43	48	7,529	610	0	85	9	2,214	0	340	11,389	278	287	287
May	523	35	55	7,709	656	0	92	9	2,253	0	356	11,689	309	319	319
June	525	36	57	7,839	628	0	88	11	2,312	0	355	11,850	315	326	326
Year to Date															
2017	3,848	221	388	44,933	4,140	0	796	19	13,934	0	2,379	70,658	1,149	1,168	1,168
2018	3,922	284	369	45,274	3,975	0	704	45	14,555	0	2,317	71,445	1,294	1,338	1,338
2019	3,271	237	307	46,889	3,918	0	533	48	13,685	0	2,179	71,067	1,504	1,551	1,551
Rolling 12 Months Ending in June															
2018	7,744	525	757	91,960	8,177	0	1,291	68	29,158	0	4,867	144,545	2,509	2,577	2,577
2019	6,879	481	681	95,627	8,137	0	1,232	95	28,185	0	4,543	145,861	2,851	2,946	2,946

Coal includes anthracite, bituminous, subbituminous, lignite, and waste coal; synthetic coal and refined coal; and beginning in 2011, coal-derived synthesis gas. Prior to 2011 coal-derived synthesis gas was included in Other Gases.
Petroleum Liquids includes distillate and residual fuel oils, jet fuel, kerosene, waste oil, and beginning in 2011, propane. Prior to 2011 propane was included in Other Gases.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
Other Gas includes blast furnace gas and other manufactured and waste gases derived from fossil fuels. Prior to 2011, Other Gas included propane and synthesis gases.
See the Technical Notes for fuel conversion factors.
Renewable Sources include wood, black liquor, other wood waste, biogenic municipal solid waste, landfill gas, sludge waste, agriculture byproducts, other biomass, geothermal, solar thermal, photovoltaic energy, and wind.
Other includes non-biogenic municipal solid waste, batteries, hydrogen, purchased steam, sulfur, tire-derived fuel, and other miscellaneous energy sources.
Notes: Beginning with 2001 data, non-biogenic municipal solid waste and tire-derived fuels are reclassified as non-renewable energy sources and included in Other. Biogenic municipal solid waste is included in Other Renewable Sources.
See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
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Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
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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.E. Net Generation by Energy Source: Residential Sector, 2014-June 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	17,146
Year 2017	
January	703
February	789
March	1,147
April	1,283
May	1,415
June	1,469
July	1,495
August	1,446
Sept	1,293
October	1,157
November	904
December	841
Year 2018	
January	922
February	1,008
March	1,394
April	1,596
May	1,758
June	1,793
July	1,839
August	1,762
Sept	1,545
October	1,391
November	1,114
December	1,025
Year 2019	
January	1,122
February	1,219
March	1,754
April	1,963
May	2,134
June	2,178
Year to Date	
2017	6,806
2018	8,471
2019	10,370
Rolling 12 Months Ending in June	
2018	15,607
2019	19,045

See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	8,178	8,948	-8.6%	192	195	7,669	8,406	97	97	219	250
Connecticut	3,385	3,352	1.0%	6	6	3,293	3,264	32	30	54	52
Maine	852	915	-6.9%	0	0	710	736	10	15	132	165
Massachusetts	1,550	2,235	-30.7%	49	50	1,438	2,120	45	46	19	20
New Hampshire	1,578	1,640	-3.8%	76	69	1,495	1,567	5	2	2	2
Rhode Island	630	619	1.8%	0	0	613	604	6	5	12	11
Vermont	183	187	-1.8%	61	70	122	116	0	0	0	0
Middle Atlantic	35,922	36,199	-0.8%	2,975	3,142	32,409	32,519	193	204	344	333
New Jersey	5,803	6,541	-11.3%	8	7	5,678	6,416	53	62	63	56
New York	11,113	11,357	-2.1%	2,960	3,122	7,971	8,056	110	108	71	71
Pennsylvania	19,006	18,301	3.9%	7	14	18,760	18,047	30	34	210	206
East North Central	46,847	51,209	-8.5%	16,878	21,114	28,977	29,066	142	163	850	867
Illinois	14,722	15,987	-7.9%	404	548	14,047	15,163	38	39	233	237
Indiana	7,325	9,944	-26.3%	4,957	7,745	2,024	1,854	16	24	327	321
Michigan	9,665	10,445	-7.5%	6,682	7,558	2,818	2,701	53	62	112	123
Ohio	10,187	9,352	8.9%	1,121	1,041	8,989	8,227	23	27	54	58
Wisconsin	4,948	5,481	-9.7%	3,715	4,221	1,099	1,121	11	12	123	128
West North Central	27,413	30,295	-9.5%	21,997	24,625	5,009	5,241	48	53	358	376
Iowa	5,270	5,477	-3.8%	4,034	4,263	1,032	1,004	19	17	185	193
Kansas	4,251	4,690	-9.4%	2,859	2,951	1,386	1,736	NM	NM	4	NM
Minnesota	4,998	5,188	-3.7%	3,848	3,990	1,016	1,048	12	17	121	134
Missouri	6,164	7,526	-18.1%	5,611	7,007	536	500	14	16	2	3
Nebraska	3,001	3,141	-4.5%	2,523	2,745	445	363	1	2	32	30
North Dakota	2,826	3,244	-12.9%	2,356	2,775	456	455	NM	0	13	13
South Dakota	903	1,030	-12.3%	766	894	137	136	NM	NM	0	0
South Atlantic	73,115	75,691	-3.4%	61,048	62,319	10,331	11,657	159	168	1,576	1,547
Delaware	450	402	12.1%	4	2	330	304	0	NM	116	96
District of Columbia	9	7	30.5%	0	0	NM	0	7	7	0	0
Florida	22,952	22,659	1.3%	21,365	21,087	1,163	1,162	5	6	420	404
Georgia	11,627	12,084	-3.8%	9,514	10,044	1,678	1,595	1	NM	434	445
Maryland	3,224	3,575	-9.8%	317	371	2,812	3,090	91	93	4	21
North Carolina	11,547	12,663	-8.8%	9,645	10,897	1,742	1,601	22	27	138	137
South Carolina	8,784	9,208	-4.6%	8,469	8,497	163	542	0	0	152	170
Virginia	9,001	8,770	2.6%	7,230	6,626	1,537	1,899	33	34	201	211
West Virginia	5,520	6,324	-12.7%	4,505	4,796	904	1,464	0	0	111	64
East South Central	30,880	32,959	-6.3%	26,189	27,995	3,921	4,164	17	17	754	783
Alabama	12,512	13,354	-6.3%	8,876	9,666	3,257	3,298	0	0	379	390
Kentucky	6,292	7,278	-13.6%	6,223	7,213	19	16	0	0	50	50
Mississippi	5,573	5,134	8.6%	4,819	4,158	596	817	0	0	157	159
Tennessee	6,504	7,194	-9.6%	6,271	6,958	48	34	17	17	168	186
West South Central	64,759	69,634	-7.0%	22,436	25,038	36,045	38,119	83	95	6,196	6,382
Arkansas	5,138	6,251	-17.8%	4,458	5,509	537	599	NM	NM	140	140
Louisiana	9,504	9,460	0.5%	6,407	5,980	602	1,032	NM	15	2,488	2,433
Oklahoma	7,236	8,797	-17.7%	3,544	4,314	3,626	4,408	0	0	66	75
Texas	42,881	45,125	-5.0%	8,027	9,234	31,280	32,080	73	76	3,501	3,735
Mountain	30,711	32,314	-5.0%	23,788	24,650	6,616	7,379	80	50	226	235
Arizona	10,250	10,212	0.4%	8,553	8,346	1,684	1,852	13	14	0	0
Colorado	4,321	4,987	-13.4%	3,351	3,710	961	1,265	4	5	4	6
Idaho	1,512	1,663	-9.1%	955	1,119	504	496	4	4	49	43
Montana	1,977	2,089	-5.4%	944	1,144	1,030	943	0	0	2	2
Nevada	3,652	3,843	-5.0%	2,472	2,671	1,110	1,127	46	15	24	29
New Mexico	2,957	2,885	2.5%	2,294	1,834	654	1,042	9	8	0	1
Utah	2,988	3,105	-3.8%	2,547	2,646	396	408	4	4	42	47
Wyoming	3,055	3,532	-13.5%	2,671	3,178	277	246	0	0	106	107
Pacific Contiguous	32,445	33,777	-3.9%	19,766	21,349	11,166	10,859	216	233	1,295	1,335
California	18,305	17,424	5.1%	8,104	6,912	8,854	9,115	210	224	1,137	1,172
Oregon	5,067	5,328	-4.9%	3,565	4,246	1,441	1,021	6	6	55	55
Washington	9,073	11,025	-17.7%	8,097	10,191	872	723	NM	2	103	109
Pacific Noncontiguous	1,416	1,372	3.2%	960	885	366	383	59	70	31	34
Alaska	555	528	5.0%	501	468	20	20	24	31	9	9
Hawaii	861	843	2.1%	459	417	346	362	35	39	22	25
U.S. Total	351,685	372,398	-5.6%	196,230	211,313	142,509	147,792	1,096	1,148	11,850	12,144

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 are preliminary. 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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	48,778	50,535	-3.5%	1,310	1,680	45,560	46,757	583	605	1,325	1,494
Connecticut	18,420	18,825	-2.2%	49	44	17,897	18,313	181	179	293	289
Maine	5,370	5,684	-5.5%	0	0	4,478	4,611	69	86	824	987
Massachusetts	11,924	13,058	-8.7%	283	320	11,245	12,321	269	279	128	139
New Hampshire	8,679	8,667	0.1%	508	834	8,121	7,786	36	32	15	16
Rhode Island	3,161	3,131	1.0%	0	0	3,068	3,040	27	27	66	65
Vermont	1,223	1,170	4.5%	469	482	752	687	2	2	0	0
Middle Atlantic	206,054	202,228	1.9%	16,942	17,452	185,935	181,497	1,099	1,164	2,078	2,115
New Jersey	33,468	36,221	-7.6%	56	54	32,776	35,486	279	347	356	333
New York	62,148	62,993	-1.3%	16,812	17,322	44,279	44,600	625	620	432	451
Pennsylvania	110,439	103,014	7.2%	75	76	108,880	101,411	194	197	1,290	1,330
East North Central	287,908	296,914	-3.0%	105,943	118,439	175,803	172,196	917	964	5,246	5,314
Illinois	90,125	92,481	-2.5%	2,434	2,570	86,074	88,223	234	231	1,383	1,457
Indiana	50,422	54,427	-7.4%	35,261	41,353	13,117	11,080	123	131	1,922	1,863
Michigan	56,739	58,321	-2.7%	38,104	39,315	17,494	17,823	376	406	764	778
Ohio	59,963	59,369	1.0%	6,442	10,344	53,052	48,559	108	121	361	345
Wisconsin	30,660	32,315	-5.1%	23,701	24,857	6,066	6,511	76	75	816	872
West North Central	165,388	176,419	-6.3%	129,506	140,840	33,586	33,070	304	307	1,992	2,203
Iowa	31,667	31,542	0.4%	23,428	23,564	7,108	6,813	107	111	1,024	1,054
Kansas	25,193	25,811	-2.4%	15,689	16,019	9,446	9,744	NM	9	51	39
Minnesota	28,885	31,314	-7.8%	21,836	23,819	6,290	6,596	94	96	665	803
Missouri	37,446	41,918	-10.7%	34,591	39,057	2,753	2,755	86	82	17	25
Nebraska	17,355	18,231	-4.8%	13,840	15,397	3,354	2,631	8	9	153	194
North Dakota	19,130	21,221	-9.9%	15,483	17,645	3,563	3,489	NM	0	82	88
South Dakota	5,712	6,382	-10.5%	4,640	5,340	1,072	1,043	NM	NM	0	0
South Atlantic	384,262	392,950	-2.2%	318,214	320,428	55,767	62,397	936	795	9,344	9,330
Delaware	2,202	2,837	-22.4%	7	11	1,564	2,387	3	4	628	436
District of Columbia	48	43	10.6%	0	0	7	0	41	43	0	0
Florida	114,822	115,061	-0.2%	107,155	106,736	5,132	5,733	33	35	2,502	2,557
Georgia	59,303	61,219	-3.1%	49,298	51,000	7,505	7,587	3	5	2,497	2,626
Maryland	19,167	21,442	-10.6%	2,112	1,656	16,404	19,273	530	370	122	143
North Carolina	60,707	65,361	-7.1%	50,859	57,024	8,816	7,238	140	138	892	961
South Carolina	50,001	47,841	4.5%	47,672	44,860	1,412	1,986	2	1	916	994
Virginia	46,678	45,909	1.7%	36,490	34,772	8,819	9,743	185	197	1,184	1,197
West Virginia	31,333	33,236	-5.7%	24,622	24,368	6,108	8,451	0	0	603	417
East South Central	173,198	177,879	-2.6%	147,609	151,107	21,042	22,158	90	106	4,457	4,508
Alabama	68,665	70,122	-2.1%	49,856	50,421	16,590	17,478	0	0	2,219	2,223
Kentucky	34,775	36,959	-5.9%	34,331	36,331	147	345	0	0	297	283
Mississippi	30,404	30,784	-1.2%	25,410	25,658	4,095	4,183	0	6	899	937
Tennessee	39,353	40,014	-1.7%	38,012	38,697	210	153	90	100	1,042	1,065
West South Central	337,779	350,538	-3.6%	109,400	116,995	190,452	196,212	507	435	37,420	36,896
Arkansas	29,439	31,712	-7.2%	26,018	27,564	2,513	3,236	21	21	887	892
Louisiana	46,778	48,369	-3.3%	27,298	29,202	3,853	4,582	72	76	15,555	14,510
Oklahoma	38,865	42,904	-9.4%	17,903	19,029	20,567	23,420	0	0	395	454
Texas	222,697	227,553	-2.1%	38,182	41,199	163,518	164,974	414	339	20,583	21,040
Mountain	174,426	170,743	2.2%	132,787	130,240	39,727	38,676	504	277	1,408	1,550
Arizona	52,595	49,702	5.8%	44,809	43,819	7,713	5,806	74	77	0	0
Colorado	27,143	26,717	1.6%	20,715	19,711	6,374	6,951	19	16	36	38
Idaho	8,411	9,574	-12.2%	5,245	6,277	2,838	2,970	23	24	304	303
Montana	13,193	14,379	-8.2%	5,390	6,835	7,791	7,531	0	0	13	13
Nevada	18,390	18,032	2.0%	12,112	12,006	5,859	5,812	291	68	128	145
New Mexico	15,917	14,140	12.6%	10,326	8,113	5,537	5,971	54	52	1	4
Utah	18,692	16,673	12.1%	16,443	14,380	1,930	1,960	44	40	275	294
Wyoming	20,084	21,526	-6.7%	17,748	19,098	1,685	1,674	0	0	651	753
Pacific Contiguous	183,319	189,002	-3.0%	111,658	121,533	62,782	58,219	1,269	1,414	7,610	7,837
California	98,524	89,826	9.7%	42,263	35,335	48,399	46,354	1,220	1,357	6,641	6,779
Oregon	31,518	34,407	-8.4%	23,241	27,141	7,925	6,898	37	39	314	328
Washington	53,278	64,769	-17.7%	46,153	59,056	6,458	4,967	12	17	655	729
Pacific Noncontiguous	7,970	8,045	-0.9%	5,317	5,439	2,102	2,020	365	387	187	199
Alaska	3,247	3,266	-0.6%	2,912	2,887	117	127	160	199	58	53
Hawaii	4,723	4,779	-1.2%	2,404	2,552	1,985	1,893	205	188	129	146
U.S. Total	1,969,083	2,015,252	-2.3%	1,078,685	1,124,152	812,757	813,202	6,573	6,454	71,067	71,445

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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 1.4.A. Utility Scale Facility Net Generation from Coal by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	37	19	96.1%	35	14	1	2	0	0	NM	NM
Connecticut	-1	0	--	0	0	-1	0	0	0	0	0
Maine	3	5	-42.9%	0	0	2	2	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	35	14	157.4%	35	14	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	2,837	3,830	-25.9%	0	0	2,824	3,816	0	0	13	14
New Jersey	87	92	-5.9%	0	0	87	92	0	0	0	0
New York	1	13	-94.6%	0	0	1	13	0	0	0	0
Pennsylvania	2,749	3,725	-26.2%	0	0	2,736	3,711	0	0	13	14
East North Central	16,912	22,944	-26.3%	9,692	14,086	7,055	8,678	NM	6	162	175
Illinois	3,623	5,273	-31.3%	260	363	3,228	4,767	NM	NM	133	141
Indiana	4,131	6,857	-39.7%	3,895	6,631	236	222	1	4	0	0
Michigan	3,317	4,036	-17.8%	3,278	3,991	36	39	0	0	NM	NM
Ohio	4,014	4,182	-4.0%	457	532	3,556	3,650	0	0	1	0
Wisconsin	1,827	2,598	-29.7%	1,802	2,569	0	0	0	0	25	28
West North Central	13,179	15,772	-16.4%	12,966	15,537	0	0	5	4	207	230
Iowa	2,140	2,514	-14.9%	2,001	2,367	0	0	5	4	134	143
Kansas	1,435	1,412	1.6%	1,435	1,412	0	0	0	0	0	0
Minnesota	1,647	1,815	-9.2%	1,615	1,766	0	0	0	0	33	49
Missouri	4,161	5,580	-25.4%	4,161	5,580	0	0	0	0	0	0
Nebraska	1,772	2,051	-13.6%	1,740	2,020	0	0	0	0	32	30
North Dakota	1,811	2,171	-16.6%	1,802	2,162	0	0	0	0	9	NM
South Dakota	212	230	-7.9%	212	230	0	0	0	0	0	0
South Atlantic	14,665	19,290	-24.0%	13,667	17,104	960	2,127	0	2	38	57
Delaware	1	39	-96.7%	0	0	1	39	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,140	2,866	-25.3%	2,136	2,855	0	0	0	0	NM	12
Georgia	2,651	3,259	-18.6%	2,642	3,244	0	0	0	0	NM	15
Maryland	337	841	-59.9%	0	0	337	837	0	0	0	4
North Carolina	2,804	3,732	-24.9%	2,786	3,712	7	8	0	2	10	10
South Carolina	1,285	1,964	-34.6%	1,284	1,963	0	0	0	0	0	1
Virginia	429	659	-35.0%	408	615	7	28	0	0	14	16
West Virginia	5,018	5,930	-15.4%	4,411	4,715	607	1,215	0	0	0	0
East South Central	8,316	11,763	-29.3%	8,018	11,415	NM	290	0	0	38	58
Alabama	2,194	3,272	-32.9%	2,191	3,268	0	0	0	0	NM	4
Kentucky	4,735	5,672	-16.5%	4,735	5,672	0	0	0	0	0	0
Mississippi	NM	644	NM	224	354	NM	290	0	0	0	0
Tennessee	903	2,176	-58.5%	869	2,121	0	0	0	0	34	54
West South Central	12,048	15,999	-24.7%	6,466	9,035	5,571	6,941	0	0	11	23
Arkansas	2,214	2,883	-23.2%	1,813	2,427	400	453	0	0	1	3
Louisiana	692	1,343	-48.5%	670	845	22	498	0	0	0	0
Oklahoma	745	1,309	-43.1%	703	1,143	32	146	0	0	10	20
Texas	8,398	10,465	-19.8%	3,280	4,620	5,117	5,845	0	0	0	0
Mountain	10,282	11,598	-11.3%	9,282	10,642	968	927	0	0	31	29
Arizona	1,904	2,529	-24.7%	1,904	2,529	0	0	0	0	0	0
Colorado	1,765	2,127	-17.0%	1,765	2,127	0	0	0	0	0	1
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	825	770	7.1%	24	21	801	749	0	0	0	0
Nevada	189	252	-25.0%	121	172	68	80	0	0	0	0
New Mexico	1,351	1,004	34.6%	1,351	1,004	0	0	0	0	0	0
Utah	1,747	1,925	-9.3%	1,709	1,887	37	38	0	0	0	0
Wyoming	2,500	2,989	-16.4%	2,408	2,902	62	61	0	0	30	26
Pacific Contiguous	146	140	4.2%	0	30	122	84	0	0	24	26
California	23	24	-6.3%	0	0	0	0	0	0	23	24
Oregon	0	30	-100.0%	0	30	0	0	0	0	0	0
Washington	123	86	43.1%	0	0	122	84	0	0	1	2
Pacific Noncontiguous	143	153	-6.5%	NM	NM	103	122	6	NM	0	0
Alaska	55	NM	NM	NM	NM	16	16	6	NM	0	0
Hawaii	87	106	-17.7%	0	0	87	106	0	0	0	0
U.S. Total	78,564	101,509	-22.6%	60,160	77,886	17,865	22,987	14	21	525	615

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	306	734	-58.3%	207	461	91	259	0	0	NM	14
Connecticut	60	228	-73.6%	0	0	60	228	0	0	0	0
Maine	39	45	-13.0%	0	0	30	31	0	0	NM	14
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	207	461	-55.2%	207	461	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	20,708	23,641	-12.4%	0	0	20,624	23,538	0	0	84	103
New Jersey	532	620	-14.1%	0	0	532	620	0	0	0	0
New York	343	398	-14.0%	0	0	343	387	0	0	0	11
Pennsylvania	19,833	22,622	-12.3%	0	0	19,749	22,531	0	0	84	92
East North Central	113,946	131,750	-13.5%	66,015	79,780	46,837	50,727	36	40	1,058	1,203
Illinois	25,083	29,357	-14.6%	1,836	1,918	22,411	26,507	16	20	821	912
Indiana	31,230	37,650	-17.0%	29,413	35,859	1,798	1,771	19	20	0	0
Michigan	19,462	20,383	-4.5%	19,275	20,098	158	227	0	0	29	58
Ohio	24,984	28,649	-12.8%	2,511	6,423	22,470	22,222	0	0	2	4
Wisconsin	13,186	15,710	-16.1%	12,980	15,482	0	0	0	0	207	229
West North Central	78,648	89,308	-11.9%	77,455	87,937	0	0	39	42	1,154	1,330
Iowa	11,357	12,673	-10.4%	10,572	11,864	0	0	33	36	752	773
Kansas	8,035	9,275	-13.4%	8,035	9,275	0	0	0	0	0	0
Minnesota	9,213	10,713	-14.0%	9,015	10,405	0	0	1	1	198	307
Missouri	27,604	30,917	-10.7%	27,599	30,912	0	0	5	5	0	0
Nebraska	9,307	10,884	-14.5%	9,155	10,690	0	0	0	0	153	194
North Dakota	11,755	13,529	-13.1%	11,703	13,473	0	0	0	0	52	56
South Dakota	1,377	1,318	4.5%	1,377	1,318	0	0	0	0	0	0
South Atlantic	73,391	95,746	-23.3%	66,053	81,762	7,017	13,575	27	23	295	385
Delaware	30	127	-76.1%	0	0	30	127	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	9,734	14,015	-30.5%	9,701	13,954	0	7	0	0	33	54
Georgia	11,968	14,011	-14.6%	11,901	13,912	0	0	0	0	67	99
Maryland	2,281	6,147	-62.9%	0	0	2,249	6,109	0	0	32	38
North Carolina	12,169	16,771	-27.4%	12,035	16,625	42	52	23	18	70	76
South Carolina	6,965	9,075	-23.2%	6,959	9,063	0	0	0	0	6	11
Virginia	1,502	4,837	-69.0%	1,363	4,401	48	325	4	5	88	106
West Virginia	28,743	30,761	-6.6%	24,095	23,807	4,648	6,954	0	0	0	0
East South Central	48,335	57,015	-15.2%	46,681	55,243	1,405	1,400	0	0	248	371
Alabama	12,716	16,387	-22.4%	12,694	16,364	0	0	0	0	21	23
Kentucky	25,734	27,212	-5.4%	25,734	27,212	0	0	0	0	0	0
Mississippi	2,424	2,421	0.1%	1,019	1,020	1,405	1,400	0	0	0	0
Tennessee	7,462	10,996	-32.1%	7,234	10,647	0	0	0	0	227	349
West South Central	64,725	75,448	-14.2%	34,670	41,166	29,975	34,136	0	0	81	145
Arkansas	10,913	12,820	-14.9%	9,192	10,391	1,701	2,405	0	0	20	24
Louisiana	3,873	5,166	-25.0%	2,706	3,231	1,167	1,935	0	0	0	0
Oklahoma	4,522	7,043	-35.8%	4,373	6,220	88	702	0	0	60	121
Texas	45,417	50,419	-9.9%	18,398	21,325	27,018	29,094	0	0	0	0
Mountain	65,799	66,115	-0.5%	58,475	58,929	7,138	6,971	0	0	186	216
Arizona	11,371	14,009	-18.8%	11,371	14,009	0	0	0	0	0	0
Colorado	11,999	11,902	0.8%	11,995	11,895	0	0	0	0	4	7
Idaho	NM	13	NM	0	0	0	0	0	0	NM	13
Montana	6,268	6,110	2.6%	140	92	6,127	6,016	0	0	1	2
Nevada	1,276	611	108.8%	814	201	462	410	0	0	0	0
New Mexico	6,664	4,846	37.5%	6,664	4,846	0	0	0	0	0	0
Utah	11,563	10,772	7.3%	11,358	10,567	205	205	0	0	0	0
Wyoming	16,647	17,852	-6.7%	16,133	17,319	345	340	0	0	169	194
Pacific Contiguous	3,327	988	236.7%	805	30	2,366	802	0	0	156	157
California	144	145	-1.1%	0	0	0	0	0	0	144	145
Oregon	805	30	NM	805	30	0	0	0	0	0	0
Washington	2,379	813	192.5%	0	0	2,366	802	0	0	13	12
Pacific Noncontiguous	946	932	1.6%	204	136	692	738	50	58	0	0
Alaska	346	292	18.3%	204	136	91	98	50	58	0	0
Hawaii	600	639	-6.1%	0	0	600	639	0	0	0	0
U.S. Total	470,131	541,676	-13.2%	350,565	405,444	116,144	132,146	152	163	3,271	3,922

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	11	52	-79.3%	2	4	6	46	NM	2	NM	NM
Connecticut	NM	43	NM	0	0	NM	43	NM	NM	0	0
Maine	2	1	18.8%	0	0	NM	NM	0	0	NM	NM
Massachusetts	NM	5	NM	NM	2	NM	2	NM	NM	0	0
New Hampshire	1	2	-28.0%	1	1	NM	NM	0	1	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	0	0	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	11	45	-75.9%	NM	10	6	33	NM	NM	2	2
New Jersey	NM	6	NM	0	0	NM	6	0	0	0	0
New York	5	18	-70.2%	NM	10	NM	6	NM	NM	1	1
Pennsylvania	5	22	-79.0%	0	0	3	21	1	0	NM	1
East North Central	54	42	27.9%	36	22	17	18	0	1	1	2
Illinois	4	4	-12.2%	1	1	3	4	0	0	0	0
Indiana	18	11	61.4%	18	10	0	0	0	0	0	2
Michigan	10	8	29.7%	10	7	0	0	NM	0	NM	NM
Ohio	20	15	32.5%	6	1	14	14	0	0	0	0
Wisconsin	1	3	-64.3%	1	3	0	0	0	0	NM	NM
West North Central	25	38	-34.5%	24	37	NM	NM	0	0	0	0
Iowa	11	9	12.9%	11	9	0	0	0	0	0	0
Kansas	5	6	-16.5%	5	6	0	0	0	0	0	0
Minnesota	2	5	-48.7%	2	4	NM	NM	0	0	0	0
Missouri	3	14	-77.2%	3	14	0	0	0	0	0	0
Nebraska	1	NM	NM	1	NM	0	0	0	0	0	0
North Dakota	2	2	2.1%	2	2	0	0	0	0	0	0
South Dakota	NM	1	NM	NM	1	0	0	NM	NM	0	0
South Atlantic	116	220	-47.4%	95	187	9	12	4	5	8	NM
Delaware	NM	3	NM	0	0	NM	3	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	45	46	-2.3%	44	43	0	NM	0	0	NM	NM
Georgia	12	15	-23.1%	5	5	NM	NM	0	0	6	NM
Maryland	4	5	-22.6%	0	0	4	5	NM	NM	0	0
North Carolina	18	20	-9.7%	17	17	NM	NM	NM	NM	NM	NM
South Carolina	7	NM	NM	7	NM	0	0	NM	0	0	0
Virginia	15	108	-86.6%	9	100	3	4	3	4	NM	NM
West Virginia	14	17	-17.0%	14	17	0	0	0	0	0	0
East South Central	28	22	28.0%	27	20	NM	NM	0	0	NM	NM
Alabama	1	4	-74.0%	1	3	NM	NM	0	0	NM	NM
Kentucky	6	6	-9.4%	6	6	0	0	0	0	0	0
Mississippi	1	2	-33.0%	1	2	0	0	0	0	0	0
Tennessee	20	9	121.6%	20	9	0	0	0	0	0	0
West South Central	10	11	-6.3%	9	8	0	2	0	0	1	1
Arkansas	3	2	34.0%	3	2	0	0	0	0	0	0
Louisiana	1	NM	NM	1	NM	0	0	0	0	0	0
Oklahoma	1	1	21.9%	1	1	0	0	0	0	0	0
Texas	4	5	-19.9%	4	3	0	2	0	0	0	1
Mountain	18	19	-2.5%	16	16	2	2	0	0	0	0
Arizona	5	4	38.9%	5	4	0	0	NM	0	0	0
Colorado	1	1	-60.8%	1	1	0	0	0	0	0	0
Idaho	0	0	840.0%	0	0	0	0	0	0	0	0
Montana	2	2	-0.9%	NM	NM	2	2	0	0	0	0
Nevada	2	1	56.9%	1	1	0	0	0	0	0	0
New Mexico	2	1	90.8%	2	1	0	0	0	0	0	0
Utah	2	2	-23.3%	2	2	0	0	0	0	0	0
Wyoming	5	7	-28.6%	5	7	0	0	0	0	0	0
Pacific Contiguous	7	7	-4.3%	3	4	3	2	NM	NM	NM	2
California	3	5	-33.9%	3	3	0	1	0	0	0	0
Oregon	NM	1	NM	0	1	0	0	NM	NM	0	0
Washington	4	2	94.7%	NM	NM	3	0	0	0	NM	2
Pacific Noncontiguous	675	606	11.3%	497	439	155	149	1	0	22	18
Alaska	64	49	32.7%	61	45	0	0	0	NM	4	3
Hawaii	610	558	9.4%	437	393	155	149	1	0	18	15
U.S. Total	954	1,062	-10.2%	712	747	199	263	7	8	36	43

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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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	142	1,145	-87.6%	17	174	94	921	20	29	11	NM
Connecticut	48	326	-85.3%	2	NM	41	320	3	NM	2	1
Maine	14	173	-91.7%	0	0	6	153	1	1	8	NM
Massachusetts	54	427	-87.3%	NM	80	38	332	7	NM	1	1
New Hampshire	15	156	-90.6%	5	87	NM	59	8	10	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	2	1	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	477	1,993	-76.1%	158	535	295	1,414	NM	NM	15	25
New Jersey	43	246	-82.5%	1	1	41	239	1	5	1	1
New York	348	1,327	-73.8%	157	532	174	762	NM	NM	12	21
Pennsylvania	85	420	-79.6%	0	2	81	413	2	3	3	NM
East North Central	254	342	-25.6%	143	166	102	160	1	3	8	13
Illinois	24	38	-37.6%	3	NM	20	30	NM	0	0	0
Indiana	72	65	9.5%	67	55	0	0	0	0	4	10
Michigan	45	60	-25.1%	43	57	0	0	1	2	1	1
Ohio	97	164	-41.1%	20	34	75	128	0	0	3	2
Wisconsin	17	14	21.7%	10	13	7	1	0	0	NM	NM
West North Central	178	197	-9.7%	173	184	NM	NM	1	1	1	1
Iowa	54	60	-10.7%	53	60	0	0	0	0	0	0
Kansas	30	NM	NM	30	NM	0	0	0	0	0	0
Minnesota	21	NM	NM	16	13	NM	NM	1	1	1	0
Missouri	41	55	-24.7%	41	55	0	0	0	0	0	0
Nebraska	7	4	60.9%	7	4	0	0	0	0	0	0
North Dakota	22	17	30.5%	22	17	0	0	0	0	0	0
South Dakota	3	3	2.7%	3	3	0	0	NM	NM	0	0
South Atlantic	596	2,208	-73.0%	437	1,506	91	596	17	28	51	78
Delaware	14	140	-90.2%	0	6	14	134	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	152	302	-49.7%	141	276	1	12	0	0	10	NM
Georgia	64	150	-57.3%	30	NM	NM	46	1	4	31	NM
Maryland	37	214	-82.6%	0	2	36	207	NM	NM	1	2
North Carolina	117	400	-70.7%	110	367	3	NM	NM	NM	4	NM
South Carolina	44	226	-80.7%	38	182	2	38	NM	NM	4	6
Virginia	110	681	-83.8%	60	530	34	128	14	21	2	NM
West Virginia	58	95	-39.2%	57	85	0	10	0	0	0	0
East South Central	145	153	-5.3%	137	119	1	25	0	0	7	NM
Alabama	11	47	-76.1%	6	16	1	24	0	0	4	NM
Kentucky	38	43	-12.4%	38	43	0	0	0	0	0	0
Mississippi	9	NM	NM	8	NM	0	0	0	0	1	3
Tennessee	87	53	65.6%	85	52	0	0	0	0	2	1
West South Central	73	NM	NM	53	NM	16	NM	0	0	5	5
Arkansas	26	NM	NM	17	NM	7	3	0	0	1	2
Louisiana	7	NM	NM	7	NM	0	0	0	0	0	0
Oklahoma	11	8	29.2%	10	8	0	0	0	0	1	1
Texas	30	36	-15.2%	19	24	8	NM	0	0	2	2
Mountain	103	91	13.4%	95	83	8	9	0	0	0	0
Arizona	30	28	6.6%	30	28	0	0	NM	0	0	0
Colorado	5	6	-22.1%	5	6	0	0	0	0	0	0
Idaho	0	0	641.9%	0	0	0	0	0	0	0	0
Montana	8	7	12.3%	NM	NM	6	7	0	0	0	0
Nevada	6	3	81.8%	5	2	1	1	0	0	0	0
New Mexico	18	7	163.6%	18	7	0	0	0	0	0	0
Utah	19	19	-2.5%	18	19	0	1	0	0	0	0
Wyoming	18	21	-12.6%	18	21	0	0	0	0	0	0
Pacific Contiguous	38	36	4.6%	19	17	6	4	NM	NM	12	15
California	27	29	-8.4%	17	16	1	2	0	NM	8	10
Oregon	NM	NM	NM	1	1	0	0	NM	NM	0	0
Washington	10	7	57.0%	NM	NM	5	1	0	0	NM	5
Pacific Noncontiguous	3,549	3,556	-0.2%	2,631	2,785	784	649	7	4	126	118
Alaska	388	397	-2.4%	363	373	0	0	4	3	21	22
Hawaii	3,161	3,158	0.1%	2,268	2,412	784	649	3	1	105	96
U.S. Total	5,556	9,821	-43.4%	3,864	5,650	1,400	3,801	54	86	237	284

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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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	12	14	-11.4%	0	0	0	0	0	0	12	14
New Jersey	5	6	-22.8%	0	0	0	0	0	0	5	6
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	89	138	-35.9%	8	110	67	NM	0	0	13	14
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	12	112	-89.0%	0	100	0	0	0	0	12	12
Ohio	68	NM	NM	0	0	67	NM	0	0	0	2
Wisconsin	8	10	-19.6%	8	10	0	0	0	0	0	0
West North Central	5	0	934.6%	0	0	0	0	0	0	5	0
Iowa	5	0	934.6%	0	0	0	0	0	0	5	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	134	182	-26.5%	116	160	0	0	0	0	17	NM
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	116	160	-27.2%	116	160	0	0	0	0	0	0
Georgia	17	NM	NM	0	0	0	0	0	0	17	NM
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	284	427	-33.5%	274	400	0	0	0	0	10	26
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	274	418	-34.5%	274	400	0	0	0	0	0	18
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	10	9	16.3%	0	0	0	0	0	0	10	9
Mountain	28	4	590.0%	0	0	28	4	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	28	4	590.0%	0	0	28	4	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	551	765	-27.9%	398	670	96	NM	0	0	57	77

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Notes: See Glossary for definitions. Values are preliminary. 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 1.6.B. Utility Scale Facility Net Generation from Petroleum Coke

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	86	70	21.8%	0	0	0	0	0	0	86	70
New Jersey	33	22	47.3%	0	0	0	0	0	0	33	22
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	53	48	9.9%	0	0	0	0	0	0	53	48
East North Central	923	944	-2.2%	382	572	479	334	0	0	62	38
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	404	559	-27.8%	343	526	0	0	0	0	60	33
Ohio	480	339	41.8%	0	0	479	334	0	0	2	5
Wisconsin	39	47	-16.4%	39	47	0	0	0	0	0	0
West North Central	9	40	-77.9%	0	0	0	0	4	4	5	36
Iowa	9	40	-77.9%	0	0	0	0	4	4	5	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	779	812	-4.0%	682	709	0	0	0	0	97	103
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	682	709	-3.9%	682	709	0	0	0	0	0	0
Georgia	97	103	-5.1%	0	0	0	0	0	0	97	103
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	1,881	2,159	-12.9%	1,824	2,037	0	0	0	0	57	122
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,830	2,121	-13.7%	1,824	2,037	0	0	0	0	6	83
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	52	38	34.9%	0	0	0	0	0	0	52	38
Mountain	240	184	30.6%	0	0	240	184	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	240	184	30.6%	0	0	240	184	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	3,918	4,209	-6.9%	2,888	3,319	719	518	4	4	307	369

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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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	3,959	4,235	-6.5%	NM	23	3,752	4,022	81	76	113	114
Connecticut	1,721	1,658	3.8%	3	3	1,632	1,573	32	30	54	52
Maine	129	190	-32.2%	0	0	100	157	3	3	26	30
Massachusetts	1,175	1,380	-14.8%	NM	NM	1,107	1,305	40	39	18	19
New Hampshire	349	422	-17.4%	0	2	345	417	1	0	2	2
Rhode Island	586	585	0.0%	0	0	569	570	5	4	12	11
Vermont	0	0	2.8%	0	0	0	0	0	0	0	0
Middle Atlantic	15,793	14,215	11.1%	883	1,047	14,615	12,875	89	92	207	200
New Jersey	3,475	3,215	8.1%	NM	NM	3,416	3,152	10	17	34	33
New York	3,988	4,368	-8.7%	869	1,034	3,002	3,218	69	66	49	51
Pennsylvania	8,331	6,632	25.6%	0	0	8,197	6,506	9	9	124	117
East North Central	12,303	10,994	11.9%	4,029	3,752	7,861	6,855	117	123	296	263
Illinois	1,448	1,445	0.2%	136	176	1,220	1,176	36	36	56	56
Indiana	2,401	2,382	0.8%	973	1,032	1,280	1,224	12	16	136	109
Michigan	2,448	2,412	1.5%	702	789	1,657	1,537	44	41	45	46
Ohio	4,267	3,310	28.9%	629	480	3,600	2,790	22	25	16	15
Wisconsin	1,739	1,445	20.4%	1,588	1,275	104	127	3	6	43	37
West North Central	2,803	2,968	-5.5%	2,322	2,540	395	339	29	28	57	60
Iowa	682	775	-12.0%	629	719	0	NM	11	9	42	47
Kansas	405	490	-17.4%	401	489	0	0	0	0	4	NM
Minnesota	840	790	6.4%	723	668	103	105	6	9	8	8
Missouri	687	697	-1.3%	382	449	292	235	12	10	2	3
Nebraska	68	91	-24.6%	68	91	0	0	1	0	0	0
North Dakota	58	53	10.3%	57	52	0	0	0	0	1	1
South Dakota	62	72	-13.6%	62	72	0	0	0	0	0	0
South Atlantic	35,924	33,577	7.0%	29,839	27,315	5,540	5,796	99	101	446	365
Delaware	423	322	31.5%	3	1	318	251	0	0	102	70
District of Columbia	3	2	12.9%	0	0	0	0	3	2	0	0
Florida	17,499	16,038	9.1%	16,544	15,145	816	764	1	1	138	128
Georgia	5,218	4,981	4.8%	3,789	3,622	1,375	1,303	0	0	54	56
Maryland	1,213	1,130	7.4%	316	369	806	663	88	90	4	8
North Carolina	3,519	3,875	-9.2%	2,723	3,195	776	659	NM	8	12	13
South Carolina	2,341	2,193	6.8%	2,288	1,753	44	429	0	0	10	11
Virginia	5,529	4,934	12.0%	4,159	3,228	1,304	1,644	1	1	65	62
West Virginia	180	102	76.7%	17	1	102	83	0	0	61	17
East South Central	11,856	11,838	0.2%	8,095	7,869	3,518	3,742	16	16	227	211
Alabama	5,297	5,228	1.3%	1,994	1,886	3,197	3,236	0	0	106	107
Kentucky	1,158	1,115	3.9%	1,122	1,083	16	14	0	0	19	18
Mississippi	3,909	4,336	-9.8%	3,575	3,808	303	491	0	0	30	37
Tennessee	1,493	1,160	28.7%	1,404	1,092	2	2	16	16	71	50
West South Central	36,412	34,710	4.9%	13,113	12,338	17,722	16,723	77	86	5,499	5,563
Arkansas	1,906	1,920	-0.7%	1,776	1,785	103	110	NM	NM	24	23
Louisiana	6,796	5,667	19.9%	4,163	3,219	496	450	NM	15	2,130	1,982
Oklahoma	4,221	4,534	-6.9%	2,548	2,850	1,640	1,658	0	0	33	26
Texas	23,489	22,589	4.0%	4,626	4,484	15,484	14,505	67	68	3,312	3,531
Mountain	10,028	9,918	1.1%	8,310	7,558	1,572	2,209	31	32	116	119
Arizona	4,192	3,588	16.8%	3,104	2,311	1,076	1,265	11	13	0	0
Colorado	1,423	1,675	-15.1%	1,267	1,403	155	270	0	0	2	2
Idaho	296	260	13.8%	146	133	134	116	3	3	13	NM
Montana	22	24	-7.4%	20	24	NM	NM	0	0	0	0
Nevada	2,367	2,506	-5.6%	2,154	2,289	184	182	5	6	24	29
New Mexico	914	1,157	-21.0%	890	779	NM	369	9	8	0	1
Utah	739	640	15.5%	705	601	6	6	3	2	25	31
Wyoming	76	69	10.5%	24	19	0	0	0	0	52	50
Pacific Contiguous	7,493	8,118	-7.7%	2,867	3,260	3,611	3,816	142	150	874	891
California	5,340	6,527	-18.2%	1,646	2,207	2,695	3,294	138	145	861	881
Oregon	1,230	811	51.6%	631	535	589	267	3	4	7	6
Washington	923	779	18.5%	590	518	328	256	0	2	5	NM
Pacific Noncontiguous	282	249	13.0%	276	244	0	0	0	0	6	6
Alaska	282	249	13.0%	276	244	0	0	0	0	6	6
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	136,853	130,823	4.6%	69,747	65,945	58,587	56,379	681	706	7,839	7,793

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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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	21,901	21,570	1.5%	55	83	20,743	20,377	449	448	654	662
Connecticut	9,563	8,381	14.1%	18	20	9,077	7,897	178	176	291	288
Maine	760	919	-17.4%	0	0	587	740	15	15	157	164
Massachusetts	7,568	8,584	-11.8%	NM	NM	7,176	8,163	230	231	125	131
New Hampshire	1,117	818	36.5%	1	3	1,096	797	5	4	15	16
Rhode Island	2,893	2,867	0.9%	0	0	2,806	2,780	21	22	66	65
Vermont	1	1	36.2%	0	0	0	0	1	0	0	0
Middle Atlantic	82,332	71,373	15.4%	4,443	4,527	76,165	65,091	519	565	1,204	1,190
New Jersey	18,550	16,830	10.2%	NM	76	18,237	16,462	57	100	190	192
New York	20,856	21,111	-1.2%	4,377	4,446	15,784	15,981	397	393	298	290
Pennsylvania	42,926	33,433	28.4%	2	5	42,143	32,648	66	72	716	708
East North Central	69,671	62,129	12.1%	22,428	21,359	44,723	38,306	721	721	1,798	1,744
Illinois	6,965	7,017	-0.7%	546	589	5,891	5,886	212	205	315	336
Indiana	13,936	11,909	17.0%	5,364	5,044	7,717	6,054	83	89	773	723
Michigan	14,808	15,987	-7.4%	3,909	4,886	10,268	10,493	297	283	334	325
Ohio	24,269	19,385	25.2%	3,727	3,720	20,327	15,447	101	114	114	105
Wisconsin	9,693	7,831	23.8%	8,882	7,120	521	427	28	29	261	255
West North Central	13,586	14,295	-5.0%	11,396	12,182	1,647	1,595	167	156	376	362
Iowa	3,351	3,647	-8.1%	3,058	3,365	0	NM	50	51	243	231
Kansas	1,406	1,909	-26.3%	1,357	1,872	0	0	0	0	49	36
Minnesota	4,632	4,309	7.5%	4,021	3,652	493	539	53	51	64	67
Missouri	3,184	3,222	-1.2%	1,953	2,092	1,153	1,056	62	52	16	23
Nebraska	336	492	-31.8%	334	490	0	0	2	2	0	0
North Dakota	313	296	5.9%	308	291	0	0	0	0	5	5
South Dakota	364	420	-13.2%	364	420	0	0	0	0	0	0
South Atlantic	177,917	165,172	7.7%	147,007	134,915	27,830	27,780	587	425	2,492	2,052
Delaware	2,019	2,400	-15.9%	4	1	1,471	2,074	0	0	544	325
District of Columbia	14	14	2.2%	0	0	0	0	14	14	0	0
Florida	84,205	79,304	6.2%	80,388	75,127	3,018	3,422	10	10	789	745
Georgia	25,923	25,296	2.5%	19,506	18,884	6,099	6,100	0	0	317	312
Maryland	7,174	5,672	26.5%	2,107	1,648	4,515	3,624	511	351	41	48
North Carolina	19,779	20,064	-1.4%	15,574	17,206	4,081	2,746	44	42	81	69
South Carolina	11,058	8,524	29.7%	10,196	7,062	801	1,396	0	0	61	66
Virginia	27,091	23,387	15.8%	19,159	14,890	7,553	8,133	7	7	371	356
West Virginia	654	512	27.8%	72	96	293	285	0	0	289	131
East South Central	62,153	65,041	-4.4%	41,747	43,643	18,952	20,099	87	103	1,367	1,195
Alabama	26,500	27,609	-4.0%	9,585	9,848	16,284	17,154	0	0	631	607
Kentucky	6,540	7,148	-8.5%	6,286	6,719	135	333	0	0	119	95
Mississippi	21,577	25,099	-14.0%	18,822	22,265	2,524	2,604	0	6	231	224
Tennessee	7,537	5,186	45.3%	7,054	4,811	9	9	87	98	386	269
West South Central	169,503	167,611	1.1%	55,790	54,929	80,197	80,233	459	385	33,058	32,064
Arkansas	8,442	9,943	-15.1%	7,621	9,120	636	646	NM	18	167	159
Louisiana	33,403	29,774	12.2%	17,912	15,692	2,150	2,141	72	76	13,270	11,866
Oklahoma	18,477	18,926	-2.4%	11,469	10,996	6,821	7,765	0	0	187	165
Texas	109,180	108,968	0.2%	18,788	19,121	70,589	69,681	369	292	19,434	19,875
Mountain	49,984	42,558	17.4%	39,348	33,773	9,701	7,821	212	207	723	757
Arizona	18,957	12,972	46.1%	13,917	9,842	4,972	3,058	68	73	0	0
Colorado	8,023	7,861	2.1%	6,816	6,760	1,196	1,092	1	0	10	9
Idaho	1,530	1,080	41.7%	649	365	783	631	19	20	80	64
Montana	202	171	18.3%	128	151	72	18	0	0	1	1
Nevada	11,169	11,882	-6.0%	9,967	10,690	1,042	1,016	33	31	127	144
New Mexico	5,064	5,033	0.6%	3,412	3,010	1,599	1,968	52	50	1	4
Utah	4,582	3,135	46.1%	4,311	2,859	36	37	39	33	195	206
Wyoming	458	424	8.0%	148	95	1	1	0	0	309	328
Pacific Contiguous	48,508	46,131	5.2%	18,386	18,610	24,099	21,370	842	934	5,181	5,217
California	35,108	35,770	-1.9%	11,440	12,832	17,766	16,920	813	899	5,089	5,119
Oregon	8,607	6,406	34.4%	4,138	3,570	4,400	2,768	22	23	47	44
Washington	4,793	3,955	21.2%	2,808	2,208	1,933	1,682	7	12	46	53
Pacific Noncontiguous	1,649	1,475	11.8%	1,612	1,445	0	0	0	0	36	30
Alaska	1,649	1,475	11.8%	1,612	1,445	0	0	0	0	36	30
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	697,203	657,356	6.1%	342,214	325,465	304,056	282,673	4,044	3,944	46,889	45,274

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values are preliminary. 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-June 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	1,213,763	147,486	101,132	5,454	178	1,468,013
Year 2017						
January	83,813	7,936	3,325	330	71	95,473
February	72,179	7,254	2,933	269	60	82,694
March	80,222	9,299	5,134	303	65	95,022
April	74,282	8,063	5,716	304	53	88,418
May	82,415	8,806	6,458	319	69	98,067
June	97,888	9,970	9,002	380	76	117,317
July	121,419	12,091	12,908	481	94	146,994
August	118,900	11,160	10,591	464	93	141,209
Sept	98,230	10,132	9,276	398	76	118,112
October	88,194	9,451	8,749	382	75	106,852
November	81,319	8,336	4,804	359	65	94,883
December	96,089	9,235	5,595	382	71	111,373
Year 2018						
January	92,784	10,662	6,225	364	11	110,046
February	85,087	6,493	4,135	277	10	96,002
March	89,748	9,047	5,777	350	10	104,933
April	82,019	10,962	6,097	355	13	99,446
May	92,432	13,273	9,933	451	18	116,107
June	107,052	13,121	10,169	464	17	130,823
July	130,955	20,479	15,009	784	23	167,250
August	130,825	17,728	13,106	699	19	162,377
Sept	116,193	15,302	10,711	549	18	142,772
October	101,201	13,223	9,248	482	17	124,171
November	90,847	9,697	6,197	355	11	107,109
December	94,620	7,499	4,525	323	11	106,978
Year 2019						
January	104,656	8,402	5,496	371	10	118,935
February	97,378	7,604	5,041	396	9	110,428
March	97,557	8,138	6,475	394	10	112,574
April	84,986	10,332	7,227	377	14	102,936
May	95,426	10,588	9,061	389	15	115,478
June	114,599	11,534	10,248	458	16	136,853

Values for 2017 and prior years are final. Values for 2018 and 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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 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	50	52	-4.8%	0	0	NM	0	0	0	50	52
New Jersey	18	16	14.3%	0	0	0	0	0	0	18	16
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	32	36	-13.1%	0	0	NM	0	0	0	32	36
East North Central	378	390	-3.2%	23	13	170	168	0	0	184	209
Illinois	19	17	7.8%	0	0	0	0	0	0	19	17
Indiana	155	176	-12.3%	0	0	0	0	0	0	155	176
Michigan	152	133	14.1%	23	13	129	121	0	0	0	0
Ohio	52	63	-17.2%	0	0	41	48	0	0	11	16
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	-8.9%	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	-8.9%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	17	26	-35.4%	0	0	0	0	0	0	17	26
Delaware	13	24	-46.6%	0	0	0	0	0	0	13	24
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-96.3%	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	3	1	409.3%	0	0	0	0	0	0	3	1
East South Central	1	1	-7.6%	0	0	0	0	0	0	1	1
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	1	1	-7.6%	0	0	0	0	0	0	1	1
West South Central	345	341	1.0%	0	0	119	116	0	0	226	225
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	141	131	7.1%	0	0	0	0	0	0	141	131
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	204	210	-2.8%	0	0	119	116	0	0	85	94
Mountain	21	24	-15.1%	0	0	1	0	0	0	20	24
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	0	351.6%	0	0	1	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1	1	120.5%	0	0	0	0	0	0	1	1
Wyoming	18	24	-21.6%	0	0	0	0	0	0	18	24
Pacific Contiguous	157	165	-4.9%	0	0	30	33	0	0	127	132
California	127	132	-4.4%	0	0	0	0	0	0	127	132
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	30	33	-7.3%	0	0	30	33	0	0	0	0
Pacific Noncontiguous	0	6	-92.8%	0	0	0	0	0	0	0	6
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	6	-92.8%	0	0	0	0	0	0	0	6
U.S. Total	972	1,010	-3.8%	23	13	321	317	0	0	628	680

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values are preliminary. 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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	310	295	5.2%	0	0	NM	NM	0	0	310	295
New Jersey	104	107	-3.3%	0	0	0	0	0	0	104	107
New York	2	0	--	0	0	0	0	0	0	2	0
Pennsylvania	205	188	9.2%	0	0	NM	NM	0	0	205	188
East North Central	2,330	2,222	4.9%	88	110	1,066	998	0	0	1,177	1,114
Illinois	135	76	78.4%	0	0	0	0	0	0	135	76
Indiana	956	967	-1.1%	0	0	0	0	0	0	956	967
Michigan	878	862	1.9%	88	110	790	751	0	0	0	0
Ohio	361	318	13.5%	0	0	275	247	0	0	86	72
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	25	25	-0.7%	0	0	0	0	0	0	25	25
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	25	25	-0.7%	0	0	0	0	0	0	25	25
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	99	116	-14.2%	0	0	0	0	0	0	99	116
Delaware	78	104	-25.2%	0	0	0	0	0	0	78	104
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	2	-96.6%	0	0	0	0	0	0	0	2
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	21	9	137.2%	0	0	0	0	0	0	21	9
East South Central	5	5	6.0%	0	0	0	0	0	0	5	5
Alabama	0	1	-100.0%	0	0	0	0	0	0	0	1
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	5	5	17.8%	0	0	0	0	0	0	5	5
West South Central	2,288	2,136	7.1%	0	0	860	708	0	0	1,428	1,428
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	954	907	5.1%	0	0	0	0	0	0	954	907
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	1,334	1,229	8.5%	0	0	860	708	0	0	474	521
Mountain	148	194	-23.7%	0	0	3	5	0	0	145	189
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	3	5	-33.3%	0	0	3	5	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	7	1	399.4%	0	0	0	0	0	0	7	1
Wyoming	138	188	-26.4%	0	0	0	0	0	0	138	188
Pacific Contiguous	855	978	-12.6%	0	0	129	203	0	0	726	775
California	726	775	-6.3%	0	0	0	0	0	0	726	775
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	129	203	-36.4%	0	0	129	203	0	0	0	0
Pacific Noncontiguous	4	28	-87.5%	0	0	0	0	0	0	4	28
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	4	28	-87.5%	0	0	0	0	0	0	4	28
U.S. Total	6,064	5,999	1.1%	88	110	2,058	1,914	0	0	3,918	3,975

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Notes: See Glossary for definitions. Values are preliminary. 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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	2,401	2,838	-15.4%	0	0	2,401	2,838	0	0	0	0
Connecticut	1,503	1,500	0.2%	0	0	1,503	1,500	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	437	-100.0%	0	0	0	437	0	0	0	0
New Hampshire	898	900	-0.3%	0	0	898	900	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	12,861	13,812	-6.9%	0	0	12,861	13,812	0	0	0	0
New Jersey	1,964	2,928	-32.9%	0	0	1,964	2,928	0	0	0	0
New York	3,809	3,763	1.2%	0	0	3,809	3,763	0	0	0	0
Pennsylvania	7,088	7,121	-0.5%	0	0	7,088	7,121	0	0	0	0
East North Central	13,807	13,699	0.8%	2,416	2,401	11,391	11,298	0	0	0	0
Illinois	8,451	8,316	1.6%	0	0	8,451	8,316	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,993	2,974	0.6%	2,416	2,401	577	574	0	0	0	0
Ohio	1,495	1,543	-3.2%	0	0	1,495	1,543	0	0	0	0
Wisconsin	868	865	0.3%	0	0	868	865	0	0	0	0
West North Central	3,960	3,822	3.6%	3,527	3,400	433	422	0	0	0	0
Iowa	433	422	2.5%	0	0	433	422	0	0	0	0
Kansas	870	865	0.6%	870	865	0	0	0	0	0	0
Minnesota	1,229	1,217	1.0%	1,229	1,217	0	0	0	0	0	0
Missouri	865	859	0.7%	865	859	0	0	0	0	0	0
Nebraska	562	459	22.5%	562	459	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	17,370	17,605	-1.3%	16,097	16,328	1,273	1,277	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	2,153	2,623	-17.9%	2,153	2,623	0	0	0	0	0	0
Georgia	2,910	2,944	-1.2%	2,910	2,944	0	0	0	0	0	0
Maryland	1,273	1,277	-0.3%	0	0	1,273	1,277	0	0	0	0
North Carolina	3,699	3,536	4.6%	3,699	3,536	0	0	0	0	0	0
South Carolina	4,792	4,635	3.4%	4,792	4,635	0	0	0	0	0	0
Virginia	2,544	2,590	-1.8%	2,544	2,590	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	8,180	6,658	22.9%	8,180	6,658	0	0	0	0	0	0
Alabama	3,876	3,634	6.7%	3,876	3,634	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	1,019	-6	NM	1,019	-6	0	0	0	0	0	0
Tennessee	3,286	3,031	8.4%	3,286	3,031	0	0	0	0	0	0
West South Central	5,495	6,142	-10.5%	1,895	2,538	3,600	3,604	0	0	0	0
Arkansas	597	1,026	-41.8%	597	1,026	0	0	0	0	0	0
Louisiana	1,299	1,513	-14.2%	1,299	1,513	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,600	3,604	-0.1%	0	0	3,600	3,604	0	0	0	0
Mountain	2,854	2,750	3.8%	2,854	2,750	0	0	0	0	0	0
Arizona	2,854	2,750	3.8%	2,854	2,750	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	1,878	2,361	-20.5%	1,878	2,361	0	0	0	0	0	0
California	1,633	1,637	-0.3%	1,633	1,637	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	245	724	-66.2%	245	724	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	68,805	69,688	-1.3%	36,847	36,437	31,958	33,251	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 are preliminary. 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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	15,403	16,442	-6.3%	0	0	15,403	16,442	0	0	0	0
Connecticut	7,807	9,083	-14.0%	0	0	7,807	9,083	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	2,177	1,926	13.0%	0	0	2,177	1,926	0	0	0	0
New Hampshire	5,419	5,433	-0.3%	0	0	5,419	5,433	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	76,432	79,332	-3.7%	0	0	76,432	79,332	0	0	0	0
New Jersey	12,903	17,045	-24.3%	0	0	12,903	17,045	0	0	0	0
New York	21,271	20,966	1.5%	0	0	21,271	20,966	0	0	0	0
Pennsylvania	42,258	41,321	2.3%	0	0	42,258	41,321	0	0	0	0
East North Central	78,547	77,980	0.7%	12,902	11,924	65,645	66,057	0	0	0	0
Illinois	49,587	48,519	2.2%	0	0	49,587	48,519	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	16,318	15,361	6.2%	12,902	11,924	3,417	3,437	0	0	0	0
Ohio	7,900	8,862	-10.9%	0	0	7,900	8,862	0	0	0	0
Wisconsin	4,742	5,238	-9.5%	0	0	4,742	5,238	0	0	0	0
West North Central	21,992	22,436	-2.0%	19,420	19,827	2,573	2,609	0	0	0	0
Iowa	2,573	2,609	-1.4%	0	0	2,573	2,609	0	0	0	0
Kansas	5,306	3,819	38.9%	5,306	3,819	0	0	0	0	0	0
Minnesota	6,845	7,548	-9.3%	6,845	7,548	0	0	0	0	0	0
Missouri	3,816	5,290	-27.9%	3,816	5,290	0	0	0	0	0	0
Nebraska	3,452	3,170	8.9%	3,452	3,170	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	101,240	101,453	-0.2%	94,040	94,276	7,200	7,177	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	14,044	15,236	-7.8%	14,044	15,236	0	0	0	0	0	0
Georgia	15,893	16,941	-6.2%	15,893	16,941	0	0	0	0	0	0
Maryland	7,200	7,177	0.3%	0	0	7,200	7,177	0	0	0	0
North Carolina	20,060	20,451	-1.9%	20,060	20,451	0	0	0	0	0	0
South Carolina	29,154	27,428	6.3%	29,154	27,428	0	0	0	0	0	0
Virginia	14,888	14,220	4.7%	14,888	14,220	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	45,586	40,311	13.1%	45,586	40,311	0	0	0	0	0	0
Alabama	21,200	19,057	11.2%	21,200	19,057	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	5,561	2,365	135.2%	5,561	2,365	0	0	0	0	0	0
Tennessee	18,824	18,890	-0.3%	18,824	18,890	0	0	0	0	0	0
West South Central	32,139	35,570	-9.6%	11,974	14,639	20,164	20,931	0	0	0	0
Arkansas	7,128	6,430	10.9%	7,128	6,430	0	0	0	0	0	0
Louisiana	4,847	8,209	-41.0%	4,847	8,209	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	20,164	20,931	-3.7%	0	0	20,164	20,931	0	0	0	0
Mountain	16,192	15,861	2.1%	16,192	15,861	0	0	0	0	0	0
Arizona	16,192	15,861	2.1%	16,192	15,861	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	12,475	13,228	-5.7%	12,475	13,228	0	0	0	0	0	0
California	8,679	8,562	1.4%	8,679	8,562	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	3,796	4,666	-18.7%	3,796	4,666	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	400,005	402,613	-0.6%	212,588	210,066	187,417	192,547	0	0	0	0

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

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	648	647	0.3%	94	91	545	526	0	0	9	29
Connecticut	29	29	-0.9%	2	NM	27	28	0	0	0	0
Maine	291	288	1.0%	0	0	281	258	0	0	9	29
Massachusetts	91	90	1.0%	23	23	68	67	0	0	0	0
New Hampshire	125	129	-3.4%	29	29	96	100	0	0	0	0
Rhode Island	0	0	16.2%	0	0	0	0	0	0	0	0
Vermont	113	110	2.2%	40	37	73	73	0	0	0	0
Middle Atlantic	2,837	2,851	-0.5%	2,118	2,133	713	715	1	0	6	3
New Jersey	3	1	243.7%	0	0	3	1	0	0	0	0
New York	2,563	2,568	-0.2%	2,112	2,120	445	445	1	0	6	3
Pennsylvania	271	282	-3.8%	7	13	265	269	0	0	0	0
East North Central	427	511	-16.5%	367	442	49	52	0	0	10	18
Illinois	10	11	-16.9%	NM	NM	7	7	0	0	0	0
Indiana	27	27	-1.6%	27	27	0	0	0	0	0	0
Michigan	135	166	-19.0%	124	153	NM	NM	0	0	NM	NM
Ohio	45	45	-1.3%	24	25	NM	NM	0	0	0	0
Wisconsin	211	261	-19.1%	190	233	NM	NM	0	0	NM	NM
West North Central	1,065	1,275	-16.5%	1,032	1,240	NM	NM	0	0	11	NM
Iowa	80	101	-20.5%	79	100	1	1	0	0	0	0
Kansas	0	2	-84.0%	0	0	0	2	0	0	0	0
Minnesota	102	121	-15.6%	71	89	NM	NM	0	0	11	NM
Missouri	111	108	2.5%	111	108	0	0	0	0	0	0
Nebraska	122	151	-19.1%	122	151	0	0	0	0	0	0
North Dakota	210	258	-18.8%	210	258	0	0	0	0	0	0
South Dakota	440	534	-17.7%	440	534	0	0	0	0	0	0
South Atlantic	1,245	1,199	3.8%	924	955	271	195	1	0	48	48
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	19	-0.8%	19	19	0	0	0	0	0	0
Georgia	208	225	-7.8%	205	222	NM	NM	0	0	1	1
Maryland	223	143	56.3%	0	0	223	143	0	0	0	0
North Carolina	378	387	-2.1%	372	380	4	5	1	0	NM	NM
South Carolina	173	189	-8.3%	169	184	NM	NM	0	0	0	0
Virginia	100	93	7.8%	95	87	5	6	0	0	0	0
West Virginia	143	143	-0.2%	63	63	34	34	0	0	46	46
East South Central	1,912	2,071	-7.7%	1,911	2,070	NM	NM	0	0	0	0
Alabama	810	871	-7.0%	810	871	0	0	0	0	0	0
Kentucky	346	430	-19.6%	345	429	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	757	769	-1.7%	757	769	0	0	0	0	0	0
West South Central	626	648	-3.3%	542	562	85	85	NM	NM	0	0
Arkansas	267	275	-2.6%	263	269	NM	NM	0	0	0	0
Louisiana	77	77	0.0%	0	0	77	77	0	0	0	0
Oklahoma	181	187	-3.2%	181	187	0	0	0	0	0	0
Texas	101	109	-7.8%	98	106	3	3	NM	NM	0	0
Mountain	2,959	3,497	-15.4%	2,830	3,343	126	152	2	2	0	0
Arizona	603	649	-7.0%	603	649	0	0	0	0	0	0
Colorado	174	202	-13.5%	148	174	25	NM	2	2	0	0
Idaho	875	1,074	-18.5%	795	972	80	102	0	0	0	0
Montana	895	1,099	-18.6%	882	1,084	NM	NM	0	0	0	0
Nevada	195	210	-7.2%	189	203	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	NM	NM	0	0	0	0	0	0
Utah	105	129	-18.3%	104	129	1	0	0	0	0	0
Wyoming	94	115	-18.0%	92	113	2	2	0	0	0	0
Pacific Contiguous	14,474	15,079	-4.0%	14,134	14,839	339	240	NM	NM	0	0
California	4,822	2,880	67.5%	4,542	2,712	280	167	NM	NM	0	0
Oregon	2,767	3,545	-22.0%	2,741	3,514	26	NM	0	0	0	0
Washington	6,885	8,654	-20.4%	6,851	8,613	34	42	0	0	0	0
Pacific Noncontiguous	143	177	-19.0%	123	151	1	3	NM	NM	NM	NM
Alaska	138	168	-18.0%	122	149	0	0	NM	NM	0	0
Hawaii	NM	NM	NM	1	2	1	3	0	0	NM	NM
U.S. Total	26,336	27,955	-5.8%	24,076	25,826	2,151	1,992	21	NM	88	114

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	4,340	3,904	11.2%	637	563	3,638	3,144	3	2	62	194
Connecticut	222	184	20.7%	28	20	194	164	0	0	0	0
Maine	1,861	1,745	6.6%	0	0	1,799	1,555	0	0	62	190
Massachusetts	608	542	12.1%	159	137	445	399	3	2	0	4
New Hampshire	904	762	18.6%	184	175	720	587	0	0	0	0
Rhode Island	2	2	25.0%	0	0	2	2	0	0	0	0
Vermont	744	669	11.3%	266	231	478	438	0	0	0	0
Middle Atlantic	17,236	16,947	1.7%	12,502	12,614	4,694	4,294	4	3	35	36
New Jersey	22	19	19.7%	0	0	22	19	0	0	0	0
New York	15,320	15,259	0.4%	12,429	12,545	2,852	2,676	4	3	35	36
Pennsylvania	1,894	1,669	13.5%	73	69	1,820	1,600	0	0	0	0
East North Central	2,531	3,067	-17.5%	2,170	2,656	297	307	1	1	64	103
Illinois	62	68	-8.3%	21	26	41	42	1	1	0	0
Indiana	184	161	14.2%	184	161	0	0	0	0	0	0
Michigan	770	1,000	-23.0%	707	920	57	66	0	0	NM	15
Ohio	296	270	9.4%	166	147	129	124	0	0	0	0
Wisconsin	1,219	1,567	-22.2%	1,092	1,403	69	76	0	0	58	88
West North Central	6,224	7,592	-18.0%	6,047	7,395	127	135	0	0	50	62
Iowa	468	614	-23.9%	463	612	4	3	0	0	0	0
Kansas	11	11	-3.3%	0	0	11	11	0	0	0	0
Minnesota	572	722	-20.8%	411	539	112	121	0	0	50	62
Missouri	826	641	28.8%	826	641	0	0	0	0	0	0
Nebraska	699	908	-23.1%	699	908	0	0	0	0	0	0
North Dakota	1,192	1,545	-22.8%	1,192	1,545	0	0	0	0	0	0
South Dakota	2,457	3,150	-22.0%	2,457	3,150	0	0	0	0	0	0
South Atlantic	9,735	7,485	30.0%	7,485	5,604	1,936	1,587	11	7	303	288
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	126	114	10.3%	126	114	0	0	0	0	0	0
Georgia	1,806	1,277	41.4%	1,790	1,261	NM	NM	0	0	5	7
Maryland	1,588	1,281	23.9%	0	0	1,588	1,281	0	0	0	0
North Carolina	2,913	2,176	33.9%	2,867	2,141	32	25	9	5	NM	NM
South Carolina	1,546	1,142	35.3%	1,509	1,108	35	33	2	1	0	0
Virginia	830	634	30.8%	795	599	34	35	0	0	0	0
West Virginia	926	861	7.6%	398	381	236	203	0	0	293	277
East South Central	13,635	11,957	14.0%	13,629	11,952	NM	NM	0	0	0	0
Alabama	6,351	5,115	24.2%	6,351	5,115	0	0	0	0	0	0
Kentucky	2,187	2,258	-3.2%	2,181	2,253	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	5,097	4,584	11.2%	5,097	4,584	0	0	0	0	0	0
West South Central	4,762	3,790	25.6%	4,219	3,283	542	506	NM	NM	0	0
Arkansas	2,040	1,601	27.4%	2,015	1,575	25	26	0	0	0	0
Louisiana	494	463	6.8%	0	0	494	463	0	0	0	0
Oklahoma	1,347	1,101	22.4%	1,347	1,101	0	0	0	0	0	0
Texas	881	625	40.9%	857	607	23	17	NM	NM	0	0
Mountain	16,523	20,595	-19.8%	15,830	19,689	687	900	5	5	0	0
Arizona	3,009	3,736	-19.5%	3,009	3,736	0	0	0	0	0	0
Colorado	937	1,176	-20.3%	814	1,024	118	147	5	5	0	0
Idaho	4,958	6,421	-22.8%	4,501	5,812	456	609	0	0	0	0
Montana	5,072	6,567	-22.8%	5,001	6,475	71	93	0	0	0	0
Nevada	1,325	1,121	18.2%	1,296	1,078	NM	43	0	0	0	0
New Mexico	93	117	-20.6%	93	117	0	0	0	0	0	0
Utah	604	781	-22.7%	595	776	8	5	0	0	0	0
Wyoming	525	676	-22.3%	521	672	4	3	0	0	0	0
Pacific Contiguous	77,997	86,572	-9.9%	76,345	85,340	1,639	1,223	NM	NM	0	0
California	22,478	13,647	64.7%	21,164	12,853	1,302	785	NM	NM	0	0
Oregon	17,866	22,983	-22.3%	17,721	22,795	145	188	0	0	0	0
Washington	37,653	49,941	-24.6%	37,461	49,692	192	249	0	0	0	0
Pacific Noncontiguous	808	1,051	-23.2%	691	892	9	22	89	115	20	NM
Alaska	774	995	-22.2%	685	880	0	0	89	115	0	0
Hawaii	34	56	-39.7%	5	12	9	22	0	0	20	NM
U.S. Total	153,790	162,960	-5.6%	139,555	149,988	13,575	12,124	127	143	533	704

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

Table 1.11.A. Utility Scale Facility Net Generation from Renewable Sources Excluding Hydroelectric by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	1,015	1,041	-2.5%	47	64	870	873	12	13	86	92
Connecticut	84	79	6.0%	0	0	84	79	NM	NM	NM	NM
Maine	399	398	0.2%	0	0	310	301	4	6	85	91
Massachusetts	253	287	-11.9%	15	NM	233	273	4	6	NM	1
New Hampshire	166	169	-2.0%	10	23	152	145	3	1	0	0
Rhode Island	43	32	33.9%	0	0	43	32	0	0	0	0
Vermont	70	76	-7.3%	21	33	49	43	0	0	0	0
Middle Atlantic	1,419	1,315	8.0%	9	13	1,297	1,181	63	72	50	48
New Jersey	219	253	-13.3%	9	13	180	204	30	35	NM	NM
New York	691	590	17.0%	0	0	654	553	21	22	16	16
Pennsylvania	509	471	8.1%	0	0	463	425	12	15	34	31
East North Central	2,867	2,471	16.1%	369	342	2,358	1,973	16	21	125	135
Illinois	1,143	899	27.2%	5	NM	1,138	894	NM	NM	0	0
Indiana	560	462	21.1%	44	45	508	409	2	2	5	7
Michigan	647	635	1.9%	193	161	401	408	4	11	49	56
Ohio	225	176	27.5%	NM	NM	196	146	1	1	24	25
Wisconsin	292	298	-1.9%	123	128	115	116	8	6	47	48
West North Central	6,255	6,384	-2.0%	2,027	1,859	4,149	4,445	10	17	69	64
Iowa	1,920	1,655	16.0%	1,314	1,067	599	581	3	3	4	3
Kansas	1,535	1,915	-19.8%	148	180	1,386	1,734	NM	NM	0	0
Minnesota	1,147	1,204	-4.7%	198	229	881	911	NM	NM	65	60
Missouri	252	277	-9.0%	NM	NM	245	265	2	6	0	0
Nebraska	475	389	22.1%	29	24	445	363	1	2	0	0
North Dakota	738	752	-1.9%	281	297	456	455	NM	0	0	0
South Dakota	189	193	-1.9%	52	57	137	136	0	0	0	0
South Atlantic	3,546	3,482	1.9%	577	522	2,058	2,024	42	45	869	891
Delaware	12	14	-15.6%	NM	NM	10	11	0	NM	NM	1
District of Columbia	6	4	39.5%	0	0	NM	0	4	4	0	0
Florida	738	660	11.8%	354	242	219	262	4	4	161	152
Georgia	672	660	1.8%	32	36	302	290	NM	NM	337	333
Maryland	141	148	-4.4%	NM	NM	137	134	3	4	0	9
North Carolina	1,094	1,082	1.1%	47	57	925	900	14	17	108	108
South Carolina	289	299	-3.2%	35	37	115	107	0	0	140	155
Virginia	432	483	-10.6%	107	147	187	188	15	15	122	133
West Virginia	162	132	22.8%	0	0	162	132	0	0	0	0
East South Central	647	662	-2.3%	19	19	141	131	NM	NM	486	511
Alabama	333	344	-3.2%	NM	NM	60	62	0	0	268	278
Kentucky	46	48	-3.5%	14	15	NM	NM	0	0	31	32
Mississippi	160	158	1.1%	0	0	33	36	0	0	127	122
Tennessee	108	112	-3.7%	NM	0	47	32	NM	NM	60	79
West South Central	9,469	11,263	-15.9%	135	168	8,939	10,637	6	8	390	449
Arkansas	144	144	0.4%	NM	NM	29	30	1	1	115	113
Louisiana	187	240	-22.2%	NM	NM	NM	NM	0	0	179	233
Oklahoma	2,092	2,772	-24.6%	115	146	1,954	2,599	0	0	22	27
Texas	7,046	8,106	-13.1%	19	21	6,949	8,000	5	8	73	76
Mountain	4,468	4,440	0.6%	494	333	3,894	4,057	48	15	33	36
Arizona	683	666	2.5%	73	78	608	587	NM	NM	0	0
Colorado	969	1,001	-3.2%	186	31	780	967	NM	NM	0	0
Idaho	335	325	3.0%	14	NM	290	277	1	1	30	33
Montana	181	164	10.6%	17	NM	162	146	0	0	2	2
Nevada	897	872	3.0%	5	5	851	857	41	9	0	0
New Mexico	673	703	-4.3%	34	30	638	673	NM	NM	0	0
Utah	374	388	-3.6%	22	22	351	365	1	1	0	0
Wyoming	355	321	10.7%	142	137	213	184	0	0	0	0
Pacific Contiguous	8,169	7,706	6.0%	836	743	7,045	6,660	74	82	214	220
California	6,243	6,030	3.5%	232	242	5,870	5,639	71	78	70	71
Oregon	1,068	938	13.9%	193	167	824	719	3	3	47	49
Washington	857	738	16.2%	410	334	350	302	NM	NM	96	101
Pacific Noncontiguous	141	146	-2.9%	16	14	106	108	19	23	0	NM
Alaska	16	16	-2.9%	NM	NM	NM	NM	2	4	0	NM
Hawaii	126	129	-2.9%	7	6	101	104	18	20	0	0
U.S. Total	37,998	38,909	-2.3%	4,527	4,076	30,858	32,090	291	298	2,322	2,445

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	6,050	6,098	-0.8%	393	399	5,045	5,069	85	91	527	539
Connecticut	466	409	14.1%	2	2	464	406	NM	NM	NM	NM
Maine	2,526	2,616	-3.5%	0	0	1,974	2,045	27	36	524	536
Massachusetts	1,330	1,359	-2.1%	78	43	1,221	1,283	29	31	NM	3
New Hampshire	995	1,013	-1.8%	112	108	860	887	23	19	0	0
Rhode Island	256	204	25.3%	0	0	251	200	4	4	0	0
Vermont	477	496	-3.9%	202	247	274	249	1	1	0	0
Middle Atlantic	7,868	8,058	-2.4%	41	48	7,164	7,262	346	357	318	391
New Jersey	1,067	1,127	-5.3%	41	48	871	905	152	169	3	5
New York	3,762	3,706	1.5%	0	0	3,561	3,501	115	112	85	93
Pennsylvania	3,040	3,225	-5.7%	0	0	2,732	2,856	78	77	229	292
East North Central	19,607	18,363	6.8%	2,106	2,161	16,603	15,250	111	130	788	821
Illinois	8,164	7,281	12.1%	29	29	8,130	7,247	NM	NM	0	0
Indiana	3,877	3,540	9.5%	232	235	3,602	3,255	10	11	32	39
Michigan	4,250	4,276	-0.6%	1,139	1,093	2,747	2,783	40	61	324	339
Ohio	1,570	1,375	14.1%	19	22	1,396	1,196	8	7	147	150
Wisconsin	1,747	1,890	-7.6%	688	782	727	769	48	46	284	293
West North Central	44,216	42,266	4.6%	14,605	13,171	29,175	28,651	82	89	354	355
Iowa	13,856	11,898	16.5%	9,281	7,664	4,531	4,200	20	21	25	14
Kansas	10,403	10,762	-3.3%	961	1,021	9,435	9,733	NM	9	0	0
Minnesota	7,443	7,797	-4.5%	1,467	1,576	5,620	5,857	30	28	327	337
Missouri	1,647	1,755	-6.2%	27	30	1,599	1,699	19	25	1	2
Nebraska	3,554	2,772	28.2%	193	134	3,354	2,631	6	7	0	0
North Dakota	5,802	5,790	0.2%	2,236	2,299	3,563	3,489	NM	0	2	2
South Dakota	1,512	1,492	1.3%	440	449	1,072	1,043	0	0	0	0
South Atlantic	19,139	18,747	2.1%	3,334	2,687	10,462	10,428	220	233	5,123	5,399
Delaware	61	65	-6.1%	3	4	49	51	3	4	6	6
District of Columbia	34	30	14.6%	0	0	7	0	27	30	0	0
Florida	4,394	3,873	13.5%	2,072	1,319	1,336	1,517	23	25	963	1,011
Georgia	3,486	3,615	-3.6%	160	156	1,393	1,432	NM	NM	1,932	2,025
Maryland	762	788	-3.4%	4	5	691	711	18	17	49	55
North Carolina	5,398	5,212	3.6%	213	233	4,499	4,234	63	70	623	675
South Carolina	1,632	1,646	-0.9%	230	236	573	515	0	0	828	895
Virginia	2,439	2,515	-3.0%	651	734	980	962	84	86	724	733
West Virginia	935	1,005	-7.0%	0	0	935	1,005	0	0	0	0
East South Central	3,602	3,651	-1.3%	96	100	679	629	NM	3	2,825	2,920
Alabama	1,887	1,908	-1.1%	20	21	305	299	0	0	1,562	1,587
Kentucky	260	273	-4.8%	75	78	7	7	0	0	178	188
Mississippi	833	888	-6.3%	0	0	166	179	0	0	666	709
Tennessee	623	583	6.9%	NM	0	200	144	NM	3	419	436
West South Central	61,928	63,196	-2.0%	868	891	58,653	59,624	46	49	2,361	2,633
Arkansas	844	863	-2.2%	NM	NM	143	156	3	3	697	703
Louisiana	1,134	1,359	-16.5%	NM	NM	42	43	0	0	1,091	1,314
Oklahoma	14,547	15,860	-8.3%	746	766	13,657	14,928	0	0	144	166
Texas	45,403	45,115	0.6%	120	123	44,810	44,496	43	46	430	450
Mountain	25,208	24,913	1.2%	2,932	2,019	21,796	22,623	287	65	193	206
Arizona	3,072	3,101	-0.9%	323	348	2,744	2,749	6	4	0	0
Colorado	6,243	5,891	6.0%	1,177	176	5,052	5,702	12	11	1	2
Idaho	1,879	2,028	-7.4%	95	100	1,600	1,730	4	5	180	193
Montana	1,252	1,182	5.9%	119	117	1,123	1,055	0	0	10	10
Nevada	4,603	4,401	4.6%	20	21	4,324	4,341	258	37	1	1
New Mexico	4,079	4,137	-1.4%	139	133	3,937	4,003	NM	NM	0	0
Utah	1,816	1,850	-1.8%	131	131	1,681	1,713	5	6	0	0
Wyoming	2,263	2,323	-2.6%	928	992	1,335	1,331	0	0	0	0
Pacific Contiguous	39,816	40,602	-1.9%	3,723	4,318	34,434	34,478	415	471	1,245	1,335
California	31,100	30,507	1.9%	1,060	1,109	29,261	28,557	395	449	385	392
Oregon	4,229	4,967	-14.9%	577	746	3,370	3,920	15	16	268	284
Washington	4,486	5,128	-12.5%	2,086	2,463	1,803	2,000	5	5	592	660
Pacific Noncontiguous	841	825	2.0%	103	95	618	611	120	119	NM	NM
Alaska	93	107	-13.6%	49	55	26	29	17	23	NM	NM
Hawaii	749	717	4.4%	54	40	592	582	103	95	0	0
U.S. Total	228,275	226,719	0.7%	28,201	25,888	184,628	184,625	1,713	1,606	13,733	14,600

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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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	-32	-36	-11.8%	0	0	-32	-36	0	0	0	0
Connecticut	0	0	-26.1%	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-32	-36	-12.0%	0	0	-32	-36	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	-92	-119	-23.2%	-37	-61	-54	-59	0	0	0	0
New Jersey	-15	-20	-22.4%	-15	-20	0	0	0	0	0	0
New York	-22	-41	-46.3%	-22	-41	0	0	0	0	0	0
Pennsylvania	-54	-59	-7.4%	0	0	-54	-59	0	0	0	0
East North Central	-63	-55	14.4%	-63	-55	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	-63	-55	14.4%	-63	-55	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	84	-8	NM	84	-8	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	84	-8	NM	84	-8	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	-267	-251	6.2%	-267	-251	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	-69	-29	139.0%	-69	-29	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	-106	-80	32.0%	-106	-80	0	0	0	0	0	0
Virginia	-91	-142	-35.6%	-91	-142	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-63	-65	-2.9%	-63	-65	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	-63	-65	-2.9%	-63	-65	0	0	0	0	0	0
West South Central	2	-11	-117.1%	2	-11	0	0	0	0	0	0
Arkansas	6	1	541.9%	6	1	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-5	-12	-63.6%	-5	-12	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-6	1	NM	-6	1	0	0	0	0	0	0
Arizona	8	26	-67.8%	8	26	0	0	0	0	0	0
Colorado	-14	-25	-43.8%	-14	-25	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	51	113	-55.1%	51	113	0	0	0	0	0	0
California	50	110	-54.4%	50	110	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	2	-88.8%	0	2	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-385	-433	-11.1%	-299	-339	-86	-95	0	0	0	0

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	-208	-208	-0.2%	0	0	-208	-208	0	0	0	0
Connecticut	2	-4	-152.5%	0	0	2	-4	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-210	-204	2.6%	0	0	-210	-204	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	-475	-565	-15.9%	-202	-272	-273	-293	0	0	0	0
New Jersey	-51	-70	-27.1%	-51	-70	0	0	0	0	0	0
New York	-151	-202	-25.3%	-151	-202	0	0	0	0	0	0
Pennsylvania	-273	-293	-6.8%	0	0	-273	-293	0	0	0	0
East North Central	-302	-299	1.1%	-302	-299	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	-302	-299	1.1%	-302	-299	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	328	36	801.0%	328	36	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	328	36	801.0%	328	36	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	-823	-1,031	-20.2%	-823	-1,031	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	19	-212	-108.9%	19	-212	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	-414	-218	90.4%	-414	-218	0	0	0	0	0	0
Virginia	-427	-602	-29.1%	-427	-602	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-285	-287	-0.7%	-285	-287	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	-285	-287	-0.7%	-285	-287	0	0	0	0	0	0
West South Central	2	-33	-107.2%	2	-33	0	0	0	0	0	0
Arkansas	44	28	56.1%	44	28	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-42	-61	-31.6%	-42	-61	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-125	-156	-19.6%	-125	-156	0	0	0	0	0	0
Arizona	-34	-5	583.1%	-34	-5	0	0	0	0	0	0
Colorado	-91	-151	-39.4%	-91	-151	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	-91	-11	726.6%	-91	-11	0	0	0	0	0	0
California	-93	-38	148.3%	-93	-38	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	27	-91.9%	2	27	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	-1,977	-2,553	-22.5%	-1,497	-2,052	-481	-501	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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	139	151	-8.2%	0	0	126	135	4	6	10	11
Connecticut	44	41	6.9%	0	0	44	41	0	0	0	0
Maine	29	33	-11.4%	0	0	16	17	4	6	10	11
Massachusetts	61	73	-15.9%	0	0	61	73	0	0	0	0
New Hampshire	4	4	3.3%	0	0	4	4	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	193	185	4.5%	0	0	148	146	40	39	6	0
New Jersey	47	44	5.4%	0	0	28	34	13	10	6	0
New York	78	77	1.0%	0	0	59	58	19	19	0	0
Pennsylvania	69	64	8.1%	0	0	61	54	8	10	0	0
East North Central	75	75	-0.6%	2	2	8	9	6	12	59	52
Illinois	24	21	13.8%	0	0	0	-1	0	0	25	23
Indiana	33	28	16.5%	0	0	0	0	2	2	31	27
Michigan	14	23	-39.4%	0	0	8	11	4	10	2	2
Ohio	1	0	320.4%	0	0	0	0	0	0	1	1
Wisconsin	2	NM	NM	2	2	0	0	0	0	0	NM
West North Central	33	40	-16.8%	15	20	12	12	3	3	4	5
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	0.2%	0	0	0	0	0	0	0	0
Minnesota	29	36	-18.5%	11	17	12	12	3	3	4	4
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	-2.7%	4	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	366	363	1.0%	0	0	220	226	14	14	133	123
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	243	246	-1.3%	0	0	128	136	0	0	115	110
Georgia	9	8	16.8%	0	0	0	0	0	0	9	8
Maryland	33	32	2.3%	0	0	33	32	0	0	0	0
North Carolina	35	30	16.4%	0	0	29	28	0	0	7	3
South Carolina	3	4	-31.0%	0	0	0	1	0	0	2	3
Virginia	44	44	1.5%	0	0	31	30	14	14	0	0
West Virginia	-1	-1	-45.8%	0	0	-1	-1	0	0	0	0
East South Central	2	8	-72.3%	2	7	0	0	0	0	1	NM
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	2	7	-76.8%	2	7	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	NM	NM	0	0	0	0	0	0	1	NM
West South Central	67	104	-35.5%	0	0	8	10	0	0	59	95
Arkansas	0	1	-73.5%	0	0	0	0	0	0	0	1
Louisiana	38	69	-45.4%	0	0	0	0	0	0	38	69
Oklahoma	1	5	-90.7%	0	0	0	4	0	0	1	1
Texas	29	29	0.2%	0	0	8	5	0	0	21	23
Mountain	58	62	-5.8%	7	7	24	27	0	0	27	27
Arizona	0	0	12.5%	0	0	0	0	0	0	0	0
Colorado	4	5	-21.3%	0	0	2	2	0	0	2	3
Idaho	4	1	293.0%	0	0	0	0	0	0	4	1
Montana	22	26	-13.2%	0	0	22	26	0	0	0	0
Nevada	3	2	12.8%	3	2	0	0	0	0	0	0
New Mexico	0	0	-400.0%	0	0	0	0	0	0	0	0
Utah	20	21	-2.5%	5	5	0	0	0	0	15	15
Wyoming	6	8	-20.3%	0	0	0	0	0	0	6	8
Pacific Contiguous	71	88	-19.1%	-1	0	16	24	0	0	56	63
California	64	78	-18.4%	-1	0	9	15	0	0	56	63
Oregon	2	4	-40.0%	0	0	2	4	0	0	0	0
Washington	5	6	-16.0%	0	0	5	6	0	0	0	0
Pacific Noncontiguous	31	35	-9.2%	14	16	0	0	17	19	0	0
Alaska	0	0	78.3%	0	0	0	0	0	0	0	0
Hawaii	32	35	-8.7%	15	16	0	0	17	19	0	0
U.S. Total	1,037	1,111	-6.7%	39	52	561	589	82	92	355	376

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	843	851	-1.0%	0	0	753	752	26	34	64	65
Connecticut	252	219	15.0%	0	0	252	219	0	0	0	0
Maine	171	186	-8.0%	0	0	81	87	26	34	64	65
Massachusetts	397	422	-6.1%	0	0	397	422	0	0	0	0
New Hampshire	23	24	-1.9%	0	0	23	24	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	1,081	1,084	-0.2%	0	0	834	859	222	219	25	6
New Jersey	265	276	-3.7%	0	0	170	196	70	74	25	6
New York	398	427	-6.9%	0	0	294	327	104	100	0	0
Pennsylvania	418	381	9.8%	0	0	370	335	48	46	0	0
East North Central	401	415	-3.5%	11	10	52	58	48	69	290	279
Illinois	107	126	-15.4%	0	0	-5	-8	0	0	112	134
Indiana	166	134	23.8%	0	0	0	0	10	10	156	124
Michigan	105	132	-20.5%	0	0	57	65	38	59	11	8
Ohio	6	5	18.6%	0	-1	0	0	0	0	7	7
Wisconsin	16	17	-5.2%	11	11	0	0	0	0	NM	NM
West North Central	182	223	-18.4%	83	107	62	67	10	16	28	32
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	3	3	-0.2%	0	0	0	0	0	0	3	3
Minnesota	158	199	-20.3%	61	85	62	67	10	16	26	30
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	21	21	0.3%	21	21	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	2,189	2,242	-2.4%	-1	0	1,232	1,254	75	77	883	910
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	1,485	1,505	-1.3%	-1	0	778	775	0	0	709	730
Georgia	47	38	24.6%	0	0	0	0	0	0	47	38
Maryland	125	163	-23.1%	0	0	125	163	0	0	0	0
North Carolina	271	286	-5.5%	0	0	160	159	0	0	111	127
South Carolina	18	18	0.2%	0	0	2	3	0	0	16	15
Virginia	246	238	3.2%	0	0	171	160	75	77	0	0
West Virginia	-3	-6	-47.3%	0	0	-3	-6	0	0	0	0
East South Central	20	31	-33.9%	17	26	0	0	0	0	3	5
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	17	26	-33.7%	17	26	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	3	5	-34.8%	0	0	0	0	0	0	3	5
West South Central	478	561	-14.8%	0	0	46	61	0	0	432	499
Arkansas	2	4	-38.6%	0	0	0	0	0	0	2	4
Louisiana	235	340	-30.7%	0	0	0	0	0	0	235	340
Oklahoma	3	26	-87.9%	0	0	1	24	0	0	2	2
Texas	237	191	23.8%	0	0	45	37	0	0	192	154
Mountain	353	388	-8.9%	39	43	153	163	0	0	162	182
Arizona	-2	-1	243.0%	0	0	-2	-1	0	0	0	0
Colorado	28	31	-9.1%	0	0	7	11	0	0	21	20
Idaho	33	33	1.4%	0	0	0	0	0	0	33	33
Montana	148	153	-3.3%	0	0	148	153	0	0	0	0
Nevada	10	14	-26.9%	10	14	0	0	0	0	0	0
New Mexico	0	0	150.8%	0	0	0	0	0	0	0	0
Utah	102	115	-11.6%	29	29	0	0	0	0	73	86
Wyoming	35	43	-19.0%	0	0	0	0	0	0	35	43
Pacific Contiguous	396	479	-17.3%	-3	0	109	140	0	0	290	338
California	356	428	-16.9%	-3	0	69	90	0	0	290	338
Oregon	10	20	-51.3%	0	0	10	21	0	0	0	0
Washington	30	30	-0.1%	0	0	30	30	0	0	0	0
Pacific Noncontiguous	174	179	-2.3%	75	87	0	0	99	92	0	0
Alaska	-2	-1	45.3%	-2	-1	0	0	0	0	0	0
Hawaii	176	180	-2.0%	77	88	0	0	99	92	0	0
U.S. Total	6,118	6,452	-5.2%	220	273	3,241	3,355	479	508	2,179	2,317

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

Table 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	310	281	10.4%	21	19	287	259	NM	NM	NM	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	195	182	6.8%	0	0	195	182	0	0	0	0
Massachusetts	20	19	7.6%	NM	NM	14	NM	NM	NM	NM	0
New Hampshire	43	37	15.6%	0	0	43	37	0	0	0	0
Rhode Island	17	11	56.1%	0	0	16	10	0	0	0	0
Vermont	35	31	11.1%	16	NM	18	17	0	0	0	0
Middle Atlantic	753	633	19.0%	0	0	752	632	NM	NM	NM	0
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	441	347	27.0%	0	0	441	347	NM	NM	NM	0
Pennsylvania	310	283	9.3%	0	0	310	283	0	0	0	0
East North Central	2,340	1,891	23.8%	280	237	2,050	1,645	NM	NM	NM	NM
Illinois	1,101	856	28.7%	NM	NM	1,100	855	NM	NM	0	0
Indiana	482	374	29.0%	0	0	482	374	0	0	0	0
Michigan	434	403	7.7%	181	148	253	255	0	0	0	0
Ohio	153	99	54.3%	NM	NM	145	92	0	0	NM	NM
Wisconsin	170	159	6.5%	96	87	71	70	NM	NM	0	0
West North Central	5,884	5,988	-1.7%	1,983	1,805	3,898	4,179	NM	NM	0	0
Iowa	1,898	1,634	16.1%	1,310	1,063	588	571	0	0	0	0
Kansas	1,529	1,909	-19.9%	148	179	1,380	1,728	NM	NM	0	0
Minnesota	836	876	-4.5%	169	190	665	683	NM	NM	0	0
Missouri	229	248	-7.4%	0	0	229	248	0	0	0	0
Nebraska	464	377	23.2%	23	17	442	359	0	0	0	0
North Dakota	738	752	-1.9%	281	297	456	455	NM	0	0	0
South Dakota	189	193	-1.9%	52	57	137	136	0	0	0	0
South Atlantic	243	196	24.3%	0	0	243	195	0	0	0	0
Delaware	0	0	46.8%	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	42	41	1.6%	0	0	42	41	0	0	0	0
North Carolina	38	22	77.3%	0	0	38	22	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	162	132	22.8%	0	0	162	132	0	0	0	0
East South Central	NM	NM	NM	0	0	NM	NM	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	NM	NM	0	0	NM	NM	0	0	0	0
West South Central	8,515	10,284	-17.2%	126	159	8,382	10,119	5	5	NM	NM
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	2,060	2,736	-24.7%	108	138	1,952	2,598	0	0	0	0
Texas	6,454	7,548	-14.5%	18	21	6,429	7,521	5	5	NM	NM
Mountain	2,231	2,277	-2.0%	357	195	1,872	2,081	NM	NM	0	0
Arizona	60	58	3.4%	0	0	60	58	0	0	0	0
Colorado	817	859	-4.9%	185	30	631	829	NM	NM	0	0
Idaho	221	204	8.0%	13	NM	208	192	0	0	0	0
Montana	175	158	11.2%	17	NM	158	142	0	0	0	0
Nevada	34	36	-5.2%	0	0	34	36	0	0	0	0
New Mexico	516	551	-6.3%	0	0	516	550	NM	NM	0	0
Utah	75	90	-16.3%	0	0	75	90	0	0	0	0
Wyoming	332	321	3.5%	142	137	190	184	0	0	0	0
Pacific Contiguous	3,055	2,756	10.8%	679	569	2,374	2,186	0	0	1	1
California	1,445	1,395	3.5%	105	101	1,338	1,294	0	0	1	1
Oregon	888	762	16.5%	188	161	701	601	0	0	0	0
Washington	722	599	20.6%	387	307	336	291	0	0	0	0
Pacific Noncontiguous	62	66	-6.1%	NM	NM	53	58	0	0	0	0
Alaska	14	NM	NM	NM	NM	NM	NM	0	0	0	0
Hawaii	48	54	-10.5%	0	0	48	54	0	0	0	0
U.S. Total	23,400	24,376	-4.0%	3,456	2,993	19,918	21,360	15	15	11	NM

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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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	1,965	2,032	-3.3%	124	135	1,822	1,878	18	18	NM	2
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	1,282	1,344	-4.6%	0	0	1,282	1,344	0	0	0	0
Massachusetts	125	133	-6.1%	31	33	78	84	14	14	NM	2
New Hampshire	219	247	-11.4%	0	0	219	247	0	0	0	0
Rhode Island	126	86	46.3%	0	0	121	82	4	4	0	0
Vermont	207	216	-4.0%	92	101	115	115	0	0	0	0
Middle Atlantic	4,350	4,444	-2.1%	0	0	4,347	4,440	NM	NM	NM	2
New Jersey	12	13	-8.8%	0	0	12	13	0	0	0	0
New York	2,478	2,411	2.8%	0	0	2,475	2,407	NM	NM	NM	2
Pennsylvania	1,860	2,020	-7.9%	0	0	1,860	2,020	0	0	0	0
East North Central	16,524	15,122	9.3%	1,616	1,637	14,842	13,422	20	21	45	43
Illinois	7,929	7,017	13.0%	7	8	7,919	7,006	NM	NM	0	0
Indiana	3,475	3,115	11.5%	0	0	3,475	3,115	0	0	0	0
Michigan	2,954	2,937	0.6%	1,086	1,037	1,869	1,901	0	0	0	0
Ohio	1,157	950	21.8%	NM	8	1,107	901	2	2	41	39
Wisconsin	1,009	1,102	-8.5%	516	584	473	499	16	16	4	4
West North Central	42,411	40,349	5.1%	14,345	12,877	28,042	27,448	23	25	0	0
Iowa	13,734	11,782	16.6%	9,263	7,644	4,469	4,137	2	2	0	0
Kansas	10,371	10,728	-3.3%	960	1,020	9,404	9,700	NM	9	0	0
Minnesota	5,976	6,223	-4.0%	1,294	1,371	4,669	4,838	13	14	0	0
Missouri	1,527	1,628	-6.2%	0	0	1,527	1,628	0	0	0	0
Nebraska	3,492	2,710	28.9%	153	95	3,339	2,615	0	0	0	0
North Dakota	5,800	5,787	0.2%	2,236	2,299	3,563	3,489	NM	0	0	0
South Dakota	1,511	1,491	1.3%	440	449	1,071	1,041	0	0	0	0
South Atlantic	1,518	1,623	-6.5%	0	0	1,515	1,620	3	3	0	0
Delaware	3	3	5.4%	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	287	304	-5.7%	0	0	287	304	0	0	0	0
North Carolina	294	311	-5.6%	0	0	294	311	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	935	1,005	-7.0%	0	0	935	1,005	0	0	0	0
East South Central	25	30	-17.5%	0	0	25	30	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	25	30	-17.5%	0	0	25	30	0	0	0	0
West South Central	56,967	58,342	-2.4%	830	851	56,096	57,456	30	28	NM	NM
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	14,362	15,651	-8.2%	714	732	13,648	14,919	0	0	0	0
Texas	42,605	42,692	-0.2%	117	119	42,447	42,537	30	28	NM	NM
Mountain	14,716	14,607	0.8%	2,310	1,375	12,398	13,226	NM	NM	1	2
Arizona	362	341	6.2%	0	0	362	341	0	0	0	0
Colorado	5,564	5,251	5.9%	1,174	173	4,383	5,075	NM	NM	1	2
Idaho	1,316	1,434	-8.2%	88	93	1,228	1,340	0	0	0	0
Montana	1,224	1,153	6.2%	119	117	1,105	1,035	0	0	0	0
Nevada	215	212	1.1%	0	0	215	212	0	0	0	0
New Mexico	3,384	3,453	-2.0%	0	0	3,383	3,452	NM	NM	0	0
Utah	478	440	8.7%	0	0	478	440	0	0	0	0
Wyoming	2,173	2,323	-6.4%	928	992	1,245	1,331	0	0	0	0
Pacific Contiguous	15,482	16,057	-3.6%	2,919	3,347	12,557	12,704	3	3	3	2
California	8,501	7,808	8.9%	430	399	8,065	7,403	3	3	3	2
Oregon	3,314	4,074	-18.6%	544	713	2,770	3,361	0	0	0	0
Washington	3,667	4,175	-12.2%	1,944	2,235	1,723	1,940	0	0	0	0
Pacific Noncontiguous	381	395	-3.8%	49	55	332	341	0	0	0	0
Alaska	75	83	-10.2%	49	55	26	29	0	0	0	0
Hawaii	306	312	-2.1%	0	0	306	312	0	0	0	0
U.S. Total	154,338	153,003	0.9%	22,193	20,277	131,976	132,565	107	103	62	57

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

Table 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	516	554	-6.9%	11	35	410	418	10	10	85	91
Connecticut	64	63	2.3%	0	0	64	63	0	0	0	0
Maine	203	214	-5.3%	0	0	114	117	4	6	85	91
Massachusetts	90	102	-11.6%	0	0	88	99	2	3	0	0
New Hampshire	123	132	-7.0%	10	23	109	108	3	1	0	0
Rhode Island	19	17	13.3%	0	0	19	17	0	0	0	0
Vermont	NM	26	NM	1	12	NM	14	0	0	0	0
Middle Atlantic	447	453	-1.2%	0	0	352	361	46	46	48	45
New Jersey	74	80	-7.8%	0	0	60	69	15	12	0	0
New York	183	198	-7.6%	0	0	147	162	20	20	16	16
Pennsylvania	190	175	9.0%	0	0	146	131	12	14	33	30
East North Central	437	482	-9.2%	57	72	251	264	12	17	118	129
Illinois	35	36	-3.9%	3	NM	31	33	0	0	0	0
Indiana	37	40	-7.2%	26	27	4	4	2	2	5	7
Michigan	192	214	-10.1%	0	0	139	147	4	11	49	56
Ohio	56	59	-4.0%	NM	NM	37	38	1	1	17	19
Wisconsin	117	133	-12.0%	27	41	39	41	5	3	46	47
West North Central	171	219	-21.8%	41	51	54	91	7	13	69	64
Iowa	19	18	6.0%	NM	NM	10	10	3	3	4	3
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	131	173	-24.1%	29	38	36	72	NM	2	65	60
Missouri	9	15	-36.1%	NM	NM	NM	NM	2	6	0	0
Nebraska	6	8	-21.8%	NM	6	0	0	1	2	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	1,648	1,720	-4.2%	183	221	571	584	25	26	868	890
Delaware	NM	NM	NM	0	0	NM	NM	0	0	NM	1
District of Columbia	4	4	1.1%	0	0	0	0	4	4	0	0
Florida	398	434	-8.3%	66	62	168	217	3	3	161	151
Georgia	446	402	10.9%	0	0	109	69	0	0	337	333
Maryland	43	51	-16.6%	0	0	41	41	2	2	0	9
North Carolina	223	219	1.4%	0	0	114	110	NM	NM	108	108
South Carolina	204	227	-10.1%	34	37	30	35	0	0	139	155
Virginia	325	378	-13.9%	83	123	105	108	15	15	122	133
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	523	548	-4.6%	NM	NM	29	29	0	0	486	510
Alabama	288	298	-3.4%	0	0	20	21	0	0	268	278
Kentucky	40	42	-2.7%	NM	NM	NM	NM	0	0	31	32
Mississippi	128	123	4.0%	0	0	NM	NM	0	0	127	122
Tennessee	66	85	-22.0%	0	0	NM	NM	0	0	60	78
West South Central	444	538	-17.5%	0	0	56	87	1	3	388	448
Arkansas	123	121	1.4%	0	0	NM	NM	1	1	115	113
Louisiana	187	240	-22.2%	0	0	NM	NM	0	0	179	233
Oklahoma	24	29	-16.4%	0	0	NM	NM	0	0	22	27
Texas	111	148	-25.4%	0	0	40	71	0	2	71	75
Mountain	88	94	-6.1%	NM	NM	53	55	2	2	32	35
Arizona	NM	16	NM	0	0	NM	16	0	0	0	0
Colorado	13	14	-9.3%	0	0	13	14	0	0	0	0
Idaho	44	48	-8.2%	NM	NM	12	13	1	1	30	33
Montana	2	2	4.6%	0	0	0	0	0	0	2	2
Nevada	NM	NM	NM	0	0	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	NM	NM	NM	0	0	NM	NM	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	676	722	-6.4%	34	37	381	410	55	61	207	214
California	462	491	-5.9%	5	6	342	364	51	58	63	64
Oregon	83	91	-8.9%	NM	NM	28	35	3	3	47	49
Washington	131	139	-6.2%	24	26	10	11	NM	NM	96	101
Pacific Noncontiguous	27	30	-9.1%	3	2	NM	NM	19	23	0	NM
Alaska	2	4	-53.2%	0	0	0	0	2	4	0	NM
Hawaii	25	26	-2.4%	3	2	NM	NM	18	20	0	0
U.S. Total	4,978	5,360	-7.1%	339	428	2,161	2,304	176	202	2,301	2,426

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	3,235	3,282	-1.4%	201	229	2,445	2,447	65	70	524	536
Connecticut	376	345	9.1%	0	0	376	345	0	0	0	0
Maine	1,238	1,266	-2.2%	0	0	686	695	27	36	524	536
Massachusetts	566	594	-4.7%	0	0	552	580	14	14	0	0
New Hampshire	776	767	1.3%	112	108	642	640	23	19	0	0
Rhode Island	97	99	-2.6%	0	0	97	99	0	0	0	0
Vermont	181	211	-14.1%	89	122	91	88	1	1	0	0
Middle Atlantic	2,595	2,773	-6.4%	0	0	2,020	2,131	266	264	310	379
New Jersey	447	490	-8.9%	0	0	366	406	80	85	0	0
New York	1,013	1,122	-9.7%	0	0	819	924	110	107	84	92
Pennsylvania	1,135	1,161	-2.2%	0	0	835	801	75	72	225	287
East North Central	2,676	2,852	-6.2%	346	387	1,505	1,582	83	105	741	778
Illinois	205	234	-12.5%	20	20	184	214	0	0	0	0
Indiana	215	235	-8.6%	147	160	25	25	10	11	32	39
Michigan	1,203	1,267	-5.0%	0	0	840	867	39	61	324	339
Ohio	340	352	-3.5%	7	8	223	230	4	3	105	110
Wisconsin	714	764	-6.5%	171	199	233	246	30	30	280	289
West North Central	965	1,202	-19.7%	246	282	307	502	58	64	354	355
Iowa	112	106	5.4%	12	13	57	61	18	19	25	14
Kansas	28	29	-3.1%	0	0	28	29	0	0	0	0
Minnesota	718	942	-23.8%	171	203	204	388	16	13	327	337
Missouri	62	77	-19.9%	25	27	17	24	18	24	1	2
Nebraska	44	45	-3.9%	38	38	0	0	6	7	0	0
North Dakota	2	2	-22.2%	0	0	0	0	0	0	2	2
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	9,618	10,258	-6.2%	1,127	1,176	3,226	3,532	145	153	5,119	5,397
Delaware	30	31	-4.3%	0	0	24	25	0	0	6	6
District of Columbia	27	30	-8.7%	0	0	0	0	27	30	0	0
Florida	2,410	2,636	-8.5%	357	309	1,073	1,297	20	22	960	1,009
Georgia	2,444	2,511	-2.7%	0	0	512	486	0	0	1,932	2,025
Maryland	223	276	-19.2%	0	0	164	211	10	11	49	55
North Carolina	1,286	1,371	-6.2%	0	0	659	691	5	5	623	675
South Carolina	1,240	1,337	-7.2%	228	234	186	207	0	0	826	895
Virginia	1,957	2,065	-5.3%	541	633	608	614	83	86	724	733
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,038	3,142	-3.3%	50	52	167	173	0	0	2,822	2,917
Alabama	1,679	1,709	-1.8%	0	0	116	122	0	0	1,562	1,587
Kentucky	233	245	-4.6%	50	52	6	5	0	0	178	188
Mississippi	672	715	-6.1%	0	0	NM	NM	0	0	666	709
Tennessee	454	473	-3.9%	0	0	39	40	0	0	415	432
West South Central	2,707	3,087	-12.3%	0	0	343	441	14	19	2,350	2,626
Arkansas	745	754	-1.2%	0	0	46	48	3	3	697	703
Louisiana	1,133	1,357	-16.5%	0	0	42	43	0	0	1,091	1,314
Oklahoma	153	175	-12.9%	0	0	NM	10	0	0	144	166
Texas	676	800	-15.5%	0	0	246	340	11	17	419	443
Mountain	517	543	-4.7%	NM	7	312	322	9	11	190	203
Arizona	91	92	-1.8%	0	0	91	92	0	0	0	0
Colorado	79	81	-2.2%	0	0	79	81	0	0	0	0
Idaho	258	275	-6.2%	NM	7	67	70	4	5	180	193
Montana	10	10	-0.3%	0	0	0	0	0	0	10	10
Nevada	33	34	-3.7%	0	0	33	34	0	0	0	0
New Mexico	9	10	-9.6%	0	0	9	10	0	0	0	0
Utah	37	40	-6.8%	0	0	32	33	5	6	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	3,988	4,368	-8.7%	191	312	2,257	2,362	327	386	1,213	1,308
California	2,707	2,895	-6.5%	20	55	2,027	2,111	307	365	353	364
Oregon	482	520	-7.4%	29	30	170	190	15	16	268	284
Washington	798	953	-16.2%	142	227	60	61	5	5	592	660
Pacific Noncontiguous	180	168	7.5%	34	22	26	26	120	119	NM	NM
Alaska	18	24	-25.6%	0	0	0	0	17	23	NM	NM
Hawaii	162	144	13.0%	34	22	26	26	103	95	0	0
U.S. Total	29,519	31,674	-6.8%	2,201	2,467	12,607	13,518	1,088	1,191	13,623	14,498

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 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	377	328	14.9%	22	22	321	306	34	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	7	7	0.9%	0	0	7	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	327	281	16.3%	0	0	293	281	34	0	0	0
New Mexico	4	1	259.5%	0	0	4	1	0	0	0	0
Utah	39	39	1.3%	22	22	17	17	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,001	1,014	-1.4%	62	67	939	947	0	0	0	0
California	985	999	-1.4%	62	67	923	931	0	0	0	0
Oregon	16	16	1.9%	0	0	16	16	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	27	27	1.6%	0	0	27	27	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	27	27	1.6%	0	0	27	27	0	0	0	0
U.S. Total	1,405	1,369	2.6%	84	90	1,286	1,279	34	0	0	0

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	2,303	2,041	12.8%	131	131	1,947	1,910	225	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	39	39	0.1%	0	0	39	39	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,004	1,767	13.4%	0	0	1,779	1,767	225	0	0	0
New Mexico	31	6	409.5%	0	0	31	6	0	0	0	0
Utah	230	229	0.4%	131	131	99	98	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	5,915	5,999	-1.4%	352	382	5,563	5,616	0	0	0	0
California	5,822	5,907	-1.4%	352	382	5,471	5,525	0	0	0	0
Oregon	92	92	0.9%	0	0	92	92	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	158	157	0.6%	0	0	158	157	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	158	157	0.6%	0	0	158	157	0	0	0	0
U.S. Total	8,376	8,197	2.2%	483	513	7,668	7,684	225	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 are preliminary. 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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	561	499	12.3%	189	206	372	293	15	9	173	195	NM	NM	NM	NM	194	156	17	12	0	0	17	12	160	126
Connecticut	83	67	23.9%	19	15	64	52	0	0	18	15	NM	NM	NM	NM	23	20	NM	NM	NM	NM	3	3	38	29
Maine	NM	7	NM	NM	NM	8	6	0	0	NM	NM	3	2	0	0	3	2	0	0	0	0	0	0	5	4
Massachusetts	394	367	7.2%	142	166	251	201	10	3	132	162	NM	NM	NM	NM	145	121	13	8	0	0	13	8	93	72
New Hampshire	13	11	19.1%	0	0	13	11	0	0	0	0	4	3	0	0	4	3	1	1	0	0	1	1	9	7
Rhode Island	25	14	84.7%	7	5	18	9	0	0	7	5	12	5	0	0	12	5	0	0	0	0	0	0	6	4
Vermont	36	33	9.7%	19	18	17	14	4	6	15	12	6	5	0	0	6	5	NM	NM	0	0	NM	NM	10	9
Middle Atlantic	710	649	9.4%	219	229	491	420	9	13	192	188	228	211	17	26	211	186	NM	NM	NM	NM	25	21	255	214
New Jersey	380	378	0.4%	143	171	236	207	9	13	118	133	123	125	15	23	108	102	NM	NM	NM	NM	16	13	112	93
New York	268	213	25.5%	67	45	201	168	0	0	66	45	NM	NM	NM	NM	85	68	2	2	0	0	2	2	114	98
Pennsylvania	63	58	9.0%	9	13	54	45	0	0	8	10	NM	NM	NM	NM	18	16	NM	NM	NM	NM	7	6	30	23
East North Central	168	153	9.4%	90	98	78	55	31	33	57	64	NM	NM	NM	NM	43	34	6	3	0	0	6	3	29	18
Illinois	26	17	51.2%	7	7	19	10	NM	NM	7	6	NM	NM	NM	NM	10	7	0	0	0	0	0	0	8	3
Indiana	55	60	-8.3%	41	49	14	11	19	18	22	31	9	7	0	0	9	7	0	0	0	0	0	0	4	3
Michigan	32	27	19.2%	20	18	12	9	12	13	9	NM	NM	5	NM	0	5	5	NM	0	0	0	NM	0	6	4
Ohio	38	36	7.5%	16	19	23	17	NM	NM	14	17	NM	NM	NM	NM	14	13	3	1	0	0	3	1	6	4
Wisconsin	NM	14	NM	NM	6	11	8	0	0	NM	5	NM	NM	NM	NM	4	3	2	2	0	0	2	2	5	3
West North Central	262	227	15.2%	200	177	62	50	NM	NM	197	174	29	25	0	0	29	25	2	2	0	0	2	2	30	23
Iowa	NM	16	NM	NM	NM	16	13	NM	NM	NM	NM	10	8	0	0	10	8	1	0	0	0	1	0	6	5
Kansas	NM	4	NM	NM	NM	4	3	NM	NM	NM	NM	1	1	0	0	1	1	0	0	0	0	0	0	2	2
Minnesota	191	165	15.8%	180	156	11	9	NM	NM	180	155	4	3	0	0	4	3	1	1	0	0	1	1	6	5
Missouri	42	38	10.8%	13	14	29	24	1	1	12	13	13	12	0	0	13	12	1	0	0	0	1	0	15	12
Nebraska	NM	5	NM	NM	NM	1	1	NM	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	1	1
North Dakota	0	0	111.4%	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	NM	0	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	1,953	1,792	9.0%	1,654	1,561	298	231	393	296	1,245	1,245	94	85	16	19	78	66	NM	NM	NM	NM	33	30	188	136
Delaware	20	20	-2.0%	6	8	13	12	NM	NM	5	7	4	NM	0	NM	4	3	1	1	0	0	1	1	9	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	4	3
Florida	400	260	53.8%	339	222	60	38	287	176	51	45	NM	NM	NM	NM	13	9	NM	NM	NM	NM	1	1	47	27
Georgia	NM	284	NM	226	258	NM	26	32	36	194	221	NM	NM	NM	NM	NM	NM	NM	NM	0	0	NM	NM	NM	2
Maryland	169	147	15.1%	56	55	113	92	NM	NM	54	52	NM	NM	NM	NM	29	24	4	4	0	0	4	4	80	64
North Carolina	860	861	-0.2%	833	841	27	20	47	57	773	768	25	27	13	16	12	11	1	1	0	0	1	1	14	8
South Carolina	117	98	20.2%	85	72	32	25	NM	NM	84	72	8	6	0	0	8	6	NM	2	NM	0	3	2	21	17
Virginia	119	114	4.5%	106	105	13	9	24	24	82	81	NM	3	NM	0	4	3	0	0	0	0	0	0	9	6
West Virginia	1	1	27.0%	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	134	124	7.9%	118	109	16	15	10	11	106	97	NM	NM	NM	NM	11	10	NM	NM	NM	NM	0	NM	5	5
Alabama	NM	47	NM	45	46	NM	NM	NM	NM	40	41	1	1	0	0	1	1	0	0	0	0	0	0	NM	NM
Kentucky	10	10	2.2%	6	6	4	3	6	6	NM	NM	2	2	0	0	2	2	0	0	0	0	0	0	2	1
Mississippi	33	36	-8.3%	32	35	1	1	0	0	32	35	1	1	0	0	1	1	NM	NM	0	0	NM	NM	1	0
Tennessee	45	31	42.9%	35	22	10	9	NM	0	34	20	NM	NM	NM	NM	7	7	NM	NM	NM	NM	NM	NM	3	3
West South Central	633	535	18.3%	510	440	123	95	8	9	501	431	NM	21	NM	0	25	21	0	0	0	0	0	0	98	74
Arkansas	25	25	-1.1%	22	23	3	2	NM	NM	21	23	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Louisiana	NM	22	NM	NM	NM	24	22	NM	NM	0	0	2	1	0	0	2	1	0	0	0	0	0	0	22	21
Oklahoma	9	9	-2.2%	7	8	1	1	7	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	575	479	20.1%	481	409	94	70	NM	NM	480	408	NM	19	NM	0	22	18	0	0	0	0	0	0	72	52
Mountain	2,123	1,992	6.6%	1,644	1,582	479	410	113	114	1,520	1,456	137	135	11	12	126	123	NM	7	NM	0	7	7	346	280
Arizona	756	714	5.9%	496	486	261	228	73	78	421	407	NM	NM	NM	NM	74	72	2	2	0	0	2	2	185	154
Colorado	203	188	8.3%	139	128	65	60	NM	NM	136	125	NM	NM	NM	NM	22	22	NM	0	0	0	NM	0	42	38
Idaho	70	70	-0.2%	64	66	6	4	0	0	63	66	1	1	0	0	1	1	NM	0	NM	0	0	0	5	3
Montana	NM	6	NM	NM	NM	3	2	0	0	NM	NM	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Nevada	583	546	6.8%	514	495	69	51	5	5	501	481	18	19	7	9	11	10	4	4	0	0	4	3	55	37
New Mexico	181	176	2.9%	152	151	28	25	34	30	118	120	8	9	0	0	8	9	0	0	0	0	0	0	20	16
Utah	300	292	2.5%	253	252	47	40	0	0	253	252	9	8	0	0	9	8	1	1	0	0	1	1	37	31
Wyoming	24	1	NM	23	0	1	1	0	0	23	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pacific Contiguous	4,745	4,252	11.6%	3,127	2,861	1,618	1,391	60	69	3,041	2,765	407	360	19	20	388	340	230	198	6	6	224	193	1,006	859
California	4,605	4,142	11.2%	3,042	2,792	1,564	1,350	60	68	2,957	2,698	389	347	19	20	370	327	228	197	6	6	222	191	972	832
Oregon	111	92	20.5%	81	68	31	24	NM	NM	80	68	15	10	0	0	15	10	2	2	0	0	2	2	14	12
Washington	NM	17	NM	NM	0	24	17	0	0	NM	0	4	3	0	0	4	3	0	0	0	0	0	0	20	15
Pacific Noncontiguous	125	121	3.7%	25	23	100	98	3	4	22	19	40	39	0	0	40	39	0	0	0	0	0	0	60	59
Alaska	1	0	45.6%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	125	121	3.5%	25	23	100	98	3	4	22	19	40	39	0	0	40	39	0	0	0	0	0	0	59	59
U.S. Total	11,415	10,347	10.3%	7,777	7,287	3,638	3,060	646	561	7,054	6,635	1,211	1,080	65	81	1,146	999	326	278	11	11	315	267	2,178	1,793

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 are preliminary. 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 June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	2,597	2,186	18.8%	850	783	1,747	1,402	69	34	778	744	941	771	2	4	939	767	72	59	1	1	71	58	737	578
Connecticut	388	304	27.5%	83	56	304	248	2	2	81	54	116	97	NM	NM	115	96	15	13	NM	NM	15	13	175	138
Maine	44	34	28.4%	6	7	38	28	0	0	6	7	16	9	0	0	16	9	0	0	0	0	0	0	22	18
Massachusetts	1,819	1,593	14.1%	640	633	1,179	961	47	9	590	619	707	601	2	3	705	598	52	41	1	1	51	40	423	323
New Hampshire	65	55	19.2%	0	0	65	55	0	0	0	0	20	16	0	0	20	16	4	4	0	0	4	4	41	35
Rhode Island	115	63	82.4%	33	19	82	45	0	0	33	19	54	23	0	0	54	23	0	0	0	0	0	0	28	21
Vermont	166	136	21.9%	88	69	78	67	20	24	68	46	29	24	0	0	29	24	1	1	0	0	1	1	47	42
Middle Atlantic	3,246	2,778	16.8%	923	841	2,323	1,938	41	48	798	692	1,109	966	77	91	1,031	874	125	114	7	10	118	104	1,174	960
New Jersey	1,749	1,601	9.2%	609	624	1,141	978	41	48	493	487	619	579	72	84	548	495	80	70	3	5	77	65	516	418
New York	1,205	922	30.7%	270	172	935	749	0	0	268	170	402	306	2	3	400	303	9	9	0	0	9	9	526	437
Pennsylvania	292	255	14.5%	45	45	248	211	0	0	37	35	87	80	3	4	84	76	36	35	4	5	32	30	132	104
East North Central	745	634	17.4%	407	389	338	246	143	137	256	246	199	158	7	4	192	153	24	14	1	1	23	13	122	80
Illinois	107	75	42.3%	30	30	77	45	1	1	27	27	47	32	NM	NM	44	29	0	0	0	0	0	0	32	15
Indiana	251	236	6.1%	187	190	63	47	84	75	103	115	43	31	0	0	43	31	2	2	0	0	2	2	19	14
Michigan	142	112	27.5%	93	72	50	40	53	56	39	16	24	21	NM	0	23	21	1	1	0	0	1	1	25	18
Ohio	171	150	14.2%	73	73	98	77	4	5	66	65	64	59	NM	NM	63	57	12	4	1	1	11	3	24	16
Wisconsin	73	61	19.4%	24	24	49	37	0	0	22	24	21	15	NM	NM	19	15	9	7	0	0	9	7	21	15
West North Central	1,128	950	18.8%	840	715	288	235	13	12	826	702	137	116	1	1	137	115	12	9	0	0	12	9	140	111
Iowa	87	71	22.3%	10	10	77	61	6	7	NM	NM	48	38	0	0	48	38	3	2	0	0	3	2	26	21
Kansas	21	17	26.3%	4	5	17	12	NM	NM	NM	4	7	4	0	0	7	4	0	0	0	0	0	0	11	8
Minnesota	801	673	19.1%	749	632	52	41	NM	NM	748	631	17	15	0	0	17	15	6	5	0	0	6	5	29	21
Missouri	192	166	15.8%	58	50	134	115	2	2	55	47	62	56	1	1	62	55	3	2	0	0	3	2	70	58
Nebraska	24	21	14.9%	18	16	7	5	NM	0	15	16	2	2	0	0	2	2	0	0	0	0	0	0	4	3
North Dakota	0	0	87.6%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	2	2	-2.3%	NM	NM	1	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	9,437	7,977	18.3%	7,976	6,837	1,460	1,139	2,181	1,482	5,720	5,276	464	408	71	77	392	331	177	158	NM	NM	173	156	895	652
Delaware	92	86	6.8%	28	31	64	55	3	4	25	26	18	17	0	NM	18	16	4	5	0	0	4	5	42	35
District of Columbia	48	34	39.8%	7	0	41	34	0	0	7	0	21	21	0	0	21	21	0	0	0	0	0	0	21	14
Florida	2,278	1,414	61.0%	1,957	1,208	321	206	1,688	982	263	221	73	58	3	3	69	55	8	8	NM	NM	6	6	246	146
Georgia	1,200	1,241	-3.3%	1,042	1,103	158	138	160	156	881	946	23	19	NM	NM	21	17	126	112	0	0	126	112	10	9
Maryland	762	642	18.6%	252	208	510	435	4	5	240	196	146	123	7	6	138	117	19	19	0	0	19	19	353	299
North Carolina	3,953	3,634	8.8%	3,818	3,529	134	104	213	233	3,547	3,232	121	124	58	65	63	59	4	3	0	0	4	3	68	42
South Carolina	554	427	29.6%	391	309	162	118	NM	NM	387	308	41	29	0	0	41	29	15	10	NM	0	13	10	108	78
Virginia	545	493	10.5%	482	449	63	44	110	101	371	348	20	16	NM	0	19	16	1	1	0	0	1	1	43	27
West Virginia	6	5	26.7%	0	0	6	5	0	0	0	0	2	1	0	0	2	1	0	0	0	0	0	0	4	4
East South Central	619	551	12.3%	539	479	80	72	46	48	487	425	55	52	NM	3	53	49	5	4	NM	NM	1	1	26	22
Alabama	215	203	5.7%	208	198	7	5	20	21	189	177	5	4	0	0	5	4	1	0	0	0	1	0	2	1
Kentucky	46	43	5.8%	26	28	20	15	25	27	NM	NM	11	9	0	0	11	9	1	0	0	0	1	0	8	6
Mississippi	168	179	-6.4%	161	173	7	6	0	0	161	173	4	4	0	0	4	4	0	0	0	0	0	0	3	2
Tennessee	191	126	51.9%	144	80	47	46	NM	0	136	73	36	36	NM	3	34	33	3	4	NM	NM	0	0	13	13
West South Central	2,858	2,238	27.7%	2,254	1,767	604	470	38	40	2,214	1,727	126	104	NM	1	124	103	2	1	0	0	2	1	478	366
Arkansas	113	118	-4.4%	98	108	15	10	NM	NM	97	107	4	3	0	0	4	3	2	1	0	0	2	1	9	6
Louisiana	128	115	10.8%	NM	NM	126	114	NM	NM	0	0	9	7	0	0	9	7	0	0	0	0	0	0	118	107
Oklahoma	40	39	0.8%	33	34	7	5	33	34	0	0	2	2	0	0	2	2	0	0	0	0	0	0	5	3
Texas	2,578	1,965	31.2%	2,122	1,624	455	341	NM	NM	2,117	1,619	111	92	NM	1	109	91	0	0	0	0	0	0	346	250
Mountain	9,644	9,246	4.3%	7,156	7,191	2,487	2,055	485	506	6,623	6,634	727	689	46	50	681	639	37	35	NM	1	35	33	1,772	1,382
Arizona	3,642	3,437	6.0%	2,209	2,266	1,433	1,171	323	348	1,881	1,913	426	386	6	4	420	382	8	12	0	0	8	12	1,005	777
Colorado	916	856	7.0%	600	559	316	297	NM	NM	590	546	119	122	8	9	111	113	1	1	0	0	1	1	203	183
Idaho	292	295	-1.2%	266	281	26	14	0	0	266	281	3	2	0	0	3	2	2	0	NM	0	1	0	22	11
Montana	30	29	2.4%	18	20	12	9	0	0	18	20	3	3	0	0	3	3	0	0	0	0	0	0	8	7
Nevada	2,571	2,495	3.0%	2,247	2,257	324	238	20	21	2,193	2,197	87	90	33	37	54	53	20	16	1	1	19	15	251	171
New Mexico	803	798	0.6%	654	668	148	130	139	133	515	535	44	46	0	0	44	46	0	0	0	0	0	0	104	84
Utah	1,295	1,332	-2.8%	1,071	1,141	224	191	0	0	1,071	1,141	43	39	0	0	43	39	5	4	0	0	5	4	176	148
Wyoming	94	3	NM	90	0	4	3	0	0	90	0	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Pacific Contiguous	21,004	19,437	8.1%	13,362	12,901	7,642	6,535	261	277	12,988	12,518	1,962	1,692	84	81	1,878	1,611	1,096	944	29	25	1,066	919	4,698	4,006
California	20,420	18,984	7.6%	13,000	12,620	7,420	6,364	258	273	12,629	12,240	1,889	1,638	84	81	1,805	1,557	1,088	936	29	25	1,058	911	4,556	3,896
Oregon	465	381	22.2%	341	281	124	99	3	3	338	278	57	42	0	0	57	42	8	7	0	0	8	7	59	50
Washington	119	72	65.0%	21	0	98	72	0	0	21	0	15	11	0	0	15	11	0	0	0	0	0	0	83	60
Pacific Noncontiguous	673	621	8.3%	122	104	550	517	20	18	102	87	218	202	0	0	218	202	2	1	0	0	2	1	330	314
Alaska	2	1	44.5%	0	0	2	1	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	1	1
Hawaii	671	620	8.2%	122	104	548	515	20	18	102	87	217	201	0	0	217	201	2	1	0	0	2	1	329	313
U.S. Total	51,950	46,618	11.4%	34,431	32,008	17,520	14,609	3,297	2,602	30,793	29,050	5,938	5,156	293	312	5,646	4,844	1,551	1,338	48	45	1,504	1,294	10,370	8,471

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 are preliminary. 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, June 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	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 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	1	5	-81.6%	1	5	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	1	5	-81.6%	1	5	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	128	160	-19.6%	0	0	128	160	0	0	0	0
Arizona	112	107	5.1%	0	0	112	107	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	16	53	-69.1%	0	0	16	53	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	310	353	-12.0%	0	0	310	353	0	0	0	0
California	310	353	-12.0%	0	0	310	353	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	439	517	-14.9%	1	5	439	512	0	0	0	0

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

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

by State, by Sector, Year-to-Date through June 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	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	27	29	-6.2%	27	29	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	27	29	-6.2%	27	29	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	515	531	-3.1%	0	0	515	531	0	0	0	0
Arizona	410	402	2.0%	0	0	410	402	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	105	130	-19.1%	0	0	105	130	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	1,069	1,277	-16.3%	0	0	1,069	1,277	0	0	0	0
California	1,069	1,277	-16.3%	0	0	1,069	1,277	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	1,611	1,837	-12.3%	27	29	1,584	1,809	0	0	0	0

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

Chapter 2

Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2009-June 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	635,833	473,564	159,452	94	2,723
Year 2017					
January	63,460	46,708	16,471	11	270
February	47,985	35,491	12,240	9	245
March	48,840	35,655	12,926	9	250
April	44,279	31,403	12,656	6	214
May	50,898	37,373	13,294	6	224
June	58,852	43,744	14,881	6	221
July	69,769	51,971	17,560	7	230
August	65,761	48,954	16,574	7	227
Sept	54,713	39,390	15,098	8	218
October	50,015	36,190	13,591	7	227
November	50,882	35,778	14,873	8	222
December	58,457	41,733	16,479	9	236
Year 2018					
January	64,517	47,706	16,524	12	274
February	45,655	33,933	11,470	9	243
March	44,388	32,273	11,864	8	243
April	40,554	30,358	9,980	6	210
May	47,470	35,222	12,012	6	230
June	56,031	42,467	13,339	6	219
July	63,805	48,286	15,283	7	230
August	63,710	47,867	15,612	9	223
Sept	53,945	40,309	13,416	8	212
October	48,488	35,607	12,682	7	191
November	51,720	38,008	13,488	7	216
December	55,549	41,527	13,782	8	232
Year 2019					
January	55,769	41,294	14,239	10	226
February	44,982	33,360	11,407	8	207
March	43,971	31,669	12,115	9	177
April	33,391	24,388	8,826	6	170
May	40,051	30,247	9,609	5	190
June	44,115	33,489	10,438	4	184
Year to Date					
2017	314,313	230,374	82,468	48	1,424
2018	298,615	221,960	75,189	47	1,419
2019	262,279	194,447	66,634	43	1,154
Rolling 12 Months Ending in June					
2018	648,212	475,976	169,365	93	2,778
2019	599,497	446,051	150,897	91	2,459

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	13,721	2,321	1,162	493	9,745
Year 2017					
January	1,470	300	117	59	995
February	1,198	213	104	48	832
March	1,292	238	106	57	892
April	1,129	221	78	36	794
May	1,137	209	75	34	819
June	1,153	211	84	34	823
July	1,202	254	96	40	812
August	1,214	256	100	36	823
Sept	1,103	207	86	38	773
October	1,223	223	94	35	871
November	1,260	263	98	44	855
December	1,285	208	119	56	903
Year 2018					
January	1,404	235	141	58	970
February	1,267	215	139	45	868
March	1,243	205	97	43	898
April	1,108	183	80	39	805
May	1,097	171	80	35	811
June	1,089	192	91	36	770
July	1,071	201	82	40	748
August	1,032	195	78	41	720
Sept	1,080	193	80	42	765
October	1,008	164	67	35	742
November	1,136	184	110	41	802
December	1,186	183	118	39	846
Year 2019					
January	1,274	219	134	48	873
February	1,122	207	77	45	792
March	1,103	207	86	45	765
April	1,008	159	76	32	741
May	972	144	65	35	728
June	1,005	182	101	27	695
Year to Date					
2017	7,378	1,392	565	267	5,154
2018	7,207	1,201	628	256	5,122
2019	6,484	1,118	540	233	4,593
Rolling 12 Months Ending in June					
2018	14,496	2,611	1,221	504	10,160
2019	12,998	2,237	1,073	471	9,216

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	649,554	475,884	160,613	587	12,468
Year 2017					
January	64,930	47,008	16,588	71	1,264
February	49,183	35,705	12,344	58	1,077
March	50,132	35,893	13,032	66	1,141
April	45,408	31,624	12,735	42	1,008
May	52,034	37,582	13,370	39	1,043
June	60,005	43,955	14,965	40	1,045
July	70,971	52,225	17,656	47	1,042
August	66,975	49,209	16,673	43	1,050
Sept	55,817	39,596	15,184	45	991
October	51,238	36,413	13,686	42	1,098
November	52,142	36,042	14,971	52	1,077
December	59,743	41,940	16,598	66	1,139
Year 2018					
January	65,921	47,941	16,665	70	1,245
February	46,922	34,148	11,609	54	1,111
March	45,631	32,478	11,961	51	1,140
April	41,662	30,541	10,060	45	1,016
May	48,567	35,393	12,092	41	1,041
June	57,119	42,659	13,430	42	989
July	64,876	48,487	15,364	47	978
August	64,743	48,061	15,690	49	942
Sept	55,025	40,502	13,496	51	977
October	49,496	35,772	12,749	42	933
November	52,856	38,191	13,598	48	1,018
December	56,735	41,710	13,900	47	1,078
Year 2019					
January	57,043	41,512	14,373	58	1,099
February	46,104	33,567	11,484	53	999
March	45,074	31,876	12,201	55	942
April	34,399	24,547	8,902	39	911
May	41,023	30,391	9,675	40	918
June	45,120	33,671	10,539	32	879
Year to Date					
2017	321,692	231,766	83,033	315	6,578
2018	305,822	223,161	75,817	303	6,541
2019	268,763	195,565	67,174	277	5,748
Rolling 12 Months Ending in June					
2018	662,708	478,587	170,585	598	12,938
2019	612,495	448,288	151,970	562	11,675

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	27,245	17,733	8,692	281	539
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	9,046	4,361	4,541	66	78
February	1,369	1,090	219	15	44
March	1,409	1,058	297	12	42
April	1,529	1,128	349	16	37
May	1,780	1,297	421	20	42
June	1,826	1,343	421	19	43
July	1,691	1,177	430	28	56
August	1,816	1,258	495	25	38
Sept	1,775	1,346	372	20	37
October	1,732	1,318	359	17	38
November	1,654	1,207	384	23	40
December	1,618	1,150	405	20	43
Year 2019					
January	2,293	1,554	672	23	45
February	1,363	995	312	14	41
March	1,398	1,049	294	16	39
April	1,355	969	324	15	46
May	1,609	1,200	353	18	37
June	1,680	1,299	325	18	38
Year to Date					
2017	10,092	7,677	2,098	84	233
2018	16,959	10,277	6,247	148	286
2019	9,697	7,065	2,281	104	246
Rolling 12 Months Ending in June					
2018	28,563	18,168	9,611	256	529
2019	19,983	14,521	4,726	237	499

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	2,694	92	320	363	1,919
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	717	49	107	108	453
February	147	5	10	26	107
March	165	4	13	22	126
April	147	4	12	19	113
May	164	3	17	17	126
June	221	5	14	16	187
July	175	3	11	30	131
August	167	4	12	25	127
Sept	170	6	12	17	135
October	169	5	16	17	131
November	182	2	16	30	133
December	270	3	80	36	151
Year 2019					
January	377	18	40	46	272
February	187	8	18	28	133
March	176	4	19	29	124
April	164	3	17	18	127
May	274	5	16	121	132
June	148	3	16	14	115
Year to Date					
2017	885	37	97	123	629
2018	1,563	69	173	209	1,112
2019	1,327	41	127	256	904
Rolling 12 Months Ending in June					
2018	2,690	105	296	324	1,965
2019	2,458	64	274	410	1,711

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	29,940	17,825	9,013	644	2,457
Year 2017					
January	2,136	1,450	470	56	161
February	1,679	1,152	362	37	128
March	1,810	1,346	271	40	152
April	1,620	1,155	291	21	153
May	1,850	1,293	385	30	142
June	1,883	1,317	416	23	126
July	1,709	1,177	381	28	123
August	1,829	1,270	400	33	125
Sept	1,756	1,202	390	24	140
October	1,816	1,306	335	26	149
November	1,833	1,174	381	34	245
December	3,787	1,797	1,598	77	314
Year 2018					
January	9,764	4,410	4,648	175	531
February	1,516	1,095	229	40	151
March	1,574	1,062	310	35	168
April	1,676	1,132	361	35	149
May	1,944	1,300	438	37	169
June	2,048	1,348	435	36	229
July	1,865	1,180	441	58	187
August	1,984	1,262	508	50	165
Sept	1,945	1,352	384	36	173
October	1,900	1,323	375	34	168
November	1,836	1,210	400	53	173
December	1,888	1,153	485	57	194
Year 2019					
January	2,670	1,572	712	69	317
February	1,550	1,003	331	42	175
March	1,574	1,053	313	46	163
April	1,519	972	341	34	173
May	1,883	1,205	370	139	169
June	1,828	1,302	342	31	153
Year to Date					
2017	10,977	7,714	2,195	207	862
2018	18,522	10,346	6,420	357	1,398
2019	11,023	7,106	2,407	360	1,150
Rolling 12 Months Ending in June					
2018	31,252	18,272	9,907	580	2,494
2019	22,441	14,585	5,000	647	2,209

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Values for 2017 and prior years are final. Values for 2018 and 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-June 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	3,311	2,740	388	2	181
Year 2017					
January	368	301	51	0	15
February	277	217	44	0	15
March	265	214	31	0	20
April	168	110	41	0	16
May	329	264	49	0	16
June	350	282	48	0	20
July	344	271	51	0	22
August	300	226	52	0	22
Sept	276	209	50	0	16
October	228	171	40	0	18
November	293	234	40	0	18
December	292	231	44	0	16
Year 2018					
January	349	296	38	0	15
February	275	234	30	0	10
March	245	198	35	0	12
April	246	193	37	0	15
May	161	140	8	0	13
June	312	269	24	0	19
July	344	284	41	0	18
August	327	272	40	0	16
Sept	316	259	39	0	18
October	190	158	15	0	16
November	247	196	38	0	13
December	299	241	41	0	17
Year 2019					
January	312	258	39	0	14
February	269	222	35	0	12
March	247	193	40	0	13
April	159	107	36	0	15
May	276	219	41	0	15
June	200	151	34	0	15
Year to Date					
2017	1,756	1,389	264	1	102
2018	1,588	1,330	173	1	85
2019	1,463	1,152	225	1	85
Rolling 12 Months Ending in June					
2018	3,322	2,672	451	2	197
2019	3,186	2,562	441	2	181

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
The new methodology was retroactively applied to 2004-2007 data. See the Technical Notes (Appendix C) for further information. See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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-June 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	833	12	93	10	717
Year 2017					
January	81	0	10	2	70
February	69	0	10	1	58
March	90	1	10	2	77
April	74	0	10	1	64
May	78	1	10	1	66
June	91	1	9	1	80
July	86	1	10	0	75
August	90	2	9	2	77
Sept	76	1	9	2	64
October	86	1	9	1	74
November	80	1	9	1	69
December	76	1	10	2	63
Year 2018					
January	72	1	9	2	60
February	63	1	8	2	53
March	62	1	9	1	50
April	78	1	10	1	66
May	64	1	6	0	57
June	66	1	1	0	63
July	72	1	9	0	62
August	68	1	9	0	58
Sept	72	1	7	1	63
October	75	0	9	1	64
November	65	1	8	2	55
December	76	1	8	2	65
Year 2019					
January	67	1	8	2	57
February	60	1	8	1	49
March	70	1	9	1	59
April	67	2	9	1	54
May	71	1	9	0	62
June	66	1	7	0	58
Year to Date					
2017	483	3	59	7	415
2018	404	7	43	5	349
2019	402	7	49	5	340
Rolling 12 Months Ending in June					
2018	899	14	99	13	771
2019	830	13	99	10	708

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

Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-June 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	4,144	2,752	481	12	898
Year 2017					
January	449	301	61	2	85
February	347	218	54	1	74
March	355	215	41	2	97
April	242	110	51	1	80
May	406	265	59	1	82
June	441	283	57	1	100
July	430	272	60	0	98
August	390	228	61	2	99
Sept	352	211	60	2	80
October	314	172	49	2	92
November	373	235	49	1	87
December	368	233	54	2	80
Year 2018					
January	421	297	47	2	75
February	338	235	38	2	63
March	307	199	44	2	63
April	323	195	47	1	81
May	225	141	14	0	70
June	378	270	26	0	82
July	416	285	50	0	80
August	395	273	49	0	73
Sept	389	260	47	1	81
October	264	159	24	1	80
November	312	196	46	2	68
December	376	242	50	2	82
Year 2019					
January	380	260	47	2	71
February	329	224	43	1	61
March	317	194	48	2	73
April	226	110	45	1	70
May	347	220	50	0	77
June	266	152	41	0	73
Year to Date					
2017	2,239	1,392	323	8	516
2018	1,993	1,336	216	6	434
2019	1,865	1,159	275	7	424
Rolling 12 Months Ending in June					
2018	4,221	2,687	550	16	968
2019	4,016	2,575	540	12	889

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Values for 2017 and prior years are final. Values for 2018 and 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-June 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	10,855,155	5,494,870	4,756,881	51,844	551,560
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	804,466	420,245	332,392	4,152	47,678
February	717,482	356,680	314,828	3,965	42,008
March	770,858	387,882	336,121	4,114	42,741
April	726,713	369,332	309,650	3,908	43,822
May	872,155	456,439	367,191	4,104	44,420
June	972,150	510,445	411,715	4,433	45,557
July	1,254,838	641,395	559,827	5,135	48,481
August	1,216,432	606,866	555,026	5,164	49,377
Sept	1,064,493	536,030	477,656	4,666	46,142
October	914,106	458,225	406,569	4,288	45,024
November	777,300	384,952	340,874	3,818	47,656
December	764,161	366,377	345,032	4,098	48,654
Year 2019					
January	853,956	422,019	377,276	4,446	50,215
February	786,953	398,141	341,156	4,138	43,518
March	809,964	409,158	350,891	4,285	45,631
April	743,607	381,653	313,765	3,978	44,212
May	844,004	441,667	351,997	4,163	46,177
June	1,002,542	528,383	423,715	4,335	46,109
Year to Date					
2017	4,197,407	2,122,455	1,785,311	23,776	265,865
2018	4,863,823	2,501,024	2,071,897	24,676	266,227
2019	5,041,026	2,581,021	2,158,799	25,344	275,862
Rolling 12 Months Ending in June					
2018	10,174,176	5,133,452	4,448,573	50,959	541,192
2019	11,032,358	5,574,866	4,843,783	52,513	561,195

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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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-June 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	1,235,703	41,038	332,905	103,286	758,474
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	109,088	3,577	29,046	9,474	66,991
February	97,799	3,169	26,576	8,610	59,444
March	103,896	3,312	28,085	8,710	63,789
April	97,057	2,981	25,424	8,135	60,517
May	97,070	3,150	26,420	7,928	59,572
June	99,605	3,536	26,776	8,226	61,067
July	107,012	4,154	30,257	9,006	63,596
August	106,322	4,161	29,287	8,884	63,990
Sept	101,127	3,498	27,324	8,293	62,012
October	100,725	3,211	26,980	8,319	62,215
November	105,970	3,060	27,410	8,659	66,841
December	110,030	3,229	29,319	9,042	68,440
Year 2019					
January	114,580	3,570	31,252	9,527	70,231
February	102,027	3,447	26,437	8,577	63,565
March	106,560	3,648	28,565	8,684	65,663
April	97,747	3,140	25,490	7,758	61,359
May	99,181	3,377	25,052	7,838	62,915
June	100,934	4,128	26,421	7,960	62,425
Year to Date					
2017	565,463	19,209	151,747	48,894	345,613
2018	604,516	19,725	162,327	51,084	371,380
2019	621,028	21,311	163,216	50,344	386,157
Rolling 12 Months Ending in June					
2018	1,207,903	39,256	320,525	106,513	741,609
2019	1,252,215	42,624	333,794	102,547	773,251

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-June 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	12,090,858	5,535,908	5,089,786	155,131	1,310,034
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	913,555	423,822	361,438	13,625	114,669
February	815,281	359,850	341,404	12,575	101,452
March	874,754	391,194	364,206	12,824	106,530
April	823,770	372,313	335,075	12,043	104,340
May	969,225	459,589	393,611	12,032	103,992
June	1,071,754	513,981	438,490	12,659	106,624
July	1,361,850	645,550	590,084	14,140	112,077
August	1,322,754	611,027	584,313	14,048	113,366
Sept	1,165,621	539,527	504,980	12,959	108,154
October	1,014,832	461,437	433,550	12,607	107,239
November	883,270	388,012	368,284	12,477	114,497
December	874,192	369,606	374,352	13,139	117,094
Year 2019					
January	968,536	425,589	408,527	13,973	120,446
February	888,980	401,588	367,594	12,715	107,083
March	916,524	412,806	379,456	12,969	111,294
April	841,354	384,793	339,255	11,736	105,570
May	943,185	445,043	377,049	12,000	109,092
June	1,103,476	532,512	450,135	12,295	108,534
Year to Date					
2017	4,762,871	2,141,665	1,937,058	72,670	611,478
2018	5,468,340	2,520,749	2,234,224	75,759	637,607
2019	5,662,054	2,602,331	2,322,016	75,688	662,019
Rolling 12 Months Ending in June					
2018	11,382,079	5,172,707	4,769,098	157,472	1,282,801
2019	12,284,573	5,617,490	5,177,577	155,059	1,334,446

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-June 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	284,667	25,646	236,388	19,466	3,167
Year 2017					
January	25,272	2,182	20,948	1,784	358
February	21,912	2,167	17,878	1,529	337
March	24,177	2,303	19,774	1,742	359
April	22,941	2,145	18,844	1,620	332
May	23,879	2,202	19,651	1,731	294
June	23,091	1,921	19,163	1,670	336
July	22,896	1,983	18,932	1,702	279
August	22,923	2,030	18,919	1,668	305
Sept	22,102	1,851	18,287	1,672	292
October	22,063	2,037	18,243	1,465	318
November	22,870	2,105	18,715	1,728	322
December	23,986	2,148	19,695	1,810	333
Year 2018					
January	25,148	2,570	20,492	1,782	305
February	23,593	2,396	19,225	1,661	311
March	25,276	2,604	20,497	1,847	327
April	23,720	2,353	19,467	1,593	307
May	23,568	2,195	19,632	1,474	267
June	23,693	2,007	19,930	1,504	252
July	23,948	2,006	20,218	1,492	232
August	24,699	2,059	20,932	1,494	214
Sept	21,204	1,702	17,849	1,454	198
October	23,068	1,909	19,210	1,704	246
November	22,951	1,907	19,077	1,715	252
December	23,800	1,940	19,859	1,746	255
Year 2019					
January	23,042	1,866	19,139	1,759	278
February	20,928	1,672	17,454	1,549	253
March	23,336	1,898	19,451	1,692	294
April	21,066	1,723	18,124	960	259
May	21,512	1,838	18,878	566	229
June	22,143	1,781	19,040	1,099	224
Year to Date					
2017	141,271	12,920	116,260	10,076	2,016
2018	144,998	14,124	119,243	9,862	1,770
2019	132,026	10,777	112,087	7,624	1,538
Rolling 12 Months Ending in June					
2018	281,838	26,278	232,034	19,906	3,620
2019	271,695	22,300	229,232	17,229	2,935

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Table 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-June 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	4,032	8	2,242	911	871
Year 2017					
January	352	0	171	94	87
February	329	0	156	92	81
March	353	0	177	92	84
April	346	0	153	107	87
May	299	0	134	85	80
June	329	0	165	89	75
July	312	0	176	85	51
August	348	0	172	98	78
Sept	330	0	169	98	62
October	319	0	170	93	56
November	298	0	140	85	73
December	324	0	165	81	77
Year 2018					
January	411	1	259	68	83
February	400	1	238	79	82
March	435	1	262	82	90
April	351	1	179	85	87
May	272	1	127	71	73
June	248	1	135	46	67
July	264	1	126	76	62
August	282	1	138	82	61
Sept	268	0	128	82	57
October	380	1	212	95	73
November	369	0	220	73	75
December	353	0	219	71	63
Year 2019					
January	405	0	247	84	74
February	375	1	242	67	65
March	429	1	267	80	81
April	384	1	202	102	79
May	232	1	94	64	73
June	247	1	112	77	57
Year to Date					
2017	2,009	1	955	559	494
2018	2,116	5	1,199	431	482
2019	2,072	4	1,164	474	430
Rolling 12 Months Ending in June					
2018	4,047	6	2,192	971	879
2019	3,987	7	2,208	953	819

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 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-June 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	288,699	25,655	238,630	20,377	4,038
Year 2017					
January	25,625	2,182	21,119	1,878	446
February	22,241	2,167	18,034	1,621	419
March	24,530	2,303	19,951	1,834	442
April	23,287	2,146	18,996	1,727	418
May	24,178	2,202	19,785	1,816	374
June	23,419	1,921	19,329	1,759	411
July	23,208	1,983	19,108	1,786	330
August	23,271	2,030	19,092	1,766	383
Sept	22,431	1,851	18,456	1,771	354
October	22,382	2,037	18,413	1,558	374
November	23,168	2,105	18,855	1,813	395
December	24,310	2,149	19,860	1,891	410
Year 2018					
January	25,560	2,571	20,751	1,850	388
February	23,993	2,396	19,463	1,740	393
March	25,710	2,605	20,759	1,929	417
April	24,071	2,353	19,645	1,679	394
May	23,839	2,195	19,759	1,545	340
June	23,941	2,008	20,064	1,550	319
July	24,212	2,007	20,344	1,568	293
August	24,981	2,059	21,071	1,576	275
Sept	21,471	1,702	17,978	1,536	255
October	23,449	1,909	19,421	1,799	319
November	23,320	1,908	19,297	1,788	327
December	24,153	1,940	20,078	1,817	318
Year 2019					
January	23,446	1,866	19,386	1,842	352
February	21,304	1,672	17,697	1,616	318
March	23,764	1,899	19,718	1,772	376
April	21,450	1,723	18,327	1,062	338
May	21,744	1,839	18,973	630	302
June	22,390	1,781	19,152	1,176	281
Year to Date					
2017	143,280	12,921	117,214	10,635	2,510
2018	147,114	14,129	120,441	10,293	2,251
2019	134,098	10,781	113,251	8,098	1,967
Rolling 12 Months Ending in June					
2018	285,885	26,284	234,225	20,877	4,498
2019	275,683	22,307	231,440	18,182	3,754

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.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2009-June 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	16,557	467	13,702	2,379	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	1,350	28	1,132	190	0
February	1,278	26	1,076	175	1
March	1,377	40	1,138	198	1
April	1,342	38	1,109	194	1
May	1,398	43	1,143	212	1
June	1,454	42	1,202	208	1
July	1,458	48	1,208	200	1
August	1,461	47	1,204	209	1
Sept	1,313	36	1,082	194	1
October	1,372	43	1,130	199	0
November	1,356	39	1,120	196	0
December	1,398	37	1,157	204	0
Year 2019					
January	1,363	31	1,131	200	1
February	1,194	21	995	177	1
March	1,299	21	1,088	189	1
April	1,283	29	1,057	196	1
May	1,389	28	1,162	199	1
June	1,372	26	1,145	200	1
Year to Date					
2017	8,127	198	6,684	1,243	2
2018	8,199	216	6,800	1,177	5
2019	7,899	155	6,579	1,160	5
Rolling 12 Months Ending in June					
2018	16,420	440	13,497	2,472	11
2019	16,257	406	13,481	2,362	9

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.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2009-June 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	1,898	0	752	957	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	170	0	64	90	17
February	151	0	60	80	12
March	155	0	64	79	12
April	147	0	54	77	16
May	161	0	59	86	16
June	163	0	65	80	18
July	164	0	65	83	17
August	168	0	66	80	21
Sept	134	0	58	58	17
October	150	0	61	73	16
November	162	0	66	82	14
December	172	0	70	90	13
Year 2019					
January	172	0	69	87	16
February	156	0	66	74	16
March	154	0	70	67	17
April	114	0	58	39	17
May	126	0	67	47	13
June	135	0	67	53	15
Year to Date					
2017	1,101	0	416	581	103
2018	948	0	365	492	91
2019	858	0	398	365	94
Rolling 12 Months Ending in June					
2018	1,972	0	763	1,012	196
2019	1,808	0	784	831	192

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Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-June 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	18,454	467	14,454	3,336	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	1,521	28	1,196	279	17
February	1,429	26	1,136	255	13
March	1,532	40	1,202	277	13
April	1,489	38	1,163	271	17
May	1,559	43	1,202	297	17
June	1,617	42	1,267	289	19
July	1,622	48	1,273	283	18
August	1,629	47	1,270	290	22
Sept	1,447	36	1,141	252	18
October	1,521	43	1,191	271	16
November	1,518	39	1,187	278	14
December	1,570	37	1,227	293	13
Year 2019					
January	1,535	31	1,201	287	17
February	1,349	21	1,061	251	17
March	1,453	21	1,159	256	17
April	1,397	29	1,116	234	19
May	1,515	28	1,228	245	14
June	1,507	26	1,212	252	16
Year to Date					
2017	9,228	198	7,100	1,824	105
2018	9,146	216	7,166	1,669	96
2019	8,756	155	6,977	1,525	99
Rolling 12 Months Ending in June					
2018	18,391	440	14,260	3,484	207
2019	18,064	406	14,265	3,193	201

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 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-June 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	351,162	45,112	136,005	520	169,526
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	31,979	4,532	12,715	63	14,669
February	28,612	3,645	11,446	42	13,478
March	30,009	4,010	11,542	36	14,422
April	25,684	2,208	9,889	16	13,570
May	30,567	3,455	12,161	32	14,920
June	30,862	4,157	12,369	53	14,283
July	31,531	4,337	12,285	59	14,851
August	30,192	4,299	11,379	69	14,444
Sept	27,655	3,607	10,584	52	13,412
October	27,526	3,491	10,643	27	13,365
November	27,289	3,610	9,892	20	13,767
December	29,256	3,760	11,100	51	14,345
Year 2019					
January	31,235	4,596	12,490	52	14,096
February	27,338	3,844	10,578	57	12,858
March	27,746	3,568	10,216	72	13,890
April	25,617	3,065	9,554	24	12,974
May	29,033	4,067	11,527	18	13,422
June	27,863	3,202	10,984	31	13,645
Year to Date					
2017	176,832	21,401	73,361	246	81,823
2018	177,713	22,007	70,122	242	85,342
2019	168,832	22,343	65,350	254	80,885
Rolling 12 Months Ending in June					
2018	364,852	43,412	148,637	456	172,347
2019	342,281	45,448	131,233	531	165,069

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-June 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	1,036,410	10,876	23,113	4,806	997,615
Year 2017					
January	90,099	1,206	2,090	525	86,278
February	79,451	1,037	1,879	430	76,104
March	87,759	1,170	2,113	299	84,176
April	82,426	1,044	1,548	295	79,539
May	84,129	716	1,623	301	81,490
June	85,459	1,007	1,641	322	82,490
July	89,160	683	1,963	355	86,159
August	90,434	989	2,010	365	87,071
Sept	81,960	931	2,032	233	78,763
October	86,217	893	1,972	402	82,950
November	87,430	902	1,929	473	84,126
December	91,903	1,079	2,186	524	88,115
Year 2018					
January	88,492	859	2,066	454	85,114
February	83,159	832	2,113	474	79,741
March	85,663	994	2,038	493	82,138
April	84,822	913	1,804	339	81,765
May	84,790	946	1,812	319	81,712
June	85,430	968	1,799	402	82,261
July	88,879	914	2,037	382	85,545
August	90,762	847	2,033	417	87,465
Sept	82,313	918	1,647	336	79,411
October	86,305	979	1,956	329	83,042
November	85,248	749	1,879	343	82,278
December	90,548	957	1,930	518	87,143
Year 2019					
January	88,336	1,099	1,971	544	84,722
February	79,831	936	1,714	478	76,703
March	80,367	1,008	1,914	436	77,009
April	81,350	981	1,809	344	78,216
May	81,349	1,064	1,799	356	78,131
June	80,471	941	1,782	342	77,405
Year to Date					
2017	509,322	6,179	10,894	2,171	490,078
2018	512,356	5,513	11,631	2,480	492,732
2019	491,704	6,030	10,989	2,499	472,186
Rolling 12 Months Ending in June					
2018	1,039,460	10,989	23,723	4,831	999,917
2019	1,015,758	11,393	22,470	4,825	977,070

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-June 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	1,387,573	55,988	159,118	5,326	1,167,141
Year 2017					
January	121,210	5,698	14,743	581	100,188
February	107,854	4,621	13,868	480	88,885
March	119,043	5,380	15,562	325	97,777
April	109,922	4,180	12,613	328	92,800
May	112,402	3,515	13,237	344	95,306
June	115,723	4,187	14,232	360	96,944
July	121,760	4,625	15,469	395	101,271
August	123,771	4,792	16,258	406	102,315
Sept	110,535	3,021	15,033	249	92,232
October	115,168	4,281	13,754	435	96,698
November	117,888	4,509	14,529	514	98,336
December	125,122	5,654	15,564	566	103,338
Year 2018					
January	120,471	5,391	14,781	517	99,783
February	111,770	4,477	13,559	516	93,218
March	115,672	5,004	13,579	528	96,560
April	110,506	3,122	11,693	356	95,336
May	115,358	4,401	13,973	351	96,632
June	116,292	5,124	14,167	455	96,545
July	120,410	5,251	14,322	441	100,396
August	120,953	5,146	13,412	486	101,909
Sept	109,968	4,525	12,231	388	92,823
October	113,831	4,470	12,599	356	96,406
November	112,538	4,359	11,771	363	96,045
December	119,804	4,717	13,030	569	101,488
Year 2019					
January	119,571	5,696	14,461	596	98,818
February	107,168	4,781	12,292	535	89,561
March	108,114	4,576	12,130	508	90,899
April	106,967	4,046	11,363	368	91,190
May	110,382	5,130	13,326	374	91,553
June	108,333	4,143	12,766	373	91,051
Year to Date					
2017	686,154	27,580	84,255	2,418	571,901
2018	690,069	27,520	81,753	2,723	578,074
2019	660,536	28,372	76,339	2,753	553,071
Rolling 12 Months Ending in June					
2018	1,404,312	54,401	172,360	5,287	1,172,264
2019	1,358,039	56,841	153,703	5,356	1,142,138

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	17	6	168.0%	16	5	0	1	0	0	NM	NM
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	1	1	-38.0%	0	0	0	1	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	16	5	207.0%	16	5	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	1,527	1,978	-23.0%	0	0	1,523	1,973	0	0	4	5
New Jersey	37	39	-5.6%	0	0	37	39	0	0	0	0
New York	0	6	-93.0%	0	0	0	6	0	0	0	0
Pennsylvania	1,490	1,933	-23.0%	0	0	1,486	1,928	0	0	4	5
East North Central	9,039	12,369	-27.0%	5,357	7,606	3,627	4,703	1	1	54	59
Illinois	2,214	3,223	-31.0%	142	201	2,029	2,976	0	1	43	45
Indiana	2,187	3,511	-38.0%	2,071	3,395	116	115	0	1	0	0
Michigan	1,881	2,262	-17.0%	1,862	2,242	18	17	0	0	NM	3
Ohio	1,675	1,829	-8.5%	209	235	1,465	1,594	0	0	0	0
Wisconsin	1,083	1,544	-30.0%	1,073	1,533	0	0	0	0	10	11
West North Central	8,455	9,851	-14.0%	8,366	9,752	0	0	1	1	88	98
Iowa	1,235	1,431	-14.0%	1,190	1,385	0	0	1	1	44	45
Kansas	975	887	9.9%	975	887	0	0	0	0	0	0
Minnesota	994	1,062	-6.3%	979	1,038	0	0	0	0	15	24
Missouri	2,491	3,320	-25.0%	2,491	3,320	0	0	0	0	0	0
Nebraska	1,139	1,246	-8.6%	1,113	1,219	0	0	0	0	26	27
North Dakota	1,488	1,763	-16.0%	1,485	1,760	0	0	0	0	3	3
South Dakota	133	143	-7.0%	133	143	0	0	0	0	0	0
South Atlantic	6,485	8,486	-24.0%	6,056	7,548	418	919	0	1	11	19
Delaware	2	21	-92.0%	0	0	2	21	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	970	1,295	-25.0%	969	1,293	0	0	0	0	NM	2
Georgia	1,412	1,717	-18.0%	1,410	1,714	0	0	0	0	NM	3
Maryland	160	370	-57.0%	0	0	160	369	0	0	0	1
North Carolina	1,132	1,499	-25.0%	1,127	1,494	3	3	0	1	2	2
South Carolina	551	820	-33.0%	551	820	0	0	0	0	0	0
Virginia	210	326	-36.0%	199	301	5	14	0	0	6	11
West Virginia	2,049	2,438	-16.0%	1,801	1,927	248	511	0	0	0	0
East South Central	4,329	6,004	-28.0%	4,139	5,688	NM	304	0	0	8	13
Alabama	1,192	1,690	-29.0%	1,191	1,689	0	0	0	0	NM	1
Kentucky	2,291	2,716	-16.0%	2,291	2,716	0	0	0	0	0	0
Mississippi	NM	521	NM	134	217	NM	304	0	0	0	0
Tennessee	530	1,078	-51.0%	523	1,066	0	0	0	0	7	11
West South Central	8,162	10,521	-22.0%	4,279	5,834	3,877	4,675	0	0	6	12
Arkansas	1,259	1,674	-25.0%	1,034	1,432	226	242	0	0	0	1
Louisiana	505	931	-46.0%	489	587	16	344	0	0	0	0
Oklahoma	503	858	-41.0%	474	752	24	95	0	0	6	11
Texas	5,895	7,057	-16.0%	2,282	3,063	3,612	3,994	0	0	0	0
Mountain	5,914	6,639	-11.0%	5,245	5,997	661	634	0	0	8	7
Arizona	1,082	1,394	-22.0%	1,082	1,394	0	0	0	0	0	0
Colorado	1,047	1,229	-15.0%	1,047	1,229	0	0	0	0	0	0
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	558	528	5.7%	23	21	535	507	0	0	0	0
Nevada	113	149	-24.0%	71	102	42	46	0	0	0	0
New Mexico	702	569	23.0%	702	569	0	0	0	0	0	0
Utah	854	927	-7.9%	815	890	38	37	0	0	0	0
Wyoming	1,558	1,843	-15.0%	1,505	1,792	46	44	0	0	7	7
Pacific Contiguous	92	82	13.0%	0	18	87	58	0	0	5	5
California	5	5	-1.7%	0	0	0	0	0	0	5	5
Oregon	0	18	-100.0%	0	18	0	0	0	0	0	0
Washington	88	59	48.0%	0	0	87	58	0	0	0	1
Pacific Noncontiguous	95	93	1.8%	NM	NM	62	72	2	3	0	0
Alaska	45	34	33.0%	NM	NM	12	13	2	3	0	0
Hawaii	49	59	-16.0%	0	0	49	59	0	0	0	0
U.S. Total	44,115	56,031	-21.0%	33,489	42,467	10,438	13,339	4	6	184	219

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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 2.8.B. Consumption of Coal for Electricity Generation by State, by Sector, Year-to-Date through June 2019 and June 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	146	360	-59.0%	92	205	52	153	0	0	NM	2
Connecticut	46	146	-69.0%	0	0	46	146	0	0	0	0
Maine	8	9	-8.6%	0	0	7	7	0	0	NM	2
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	92	205	-55.0%	92	205	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	10,669	12,298	-13.0%	0	0	10,643	12,262	0	0	27	36
New Jersey	224	259	-14.0%	0	0	224	259	0	0	0	0
New York	147	164	-10.0%	0	0	147	161	0	0	0	4
Pennsylvania	10,298	11,875	-13.0%	0	0	10,272	11,842	0	0	27	32
East North Central	60,129	70,142	-14.0%	35,729	42,981	24,040	26,750	10	11	350	400
Illinois	15,195	17,603	-14.0%	1,013	1,073	13,917	16,238	5	7	260	284
Indiana	16,026	18,949	-15.0%	15,154	18,044	868	900	4	5	0	0
Michigan	11,083	11,743	-5.6%	10,993	11,603	79	112	0	0	11	28
Ohio	10,301	12,386	-17.0%	1,124	2,886	9,177	9,500	0	0	0	1
Wisconsin	7,523	9,461	-20.0%	7,444	9,374	0	0	0	0	79	87
West North Central	50,243	56,260	-11.0%	49,717	55,635	0	0	10	11	516	615
Iowa	6,543	7,161	-8.6%	6,292	6,904	0	0	8	9	243	248
Kansas	5,362	5,956	-10.0%	5,362	5,956	0	0	0	0	0	0
Minnesota	5,358	6,219	-14.0%	5,264	6,065	0	0	0	0	94	154
Missouri	16,264	18,179	-11.0%	16,263	18,178	0	0	1	1	0	0
Nebraska	6,189	6,924	-11.0%	6,028	6,731	0	0	0	0	161	193
North Dakota	9,668	11,004	-12.0%	9,649	10,984	0	0	0	0	19	20
South Dakota	859	817	5.1%	859	817	0	0	0	0	0	0
South Atlantic	32,590	41,675	-22.0%	29,424	35,661	3,070	5,882	7	6	89	125
Delaware	27	75	-64.0%	0	0	27	75	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,380	6,224	-30.0%	4,374	6,211	0	3	0	0	6	10
Georgia	6,645	7,341	-9.5%	6,631	7,322	0	0	0	0	14	20
Maryland	1,054	2,676	-61.0%	0	0	1,046	2,667	0	0	8	9
North Carolina	4,936	6,570	-25.0%	4,901	6,532	15	18	6	5	14	15
South Carolina	2,959	3,802	-22.0%	2,958	3,800	0	0	0	0	1	2
Virginia	852	2,396	-64.0%	772	2,179	32	148	1	1	46	69
West Virginia	11,737	12,589	-6.8%	9,787	9,617	1,950	2,972	0	0	0	0
East South Central	25,107	28,984	-13.0%	23,638	27,424	1,414	1,479	0	0	54	81
Alabama	6,656	8,262	-19.0%	6,649	8,255	0	0	0	0	6	7
Kentucky	12,523	13,131	-4.6%	12,523	13,131	0	0	0	0	0	0
Mississippi	2,051	2,109	-2.8%	637	631	1,414	1,479	0	0	0	0
Tennessee	3,877	5,481	-29.0%	3,829	5,407	0	0	0	0	48	74
West South Central	43,422	49,633	-13.0%	22,710	26,523	20,675	23,037	0	0	37	72
Arkansas	6,351	7,350	-14.0%	5,390	6,032	957	1,314	0	0	4	5
Louisiana	2,620	3,508	-25.0%	1,802	2,170	818	1,339	0	0	0	0
Oklahoma	2,985	4,542	-34.0%	2,888	4,013	63	461	0	0	33	68
Texas	31,467	34,232	-8.1%	12,629	14,309	18,837	19,923	0	0	0	0
Mountain	37,251	38,092	-2.2%	32,473	33,398	4,730	4,639	0	0	47	55
Arizona	6,159	7,677	-20.0%	6,159	7,677	0	0	0	0	0	0
Colorado	6,898	6,949	-0.7%	6,897	6,947	0	0	0	0	1	2
Idaho	2	3	-15.0%	0	0	0	0	0	0	2	3
Montana	4,132	4,036	2.4%	138	92	3,993	3,943	0	0	1	1
Nevada	729	375	95.0%	457	133	272	242	0	0	0	0
New Mexico	3,573	2,739	30.0%	3,573	2,739	0	0	0	0	0	0
Utah	5,556	5,247	5.9%	5,347	5,045	208	202	0	0	0	0
Wyoming	10,202	11,069	-7.8%	9,903	10,767	257	252	0	0	43	49
Pacific Contiguous	2,121	609	248.0%	483	18	1,605	558	0	0	33	32
California	29	29	0.5%	0	0	0	0	0	0	29	29
Oregon	483	18	NM	483	18	0	0	0	0	0	0
Washington	1,608	561	187.0%	0	0	1,605	558	0	0	3	3
Pacific Noncontiguous	601	562	6.9%	180	114	404	429	16	19	0	0
Alaska	267	209	28.0%	180	114	71	76	16	19	0	0
Hawaii	334	353	-5.5%	0	0	334	353	0	0	0	0
U.S. Total	262,279	298,615	-12.0%	194,447	221,960	66,634	75,189	43	47	1,154	1,419

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	23	80	-71.0%	5	9	16	69	1	2	1	1
Connecticut	11	63	-82.0%	1	NM	NM	62	NM	NM	0	0
Maine	2	2	9.2%	0	0	0	NM	1	1	1	1
Massachusetts	NM	9	NM	NM	4	NM	4	NM	NM	0	0
New Hampshire	2	3	-19.0%	2	2	NM	NM	0	1	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	0	0	0	0
Vermont	NM	1	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	35	93	-62.0%	NM	21	24	68	NM	NM	3	3
New Jersey	NM	11	NM	0	0	NM	11	0	0	0	0
New York	14	35	-60.0%	NM	21	6	12	NM	NM	1	1
Pennsylvania	19	47	-59.0%	0	0	16	45	2	0	2	2
East North Central	106	78	35.0%	73	44	31	32	0	1	1	2
Illinois	8	9	-11.0%	1	1	7	8	NM	0	0	0
Indiana	36	21	73.0%	35	19	0	0	0	0	0	1
Michigan	19	14	32.0%	19	14	0	0	NM	1	0	NM
Ohio	40	27	47.0%	15	3	25	24	0	0	0	0
Wisconsin	3	7	-56.0%	3	7	0	0	0	0	NM	NM
West North Central	56	65	-14.0%	55	63	NM	NM	0	0	0	0
Iowa	13	11	24.0%	13	10	0	0	0	0	0	0
Kansas	10	12	-18.0%	10	12	0	0	0	0	0	0
Minnesota	4	9	-49.0%	4	8	NM	NM	0	0	0	0
Missouri	20	26	-22.0%	20	26	0	0	0	0	0	0
Nebraska	3	NM	NM	3	NM	0	0	0	0	0	0
North Dakota	5	4	12.0%	5	4	0	0	0	0	0	0
South Dakota	NM	2	NM	NM	2	0	0	NM	NM	0	0
South Atlantic	211	389	-46.0%	173	335	19	27	11	15	7	13
Delaware	NM	5	NM	0	0	NM	5	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	78	81	-2.8%	76	77	0	NM	0	0	1	NM
Georgia	16	19	-20.0%	10	11	NM	NM	1	1	4	7
Maryland	10	12	-17.0%	0	1	10	11	NM	NM	0	0
North Carolina	33	35	-6.1%	31	32	NM	NM	NM	NM	1	2
South Carolina	14	NM	NM	13	NM	0	0	NM	0	0	0
Virginia	33	196	-83.0%	17	174	5	7	10	14	NM	NM
West Virginia	25	30	-16.0%	25	30	0	0	0	0	0	0
East South Central	55	44	26.0%	54	42	NM	0	0	0	1	NM
Alabama	2	NM	NM	1	7	NM	NM	0	0	NM	NM
Kentucky	11	13	-14.0%	11	13	0	0	0	0	0	0
Mississippi	3	4	-33.0%	3	4	0	0	0	0	0	0
Tennessee	39	18	115.0%	39	18	0	0	0	0	0	0
West South Central	18	19	-4.5%	17	15	1	3	0	0	1	1
Arkansas	5	4	34.0%	5	3	0	1	0	0	0	0
Louisiana	3	NM	NM	3	NM	0	0	0	0	0	0
Oklahoma	3	2	33.0%	2	2	0	0	0	0	0	0
Texas	8	9	-13.0%	7	NM	1	3	0	0	0	1
Mountain	37	38	-3.0%	32	33	5	6	0	0	0	0
Arizona	11	7	42.0%	11	7	0	0	NM	0	0	0
Colorado	1	3	-68.0%	1	3	0	0	0	0	0	0
Idaho	0	0	260.0%	0	0	0	0	0	0	0	0
Montana	5	5	-3.1%	NM	NM	5	5	0	0	0	0
Nevada	3	2	44.0%	3	2	0	1	0	0	0	0
New Mexico	3	2	74.0%	3	2	0	0	0	0	0	0
Utah	3	4	-23.0%	3	4	0	0	0	0	0	0
Wyoming	11	14	-23.0%	11	14	0	0	0	0	0	0
Pacific Contiguous	14	14	3.8%	6	7	6	4	NM	NM	1	2
California	6	10	-36.0%	5	6	1	4	0	0	0	0
Oregon	1	1	-35.0%	1	1	0	0	NM	NM	0	0
Washington	7	3	173.0%	NM	NM	5	0	0	0	1	2
Pacific Noncontiguous	1,125	1,006	12.0%	877	775	222	211	2	1	23	20
Alaska	118	94	26.0%	112	89	0	0	0	NM	5	4
Hawaii	1,007	912	10.0%	765	685	222	211	2	1	18	15
U.S. Total	1,680	1,826	-8.0%	1,299	1,343	325	421	18	19	38	43

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

Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through June 2019 and June 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	280	1,870	-85.0%	44	319	207	1,508	21	28	8	16
Connecticut	110	519	-79.0%	4	NM	101	510	3	NM	2	1
Maine	18	278	-93.0%	0	0	9	260	4	3	6	15
Massachusetts	102	714	-86.0%	NM	131	78	570	5	NM	1	1
New Hampshire	27	253	-89.0%	17	164	NM	80	7	9	0	0
Rhode Island	NM	NM	NM	0	0	NM	NM	1	1	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	848	3,381	-75.0%	299	950	513	2,376	13	NM	23	30
New Jersey	70	372	-81.0%	3	3	66	364	1	4	1	1
New York	583	2,197	-73.0%	297	945	268	1,217	NM	NM	11	21
Pennsylvania	195	812	-76.0%	0	2	179	795	5	7	11	NM
East North Central	478	608	-22.0%	297	349	171	244	2	4	7	12
Illinois	52	84	-38.0%	8	NM	44	69	NM	0	0	0
Indiana	135	114	19.0%	131	103	0	1	0	0	4	9
Michigan	85	131	-35.0%	82	128	0	0	1	3	1	1
Ohio	174	247	-30.0%	51	72	121	173	0	0	2	1
Wisconsin	31	32	-3.7%	25	30	5	2	1	0	NM	NM
West North Central	331	369	-10.0%	322	334	NM	NM	2	1	1	1
Iowa	65	72	-9.3%	64	71	1	1	0	0	0	0
Kansas	61	NM	NM	61	NM	0	0	0	0	0	0
Minnesota	38	58	-34.0%	30	24	NM	NM	1	1	1	0
Missouri	101	119	-15.0%	101	119	0	0	0	0	0	0
Nebraska	16	10	55.0%	16	10	0	0	0	0	0	0
North Dakota	43	32	33.0%	43	32	0	0	0	0	0	0
South Dakota	7	6	9.6%	7	6	0	0	NM	NM	0	0
South Atlantic	1,096	4,076	-73.0%	812	2,860	187	1,066	52	82	45	68
Delaware	24	219	-89.0%	0	12	23	207	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	259	551	-53.0%	248	512	3	25	0	0	9	14
Georgia	92	286	-68.0%	62	NM	NM	NM	2	5	23	31
Maryland	91	427	-79.0%	2	7	87	415	NM	NM	1	2
North Carolina	220	789	-72.0%	210	733	6	NM	NM	NM	4	9
South Carolina	81	374	-78.0%	74	NM	3	42	NM	NM	4	7
Virginia	225	1,259	-82.0%	113	965	60	220	49	68	4	NM
West Virginia	103	171	-40.0%	103	152	1	19	0	0	0	0
East South Central	291	315	-7.5%	283	248	2	58	0	0	7	10
Alabama	18	107	-83.0%	13	43	1	57	0	0	4	7
Kentucky	84	86	-1.9%	84	86	0	0	0	0	0	0
Mississippi	17	NM	NM	16	NM	0	0	0	0	1	2
Tennessee	172	102	69.0%	170	101	0	0	0	0	2	1
West South Central	136	NM	NM	102	NM	29	NM	1	1	5	5
Arkansas	44	NM	NM	30	NM	12	5	0	0	1	2
Louisiana	16	NM	NM	16	NM	0	0	0	0	0	0
Oklahoma	21	15	39.0%	19	14	0	0	0	0	2	1
Texas	56	67	-16.0%	37	45	17	NM	1	1	2	2
Mountain	206	182	13.0%	188	163	17	19	0	0	0	0
Arizona	59	54	8.6%	59	54	0	0	NM	0	0	0
Colorado	13	16	-19.0%	13	16	0	0	0	0	0	0
Idaho	0	0	253.0%	0	0	0	0	0	0	0	0
Montana	17	16	8.4%	NM	NM	14	15	0	0	0	0
Nevada	12	8	52.0%	10	5	3	3	0	0	0	0
New Mexico	37	14	163.0%	37	14	0	0	0	0	0	0
Utah	33	34	-2.1%	32	33	1	1	0	0	0	0
Wyoming	35	40	-13.0%	35	40	0	0	0	0	0	0
Pacific Contiguous	67	62	7.3%	36	34	14	9	NM	NM	16	19
California	47	51	-8.5%	32	31	4	7	0	NM	11	13
Oregon	NM	NM	NM	2	1	0	0	NM	NM	0	0
Washington	17	10	78.0%	NM	NM	10	2	0	0	5	5
Pacific Noncontiguous	5,964	5,904	1.0%	4,682	4,861	1,135	910	13	7	134	126
Alaska	732	701	4.3%	699	668	0	0	4	3	28	30
Hawaii	5,232	5,203	0.6%	3,983	4,193	1,135	910	9	4	106	96
U.S. Total	9,697	16,959	-43.0%	7,065	10,277	2,281	6,247	104	148	246	286

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

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

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 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	NM	NM	NM	0	0	0	0	0	0	NM	NM
New Jersey	1	1	-15.0%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	NM	NM	0	0	0	0	0	0	NM	NM
East North Central	33	84	-61.0%	4	55	23	23	0	0	6	6
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	5	56	-90.0%	0	51	0	0	0	0	5	6
Ohio	23	23	1.0%	0	0	23	23	0	0	0	0
Wisconsin	4	4	-15.0%	4	4	0	0	0	0	0	0
West North Central	1	0	922.0%	0	0	0	0	0	0	1	0
Iowa	1	0	922.0%	0	0	0	0	0	0	1	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	45	64	-30.0%	42	60	0	0	0	0	NM	NM
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	42	60	-31.0%	42	60	0	0	0	0	0	0
Georgia	NM	NM	NM	0	0	0	0	0	0	NM	NM
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	110	161	-32.0%	105	154	0	0	0	0	4	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	105	157	-33.0%	105	154	0	0	0	0	0	3
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	4	-5.9%	0	0	0	0	0	0	4	4
Mountain	11	1	615.0%	0	0	11	1	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	11	1	615.0%	0	0	11	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	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	200	312	-36.0%	151	269	34	24	0	0	15	19

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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 June 2019 and June 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	11	10	14.0%	0	0	0	0	0	0	11	10
New Jersey	4	3	30.0%	0	0	0	0	0	0	4	3
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	8	7	8.3%	0	0	0	0	0	0	8	7
East North Central	364	420	-13.0%	197	296	140	107	0	0	27	17
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	206	291	-29.0%	180	276	0	0	0	0	27	16
Ohio	140	108	30.0%	0	0	140	107	0	0	0	1
Wisconsin	18	21	-15.0%	18	21	0	0	0	0	0	0
West North Central	2	6	-70.0%	0	0	0	0	1	1	1	5
Iowa	2	6	-70.0%	0	0	0	0	1	1	1	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	265	276	-4.3%	248	259	0	0	0	0	16	17
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	248	259	-4.1%	248	259	0	0	0	0	0	0
Georgia	16	17	-6.5%	0	0	0	0	0	0	16	17
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	736	810	-9.2%	706	775	0	0	0	0	30	36
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	707	789	-10.0%	706	775	0	0	0	0	1	15
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	29	21	36.0%	0	0	0	0	0	0	29	21
Mountain	86	66	30.0%	0	0	86	66	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	86	66	30.0%	0	0	86	66	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	1,463	1,588	-7.9%	1,152	1,330	225	173	1	1	85	85

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

Table 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, June 2019 and June 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	28,695	31,505	-8.9%	NM	NM	27,488	30,203	410	384	663	648
Connecticut	11,833	11,861	-0.2%	26	30	11,321	11,374	171	157	316	300
Maine	976	1,658	-41.0%	0	0	841	1,506	13	14	122	137
Massachusetts	8,718	10,347	-16.0%	NM	NM	8,326	9,867	197	191	93	88
New Hampshire	2,518	3,059	-18.0%	4	37	2,495	3,006	3	0	15	15
Rhode Island	4,647	4,578	1.5%	0	0	4,504	4,450	26	20	117	108
Vermont	3	2	36.0%	3	2	0	0	0	0	0	0
Middle Atlantic	113,238	104,428	8.4%	8,181	9,711	103,279	92,965	621	607	1,157	1,144
New Jersey	24,437	23,093	5.8%	NM	NM	24,054	22,706	69	86	173	166
New York	31,197	34,681	-10.0%	8,038	9,574	22,354	24,293	498	471	307	344
Pennsylvania	57,603	46,653	23.0%	2	1	56,872	45,967	54	51	676	635
East North Central	92,469	85,065	8.7%	32,450	31,182	57,287	51,339	653	684	2,079	1,859
Illinois	14,099	14,857	-5.1%	1,045	1,680	12,463	12,571	221	219	370	388
Indiana	17,897	17,425	2.7%	8,242	8,384	8,467	8,043	59	81	1,128	917
Michigan	17,966	17,824	0.8%	5,904	6,657	11,574	10,692	236	220	252	255
Ohio	29,676	24,141	23.0%	5,534	4,987	23,957	18,956	110	125	76	73
Wisconsin	12,831	10,818	19.0%	11,725	9,473	826	1,079	26	39	254	227
West North Central	21,227	22,533	-5.8%	17,705	19,522	3,105	2,611	153	138	264	261
Iowa	4,515	4,980	-9.3%	4,284	4,744	0	NM	58	47	173	189
Kansas	3,283	4,340	-24.0%	3,259	4,329	0	0	0	0	24	10
Minnesota	5,932	5,302	12.0%	5,089	4,476	769	742	27	41	48	43
Missouri	5,589	6,018	-7.1%	3,185	4,090	2,336	1,869	61	50	7	10
Nebraska	748	786	-4.8%	741	785	0	0	7	1	0	0
North Dakota	616	518	19.0%	604	510	0	0	0	0	12	8
South Dakota	543	588	-7.7%	543	588	0	0	0	0	0	0
South Atlantic	260,403	250,997	3.7%	215,086	202,696	41,851	45,153	983	1,039	2,484	2,109
Delaware	2,938	2,602	13.0%	35	8	2,388	2,238	0	0	515	356
District of Columbia	73	66	11.0%	0	0	0	0	73	66	0	0
Florida	128,246	119,590	7.2%	120,926	112,339	6,595	6,568	7	8	719	675
Georgia	37,089	36,286	2.2%	27,014	26,321	9,738	9,610	1	0	336	356
Maryland	8,830	8,847	-0.2%	2,199	2,533	5,789	5,391	823	880	19	43
North Carolina	25,485	30,037	-15.0%	19,664	24,788	5,684	5,106	NM	81	63	63
South Carolina	17,365	16,892	2.8%	16,947	13,730	358	3,100	0	0	60	62
Virginia	38,929	35,741	8.9%	28,106	22,963	10,285	12,287	5	4	532	487
West Virginia	1,448	935	55.0%	194	14	1,014	854	0	0	239	67
East South Central	87,135	88,506	-1.5%	60,899	61,129	24,964	26,184	81	79	1,191	1,114
Alabama	38,614	38,039	1.5%	15,309	14,829	22,711	22,608	0	0	594	603
Kentucky	8,168	8,351	-2.2%	7,879	8,118	210	163	0	0	79	71
Mississippi	29,412	33,005	-11.0%	27,242	29,432	2,027	3,397	0	0	143	177
Tennessee	10,941	9,110	20.0%	10,469	8,751	15	17	81	79	376	263
West South Central	264,059	253,530	4.2%	104,769	101,261	126,982	120,054	431	449	31,877	31,766
Arkansas	13,640	13,980	-2.4%	12,914	13,224	572	609	NM	NM	120	113
Louisiana	50,019	41,279	21.0%	33,089	26,038	4,066	3,533	NM	66	12,833	11,642
Oklahoma	32,453	35,122	-7.6%	20,421	23,088	11,742	11,812	0	0	289	222
Texas	167,948	163,148	2.9%	38,345	38,911	110,603	104,100	364	347	18,636	19,789
Mountain	78,780	75,705	4.1%	65,621	58,657	12,087	15,859	170	173	902	1,015
Arizona	33,278	27,210	22.0%	25,288	18,223	7,941	8,930	49	57	0	0
Colorado	10,116	11,928	-15.0%	8,880	9,822	1,208	2,076	0	0	27	31
Idaho	2,158	1,893	14.0%	1,183	1,026	902	820	13	14	59	34
Montana	279	280	-0.4%	265	277	NM	NM	0	0	0	0
Nevada	17,886	19,247	-7.1%	16,378	17,699	1,286	1,280	19	23	203	244
New Mexico	8,513	9,711	-12.0%	8,162	6,959	NM	2,706	45	40	0	7
Utah	6,014	4,954	21.0%	5,268	4,505	429	43	43	39	274	367
Wyoming	535	480	11.0%	197	147	0	1	0	0	338	333
Pacific Contiguous	53,727	57,265	-6.2%	20,753	23,424	26,671	27,346	835	880	5,468	5,615
California	38,789	46,148	-16.0%	12,290	16,034	20,286	23,702	818	858	5,394	5,554
Oregon	8,522	5,656	51.0%	4,268	3,696	4,191	1,905	17	16	46	39
Washington	6,415	5,461	17.0%	4,194	3,693	2,194	1,739	0	6	27	23
Pacific Noncontiguous	2,808	2,616	7.3%	2,784	2,592	0	0	0	0	24	24
Alaska	2,808	2,616	7.3%	2,784	2,592	0	0	0	0	24	24
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,002,542	972,150	3.1%	528,383	510,445	423,715	411,715	4,335	4,433	46,109	45,557

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	157,664	163,904	-3.8%	528	NM	150,994	156,799	2,287	2,264	3,855	3,843
Connecticut	66,146	60,436	9.4%	166	180	63,323	57,661	948	938	1,709	1,657
Maine	5,580	8,978	-38.0%	0	0	4,780	8,145	72	74	728	759
Massachusetts	55,188	65,163	-15.0%	NM	NM	53,062	62,597	1,139	1,130	648	672
New Hampshire	8,168	6,002	36.0%	16	49	8,037	5,840	22	15	92	98
Rhode Island	22,572	23,318	-3.2%	0	0	21,792	22,555	102	105	678	658
Vermont	10	7	47.0%	8	5	0	0	3	2	0	0
Middle Atlantic	579,990	533,759	8.7%	40,328	43,631	529,291	479,551	3,601	3,734	6,769	6,843
New Jersey	128,309	122,858	4.4%	NM	NM	126,324	120,422	379	530	973	973
New York	159,417	171,545	-7.1%	39,681	42,654	114,962	124,084	2,876	2,832	1,899	1,975
Pennsylvania	292,264	239,356	22.0%	14	44	288,006	235,045	346	373	3,898	3,894
East North Central	507,701	481,133	5.5%	171,721	175,535	319,300	289,098	4,054	4,000	12,625	12,500
Illinois	65,030	73,884	-12.0%	3,777	5,618	57,944	64,675	1,302	1,265	2,009	2,327
Indiana	98,509	90,953	8.3%	39,887	42,207	51,577	41,971	425	461	6,621	6,314
Michigan	106,994	117,843	-9.2%	31,980	41,404	71,628	73,152	1,564	1,486	1,822	1,801
Ohio	167,201	139,996	19.0%	31,818	33,045	134,335	105,884	507	563	542	504
Wisconsin	69,966	58,457	20.0%	64,260	53,262	3,817	3,415	257	227	1,632	1,554
West North Central	99,698	111,808	-11.0%	84,042	97,029	13,072	12,368	852	784	1,732	1,627
Iowa	21,769	24,341	-11.0%	20,511	23,123	0	NM	258	255	1,000	962
Kansas	11,695	16,163	-28.0%	11,402	15,962	0	0	0	0	293	201
Minnesota	32,390	30,812	5.1%	27,848	26,054	3,966	4,219	255	227	321	312
Missouri	24,786	29,923	-17.0%	15,304	21,413	9,106	8,148	318	277	58	84
Nebraska	3,201	4,219	-24.0%	3,181	4,193	0	0	20	25	0	0
North Dakota	3,234	2,982	8.5%	3,174	2,914	0	0	0	0	61	68
South Dakota	2,623	3,368	-22.0%	2,623	3,368	0	0	0	0	0	0
South Atlantic	1,290,983	1,220,987	5.7%	1,066,470	989,822	204,781	214,390	5,643	4,792	14,088	11,983
Delaware	13,673	18,207	-25.0%	52	23	10,814	16,513	0	0	2,807	1,671
District of Columbia	301	325	-7.3%	0	0	0	0	301	325	0	0
Florida	621,982	587,821	5.8%	593,179	555,270	24,607	28,574	55	57	4,141	3,920
Georgia	183,217	178,535	2.6%	138,066	133,525	43,208	43,027	1	0	1,942	1,983
Maryland	50,928	47,742	6.7%	14,265	11,400	31,686	32,198	4,781	3,910	196	233
North Carolina	145,757	150,535	-3.2%	115,812	129,146	29,085	20,582	466	461	395	346
South Carolina	81,624	66,376	23.0%	75,563	55,284	5,671	10,682	0	1	390	409
Virginia	188,738	166,999	13.0%	128,741	104,127	56,876	59,928	40	38	3,081	2,906
West Virginia	4,762	4,448	7.1%	792	1,047	2,835	2,885	0	0	1,135	516
East South Central	448,625	481,763	-6.9%	309,232	335,046	131,818	139,875	421	522	7,153	6,321
Alabama	188,544	195,702	-3.7%	71,291	73,508	113,720	118,753	0	0	3,533	3,441
Kentucky	47,145	57,120	-17.0%	45,222	53,148	1,435	3,582	0	0	489	389
Mississippi	157,969	184,400	-14.0%	140,277	165,833	16,588	17,449	0	39	1,104	1,078
Tennessee	54,966	44,542	23.0%	52,442	42,557	75	91	421	483	2,027	1,411
West South Central	1,209,902	1,194,164	1.3%	451,630	443,885	564,782	564,341	2,451	1,995	191,040	183,943
Arkansas	60,331	70,713	-15.0%	55,786	66,160	3,523	3,571	202	202	820	779
Louisiana	242,762	210,640	15.0%	146,395	124,137	16,035	16,206	316	331	80,016	69,967
Oklahoma	139,521	142,755	-2.3%	88,971	86,405	48,958	54,979	0	0	1,592	1,371
Texas	767,288	770,056	-0.4%	160,477	167,184	496,265	489,585	1,933	1,462	108,612	111,825
Mountain	385,456	328,551	17.0%	306,695	263,203	71,572	57,813	1,126	1,089	6,063	6,446
Arizona	147,493	102,202	44.0%	111,084	80,130	36,111	21,756	298	315	0	0
Colorado	59,433	57,640	3.1%	49,550	48,274	9,706	9,204	7	0	170	161
Idaho	10,706	7,987	34.0%	4,988	2,946	5,266	4,660	82	86	370	296
Montana	2,147	1,866	15.0%	1,496	1,690	644	170	0	0	7	6
Nevada	83,248	87,530	-4.9%	74,727	79,030	7,304	7,157	134	130	1,083	1,213
New Mexico	44,442	43,673	1.8%	32,280	28,785	11,884	14,593	268	247	10	49
Utah	34,811	24,706	41.0%	31,396	21,590	648	265	337	311	2,429	2,540
Wyoming	3,178	2,947	7.8%	1,174	758	10	8	0	0	1,994	2,181
Pacific Contiguous	344,385	332,612	3.5%	133,904	136,861	173,187	157,664	4,909	5,493	32,385	32,594
California	250,418	259,739	-3.6%	84,873	95,964	128,922	126,372	4,772	5,333	31,851	32,071
Oregon	59,123	44,212	34.0%	27,933	24,293	30,790	19,541	108	113	291	264
Washington	34,845	28,660	22.0%	21,098	16,603	13,475	11,751	29	48	243	259
Pacific Noncontiguous	16,623	15,143	9.8%	16,471	15,014	0	0	0	2	152	127
Alaska	16,623	15,143	9.8%	16,471	15,014	0	0	0	2	152	127
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	5,041,026	4,863,823	3.6%	2,581,021	2,501,024	2,158,799	2,071,897	25,344	24,676	275,862	266,227

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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, June 2019 and June 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	911	872	4.5%	0	0	891	866	19	5	0	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	NM	NM	NM	0	0	NM	NM	0	0	0	0
Massachusetts	309	NM	NM	0	0	309	NM	0	0	0	0
New Hampshire	98	NM	NM	0	0	NM	NM	19	5	0	0
Rhode Island	383	332	15.0%	0	0	383	332	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	4,449	4,557	-2.4%	0	0	4,330	4,412	NM	48	96	97
New Jersey	603	701	-14.0%	0	0	588	679	NM	NM	0	0
New York	1,480	1,560	-5.1%	0	0	1,480	1,560	0	0	0	0
Pennsylvania	2,365	2,297	3.0%	0	0	2,262	2,173	8	27	96	97
East North Central	5,127	5,260	-2.5%	695	757	4,382	4,469	36	18	14	17
Illinois	768	821	-6.5%	NM	NM	697	756	0	0	0	0
Indiana	721	797	-9.5%	625	691	96	105	0	0	0	0
Michigan	1,820	1,782	2.1%	0	0	1,820	1,782	0	0	0	0
Ohio	894	906	-1.3%	0	0	894	906	0	0	0	0
Wisconsin	925	955	-3.2%	0	0	874	920	36	18	14	17
West North Central	867	1,086	-20.0%	330	381	536	705	0	0	0	0
Iowa	209	226	-7.5%	0	0	209	226	0	0	0	0
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	NM	336	NM	NM	NM	NM	NM	0	0	0	0
Missouri	NM	NM	NM	NM	NM	NM	NM	0	0	0	0
Nebraska	NM	NM	NM	NM	NM	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	4,485	4,689	-4.4%	398	475	3,888	3,965	NM	111	114	139
Delaware	NM	NM	NM	0	0	NM	NM	0	0	NM	NM
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	714	802	-11.0%	NM	164	612	638	0	0	0	0
Georgia	730	699	4.4%	0	0	714	685	0	0	15	14
Maryland	NM	261	NM	0	0	NM	NM	NM	79	0	0
North Carolina	926	955	-3.0%	0	0	913	937	NM	NM	0	0
South Carolina	416	464	-10.0%	290	NM	NM	NM	0	0	NM	114
Virginia	1,379	1,390	-0.7%	7	0	1,362	1,376	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	508	524	-3.1%	NM	NM	296	NM	0	0	0	0
Alabama	NM	NM	NM	0	0	NM	NM	0	0	0	0
Kentucky	NM	NM	NM	NM	NM	NM	NM	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	NM	NM	NM	0	0	NM	NM	0	0	0	0
West South Central	1,101	1,252	-12.0%	0	0	1,101	1,204	0	48	0	0
Arkansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	NM	NM	0	0	NM	NM	0	0	0	0
Texas	924	1,065	-13.0%	0	0	924	1,018	0	48	0	0
Mountain	606	616	-1.6%	NM	NM	540	538	44	55	0	0
Arizona	NM	NM	NM	0	0	NM	NM	0	0	0	0
Colorado	NM	NM	NM	0	0	NM	NM	0	0	0	0
Idaho	NM	NM	NM	NM	NM	NM	NM	19	19	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	NM	NM	NM	0	0	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	NM	NM	NM	0	0	NM	NM	25	36	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,052	4,765	-15.0%	NM	NM	3,075	3,462	854	1,147	0	0
California	3,484	4,165	-16.0%	NM	NM	2,648	3,039	829	1,117	0	0
Oregon	459	478	-4.0%	NM	NM	318	331	NM	NM	0	0
Washington	NM	NM	NM	0	30	NM	NM	0	0	0	0
Pacific Noncontiguous	37	72	-48.0%	0	0	0	0	37	72	0	0
Alaska	37	72	-48.0%	0	0	0	0	37	72	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	22,143	23,693	-6.5%	1,781	2,007	19,040	19,930	1,099	1,504	224	252

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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 June 2019 and June 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	5,034	5,200	-3.2%	0	0	4,910	5,101	124	100	0	0
Connecticut	NM	241	NM	0	0	NM	241	0	0	0	0
Maine	362	387	-6.5%	0	0	362	387	0	0	0	0
Massachusetts	1,813	1,921	-5.6%	0	0	1,813	1,921	0	0	0	0
New Hampshire	568	560	1.5%	0	0	445	460	124	100	0	0
Rhode Island	1,942	1,961	-1.0%	0	0	1,942	1,961	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	26,257	27,920	-6.0%	0	0	25,302	26,770	406	433	549	717
New Jersey	3,925	4,162	-5.7%	0	0	3,772	3,998	152	164	0	0
New York	8,540	8,864	-3.7%	0	0	8,540	8,864	0	0	0	0
Pennsylvania	13,793	14,895	-7.4%	0	0	12,990	13,908	254	269	549	717
East North Central	30,872	32,309	-4.4%	4,123	4,622	26,411	27,360	212	200	126	127
Illinois	4,549	5,332	-15.0%	419	443	4,130	4,889	0	0	0	0
Indiana	4,272	4,783	-11.0%	3,704	4,179	569	604	0	0	0	0
Michigan	11,089	10,932	1.4%	0	0	11,089	10,932	0	0	0	0
Ohio	5,413	5,457	-0.8%	0	0	5,413	5,457	0	0	0	0
Wisconsin	5,549	5,804	-4.4%	0	0	5,211	5,478	212	200	126	127
West North Central	5,149	6,370	-19.0%	2,044	2,259	3,105	4,111	0	0	0	0
Iowa	1,192	1,317	-9.5%	0	0	1,192	1,317	0	0	0	0
Kansas	697	736	-5.3%	0	0	697	736	0	0	0	0
Minnesota	1,260	1,976	-36.0%	497	545	762	1,431	0	0	0	0
Missouri	1,164	1,421	-18.0%	711	794	454	627	0	0	0	0
Nebraska	836	920	-9.1%	836	920	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	26,574	28,211	-5.8%	2,559	2,753	22,427	23,754	725	778	863	925
Delaware	653	698	-6.4%	0	0	599	638	0	0	54	59
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,364	4,655	-6.2%	811	881	3,554	3,774	0	0	0	0
Georgia	3,930	4,145	-5.2%	0	0	3,861	4,079	0	0	69	66
Maryland	1,363	1,602	-15.0%	0	0	872	1,073	491	529	0	0
North Carolina	5,484	5,660	-3.1%	0	0	5,349	5,516	136	143	0	0
South Carolina	2,663	2,868	-7.1%	1,713	1,844	NM	224	0	0	740	800
Virginia	8,115	8,583	-5.5%	36	29	7,981	8,449	98	106	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,926	3,073	-4.8%	1,209	1,275	1,717	1,798	0	0	0	0
Alabama	530	558	-5.0%	0	0	530	558	0	0	0	0
Kentucky	1,339	1,398	-4.2%	1,209	1,275	129	123	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	933	986	-5.4%	0	0	933	986	0	0	0	0
West South Central	6,785	7,428	-8.7%	0	0	6,596	7,127	189	301	0	0
Arkansas	799	838	-4.7%	0	0	799	838	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	247	NM	0	0	NM	247	0	0	0	0
Texas	5,753	6,343	-9.3%	0	0	5,564	6,041	189	301	0	0
Mountain	3,357	3,594	-6.6%	NM	NM	3,028	3,206	197	247	0	0
Arizona	481	507	-5.1%	0	0	481	507	0	0	0	0
Colorado	555	583	-4.9%	0	0	555	583	0	0	0	0
Idaho	413	435	-5.1%	NM	NM	NM	210	80	84	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	912	972	-6.1%	0	0	912	972	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	945	1,035	-8.7%	0	0	827	872	117	163	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	24,743	30,465	-19.0%	710	3,074	18,589	20,017	5,444	7,375	0	0
California	21,368	25,553	-16.0%	NM	822	16,080	17,576	5,240	7,155	0	0
Oregon	2,736	2,804	-2.4%	661	690	1,871	1,894	204	220	0	0
Washington	639	2,109	-70.0%	0	1,562	639	547	0	0	0	0
Pacific Noncontiguous	327	427	-23.0%	0	0	0	0	327	427	0	0
Alaska	327	427	-23.0%	0	0	0	0	327	427	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	132,026	144,998	-8.9%	10,777	14,124	112,087	119,243	7,624	9,862	1,538	1,770

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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, June 2019 and June 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	281	289	-2.7%	0	0	269	275	12	14	0	0
Connecticut	103	97	5.8%	0	0	103	97	0	0	0	0
Maine	21	23	-7.3%	0	0	9	9	12	14	0	0
Massachusetts	147	158	-7.2%	0	0	147	158	0	0	0	0
New Hampshire	11	11	-2.0%	0	0	11	11	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	453	462	-1.9%	0	0	358	368	96	95	0	0
New Jersey	113	120	-6.1%	0	0	82	94	31	26	0	0
New York	174	169	3.0%	0	0	130	126	44	43	0	0
Pennsylvania	167	173	-3.6%	0	0	147	148	20	25	0	0
East North Central	15	20	-24.0%	3	3	0	0	12	17	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	2	2	-10.0%	0	0	0	0	2	2	0	0
Michigan	11	15	-30.0%	0	0	0	0	11	15	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	3	-1.4%	3	3	0	0	0	0	0	0
West North Central	44	59	-27.0%	23	39	21	20	NM	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	44	59	-27.0%	23	39	21	20	NM	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	492	519	-5.3%	0	0	451	477	41	42	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	325	344	-5.4%	0	0	325	344	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	60	62	-2.7%	0	0	60	62	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	107	114	-6.2%	0	0	66	71	41	42	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	-26.0%	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	-26.0%	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	46	63	-26.0%	0	0	46	63	0	0	0	0
California	25	38	-35.0%	0	0	25	38	0	0	0	0
Oregon	7	10	-29.0%	0	0	7	10	0	0	0	0
Washington	15	15	-2.7%	0	0	15	15	0	0	0	0
Pacific Noncontiguous	40	41	-2.6%	0	0	0	0	40	41	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	40	41	-2.6%	0	0	0	0	40	41	0	0
U.S. Total	1,372	1,454	-5.6%	26	42	1,145	1,202	200	208	1	1

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	1,689	1,742	-3.0%	0	0	1,610	1,650	78	92	0	0
Connecticut	588	574	2.3%	0	0	588	574	0	0	0	0
Maine	134	148	-9.7%	0	0	56	56	78	92	0	0
Massachusetts	906	958	-5.4%	0	0	906	958	0	0	0	0
New Hampshire	61	61	-1.3%	0	0	61	61	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	2,565	2,630	-2.4%	0	0	2,030	2,091	535	539	0	0
New Jersey	658	718	-8.3%	0	0	487	542	171	175	0	0
New York	930	955	-2.6%	0	0	687	713	244	242	0	0
Pennsylvania	977	957	2.1%	0	0	856	835	121	122	0	0
East North Central	100	115	-13.0%	18	17	0	0	82	98	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	9	10	-7.3%	0	0	0	0	9	10	0	0
Michigan	73	88	-18.0%	0	0	0	0	73	88	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	18	17	8.2%	18	17	0	0	0	0	0	0
West North Central	237	312	-24.0%	137	200	100	113	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	237	312	-24.0%	137	200	100	113	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	2,736	2,816	-2.9%	0	0	2,507	2,586	229	230	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,814	1,910	-5.0%	0	0	1,814	1,910	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	319	315	1.1%	0	0	319	315	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	603	591	2.1%	0	0	374	361	229	230	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	5	5	1.2%	0	0	0	0	0	0	5	5
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	5	5	1.2%	0	0	0	0	0	0	5	5
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	331	361	-8.2%	0	0	331	361	0	0	0	0
California	196	225	-13.0%	0	0	196	225	0	0	0	0
Oregon	57	57	-0.4%	0	0	57	57	0	0	0	0
Washington	78	78	-0.1%	0	0	78	78	0	0	0	0
Pacific Noncontiguous	236	218	8.4%	0	0	0	0	236	218	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	236	218	8.4%	0	0	0	0	236	218	0	0
U.S. Total	7,899	8,199	-3.7%	155	216	6,579	6,800	1,160	1,177	5	5

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	3,672	4,221	-13.0%	203	542	3,061	3,241	1	1	406	437
Connecticut	NM	237	NM	0	0	NM	237	0	0	0	0
Maine	1,553	1,678	-7.4%	0	0	1,146	1,241	0	0	406	437
Massachusetts	NM	172	NM	0	0	NM	172	0	0	0	0
New Hampshire	1,549	1,772	-13.0%	189	358	1,359	1,415	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	NM	362	NM	14	184	NM	177	1	1	0	0
Middle Atlantic	729	838	-13.0%	0	0	486	612	0	0	244	226
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	571	698	-18.0%	0	0	486	612	0	0	85	86
Pennsylvania	159	140	13.0%	0	0	0	0	0	0	159	140
East North Central	1,874	2,206	-15.0%	350	488	952	1,104	0	0	572	614
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,213	1,392	-13.0%	0	0	941	1,090	0	0	271	302
Ohio	90	101	-11.0%	0	0	11	13	0	0	79	87
Wisconsin	572	714	-20.0%	350	488	0	0	0	0	222	225
West North Central	570	1,030	-45.0%	152	167	113	557	16	39	289	267
Iowa	6	0	--	0	0	0	0	6	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	555	996	-44.0%	152	167	113	557	1	4	289	267
Missouri	10	35	-72.0%	0	0	0	0	10	35	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	10,118	10,711	-5.5%	2,161	2,602	2,761	2,658	14	14	5,182	5,437
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	1,653	1,981	-17.0%	800	728	NM	547	0	0	712	706
Georgia	3,123	2,650	18.0%	0	0	1,077	597	0	0	2,045	2,053
Maryland	14	62	-78.0%	0	0	0	0	14	14	0	48
North Carolina	1,425	1,281	11.0%	0	0	862	716	0	0	563	565
South Carolina	1,393	1,568	-11.0%	133	150	461	525	0	0	798	893
Virginia	2,512	3,169	-21.0%	1,227	1,724	NM	273	0	0	1,064	1,171
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	3,022	3,189	-5.2%	0	0	171	181	0	0	2,851	3,009
Alabama	1,988	2,072	-4.0%	0	0	171	181	0	0	1,817	1,891
Kentucky	146	152	-4.1%	0	0	0	0	0	0	146	152
Mississippi	594	578	2.9%	0	0	0	0	0	0	594	578
Tennessee	294	388	-24.0%	0	0	0	0	0	0	294	388
West South Central	2,127	2,872	-26.0%	0	0	0	420	0	0	2,127	2,452
Arkansas	575	570	0.9%	0	0	0	0	0	0	575	570
Louisiana	1,061	1,351	-22.0%	0	0	0	0	0	0	1,061	1,351
Oklahoma	130	152	-14.0%	0	0	0	0	0	0	130	152
Texas	361	798	-55.0%	0	0	0	420	0	0	361	379
Mountain	493	531	-7.3%	0	0	336	361	0	0	157	170
Arizona	NM	209	NM	0	0	NM	209	0	0	0	0
Colorado	102	122	-17.0%	0	0	102	122	0	0	0	0
Idaho	162	178	-8.9%	0	0	29	30	0	0	133	148
Montana	23	22	4.6%	0	0	0	0	0	0	23	22
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	5,257	5,263	-0.1%	337	357	3,103	3,236	0	0	1,817	1,671
California	3,699	3,597	2.8%	0	0	2,925	3,015	0	0	774	582
Oregon	552	606	-9.0%	0	0	NM	221	0	0	373	386
Washington	1,007	1,060	-5.1%	337	357	0	0	0	0	669	703
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	27,863	30,862	-9.7%	3,202	4,157	10,984	12,369	31	53	13,645	14,283

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

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	24,761	24,609	0.6%	3,412	3,519	18,832	18,506	5	14	2,512	2,571
Connecticut	1,230	1,244	-1.2%	0	0	1,230	1,244	0	0	0	0
Maine	9,680	9,736	-0.6%	0	0	7,168	7,157	0	9	2,512	2,571
Massachusetts	1,090	1,033	5.6%	0	0	1,090	1,033	0	0	0	0
New Hampshire	10,307	9,782	5.4%	2,036	1,741	8,271	8,042	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	2,454	2,813	-13.0%	1,376	1,778	1,072	1,030	5	5	0	0
Middle Atlantic	4,454	6,291	-29.0%	0	0	2,887	3,427	0	0	1,568	2,863
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	3,345	3,926	-15.0%	0	0	2,886	3,426	0	0	459	500
Pennsylvania	1,109	2,364	-53.0%	0	0	0	1	0	0	1,109	2,363
East North Central	11,779	12,128	-2.9%	2,307	2,466	5,924	5,953	0	0	3,547	3,710
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	7,605	7,708	-1.3%	0	0	5,857	5,878	0	0	1,748	1,830
Ohio	540	582	-7.3%	0	0	67	74	0	0	473	508
Wisconsin	3,634	3,838	-5.3%	2,307	2,466	0	0	0	0	1,327	1,372
West North Central	3,209	5,249	-39.0%	927	936	662	2,670	179	162	1,441	1,481
Iowa	32	1	NM	0	0	0	0	32	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	3,077	5,111	-40.0%	927	936	662	2,670	48	24	1,441	1,481
Missouri	100	137	-27.0%	0	0	0	0	100	137	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	59,969	62,522	-4.1%	13,636	13,074	15,514	17,057	69	67	30,749	32,324
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	10,233	10,910	-6.2%	4,379	3,260	1,773	3,315	0	0	4,080	4,334
Georgia	16,655	16,868	-1.3%	0	0	4,895	4,446	0	0	11,760	12,422
Maryland	326	358	-9.0%	0	0	0	0	69	67	257	292
North Carolina	7,830	8,273	-5.3%	0	0	4,576	4,791	0	0	3,255	3,482
South Carolina	8,550	9,158	-6.6%	939	971	2,859	3,075	0	0	4,753	5,113
Virginia	16,374	16,956	-3.4%	8,318	8,844	1,411	1,430	0	0	6,645	6,682
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	17,688	18,354	-3.6%	0	0	1,006	1,059	0	0	16,681	17,295
Alabama	11,645	11,963	-2.7%	0	0	1,006	1,059	0	0	10,638	10,904
Kentucky	845	892	-5.3%	0	0	0	0	0	0	845	892
Mississippi	3,144	3,356	-6.3%	0	0	0	0	0	0	3,144	3,356
Tennessee	2,055	2,144	-4.1%	0	0	0	0	0	0	2,055	2,144
West South Central	13,160	15,682	-16.0%	0	0	295	1,316	0	0	12,866	14,366
Arkansas	3,473	3,522	-1.4%	0	0	0	0	0	0	3,473	3,522
Louisiana	6,447	7,661	-16.0%	0	0	0	0	0	0	6,447	7,661
Oklahoma	818	952	-14.0%	0	0	0	3	0	0	818	949
Texas	2,422	3,547	-32.0%	0	0	295	1,313	0	0	2,127	2,234
Mountain	2,915	2,913	0.1%	0	0	1,995	1,930	0	0	920	983
Arizona	1,242	1,202	3.4%	0	0	1,242	1,202	0	0	0	0
Colorado	606	581	4.3%	0	0	606	581	0	0	0	0
Idaho	950	1,013	-6.2%	0	0	147	147	0	0	803	866
Montana	117	117	-0.4%	0	0	0	0	0	0	117	117
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	30,897	29,965	3.1%	2,061	2,012	18,235	18,204	0	0	10,601	9,748
California	21,503	20,110	6.9%	0	0	17,094	17,049	0	0	4,409	3,061
Oregon	3,279	3,410	-3.8%	0	0	1,141	1,155	0	0	2,138	2,254
Washington	6,115	6,445	-5.1%	2,061	2,012	0	0	0	0	4,053	4,433
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	168,832	177,713	-5.0%	22,343	22,007	65,350	70,122	254	242	80,885	85,342

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

Chapter 3

Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2009 - June 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	102,786	25,082	541	84,605	16,729	522	18,181	8,353	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	123,723	26,506	721	104,206	18,503	579	19,517	8,003	141
February	121,019	27,239	689	101,983	18,924	562	19,035	8,315	127
March	126,532	27,126	717	106,845	18,987	614	19,687	8,140	103
April	129,071	26,979	710	108,308	18,935	648	20,763	8,045	62
May	128,454	27,053	715	107,594	18,978	649	20,859	8,075	66
June	121,529	26,578	583	101,926	18,547	527	19,603	8,031	55
July	110,794	25,962	643	93,478	17,978	615	17,316	7,984	28
August	104,172	24,828	607	88,284	17,129	581	15,888	7,698	26
Sept	100,781	24,594	576	85,004	16,898	558	15,777	7,696	19
October	105,209	24,502	517	87,660	16,668	513	17,549	7,833	5
November	104,324	24,537	546	86,379	16,527	542	17,946	8,010	5
December	102,786	25,082	541	84,605	16,729	522	18,181	8,353	19
Year 2019, End of Month Stocks									
January	99,201	24,935	529	81,392	16,691	520	17,809	8,244	9
February	98,744	24,958	507	81,099	16,717	497	17,645	8,242	11
March	97,127	24,920	500	79,490	16,770	484	17,637	8,150	16
April	107,961	25,004	512	87,765	16,867	502	20,196	8,137	10
May	114,947	25,194	446	92,516	17,070	436	22,432	8,125	10
June	116,480	25,007	390	92,880	16,902	383	23,600	8,105	7

Notes: See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 and 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, June 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	June 2019	June 2018	Percentage Change	June 2019	June 2018	Percentage Change	June 2019	June 2018	Percentage Change
New England	W	693	W	2,913	2,951	-1.3%	0	0	--
Connecticut	W	W	W	832	970	-14.2%	0	0	--
Maine	0	0	--	281	217	29.4%	0	0	--
Massachusetts	W	W	W	1,267	1,339	-5.4%	0	0	--
New Hampshire	W	W	W	359	242	48.3%	0	0	--
Rhode Island	0	W	W	133	139	-3.7%	0	0	--
Vermont	0	0	--	40	44	-8.1%	0	0	--
Middle Atlantic	4,671	3,338	39.9%	4,780	4,671	2.3%	0	0	--
New Jersey	W	145	W	606	676	-10.4%	0	0	--
New York	W	W	W	3,005	3,026	-0.7%	0	0	--
Pennsylvania	4,489	W	W	1,169	969	20.6%	0	0	--
East North Central	24,325	23,661	2.8%	993	1,057	-6.0%	92	94	-1.8%
Illinois	5,593	5,169	8.2%	96	79	21.4%	0	0	--
Indiana	6,979	7,551	-7.6%	73	96	-24.3%	W	W	W
Michigan	3,539	3,831	-7.6%	273	329	-16.8%	W	W	W
Ohio	4,781	3,826	25.0%	364	340	7.1%	0	W	W
Wisconsin	3,433	3,284	4.5%	187	213	-12.2%	W	W	W
West North Central	19,388	23,761	-18.4%	823	879	-6.4%	0	0	--
Iowa	3,375	5,330	-36.7%	122	132	-7.6%	0	0	--
Kansas	3,511	3,641	-3.6%	99	106	-6.5%	0	0	--
Minnesota	3,102	2,721	14.0%	115	108	6.5%	0	0	--
Missouri	5,749	7,783	-26.1%	317	346	-8.4%	0	0	--
Nebraska	2,448	2,565	-4.6%	101	113	-10.0%	0	0	--
North Dakota	W	W	W	25	29	-13.0%	0	0	--
South Dakota	W	W	W	44	46	-4.7%	0	0	--
South Atlantic	23,065	19,974	15.5%	9,566	10,771	-11.2%	W	W	W
Delaware	W	W	W	338	377	-10.2%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,367	3,725	-9.6%	3,824	5,100	-25.0%	W	W	W
Georgia	4,178	4,289	-2.6%	679	726	-6.5%	0	0	--
Maryland	1,896	884	114.5%	677	601	12.7%	0	0	--
North Carolina	4,446	3,268	36.1%	1,118	1,159	-3.5%	0	0	--
South Carolina	2,503	2,956	-15.3%	528	574	-8.0%	0	0	--
Virginia	1,253	848	47.8%	2,251	2,115	6.4%	0	0	--
West Virginia	W	W	W	150	118	27.5%	W	W	W
East South Central	11,388	11,344	0.4%	1,356	1,576	-14.0%	0	W	W
Alabama	W	2,740	W	206	194	6.1%	0	0	--
Kentucky	5,847	5,384	8.6%	229	250	-8.6%	0	W	W
Mississippi	W	W	W	176	483	-63.6%	0	0	--
Tennessee	W	W	W	746	649	14.9%	0	0	--
West South Central	14,015	17,482	-19.8%	1,434	1,617	-11.3%	W	W	W
Arkansas	3,111	2,686	15.8%	150	174	-14.0%	0	0	--
Louisiana	2,468	2,449	0.8%	333	365	-8.6%	W	W	W
Oklahoma	2,542	3,563	-28.7%	97	103	-6.0%	0	0	--
Texas	5,894	8,784	-32.9%	854	975	-12.4%	0	0	--
Mountain	17,101	19,757	-13.4%	375	388	-3.5%	W	W	W
Arizona	3,647	3,356	8.7%	146	132	10.6%	0	0	--
Colorado	4,229	4,763	-11.2%	117	132	-11.3%	0	0	--
Idaho	0	0	--	0	0	-33.7%	0	0	--
Montana	W	W	W	15	17	-12.6%	W	W	W
Nevada	W	W	W	4	3	34.7%	0	0	--
New Mexico	W	W	W	17	33	-49.4%	0	0	--
Utah	2,957	4,771	-38.0%	48	41	17.6%	0	0	--
Wyoming	3,907	4,206	-7.1%	29	31	-7.4%	0	0	--
Pacific Contiguous	W	W	W	335	367	-8.8%	0	0	--
California	0	0	--	168	195	-14.1%	0	0	--
Oregon	W	W	W	71	71	-0.4%	0	0	--
Washington	W	W	W	96	101	-4.4%	0	0	--
Pacific Noncontiguous	W	W	W	2,432	2,300	5.7%	0	0	--
Alaska	0	0	--	48	131	-63.4%	0	0	--
Hawaii	W	W	W	2,384	2,170	9.9%	0	0	--
U.S. Total	116,480	121,529	-4.2%	25,007	26,578	-5.9%	390	583	-33.0%

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 are preliminary. 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, June 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**June 2019**	**June 2018**	**Percentage Change**	**June 2019**	**June 2018**	**June 2019**	**June 2018**
Coal (Thousand Tons)							
New England	W	693	W	W	W	W	W
Middle Atlantic	4,671	3,338	39.9%	0	W	4,671	W
East North Central	24,325	23,661	2.8%	15,156	15,986	9,169	7,674
West North Central	19,388	23,761	-18.4%	19,388	23,761	0	0
South Atlantic	23,065	19,974	15.5%	19,737	18,292	3,327	1,682
East South Central	11,388	11,344	0.4%	W	11,344	W	0
West South Central	14,015	17,482	-19.8%	10,241	12,851	3,773	4,630
Mountain	17,101	19,757	-13.4%	W	W	W	W
Pacific Contiguous	W	W	W	W	W	W	W
Pacific Noncontiguous	W	W	W	0	0	W	W
U.S. Total	**116,480**	**121,529**	**-4.2%**	**92,880**	**101,926**	**23,600**	**19,603**
Petroleum Liquids (Thousand Barrels)							
New England	2,913	2,951	-1.3%	456	429	2,457	2,522
Middle Atlantic	4,780	4,671	2.3%	1,938	1,856	2,841	2,814
East North Central	993	1,057	-6.0%	644	730	349	327
West North Central	823	879	-6.4%	801	868	23	12
South Atlantic	9,566	10,771	-11.2%	7,677	8,999	1,889	1,772
East South Central	1,356	1,576	-14.0%	1,265	1,503	91	73
West South Central	1,434	1,617	-11.3%	1,114	1,276	320	341
Mountain	375	388	-3.5%	345	359	29	30
Pacific Contiguous	335	367	-8.8%	257	266	79	102
Pacific Noncontiguous	2,432	2,300	5.7%	2,405	2,262	28	39
U.S. Total	**25,007**	**26,578**	**-5.9%**	**16,902**	**18,547**	**8,105**	**8,031**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	92	94	-1.8%	92	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	**390**	**583**	**-33.0%**	**383**	**527**	**7**	**55**

W = Withheld to avoid disclosure of individual company data.
Notes: See Glossary for definitions. Values are preliminary. 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 - June 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	42,006	57,742	3,039	102,786
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	48,395	72,254	3,074	123,723
February	48,130	69,980	2,909	121,019
March	49,518	73,801	3,213	126,532
April	50,964	74,782	3,324	129,071
May	51,794	73,448	3,212	128,454
June	48,853	69,484	3,191	121,529
July	44,916	63,030	2,847	110,794
August	42,779	58,578	2,816	104,172
Sept	40,787	57,150	2,845	100,781
October	43,017	59,176	3,016	105,209
November	42,833	58,383	3,108	104,324
December	42,006	57,742	3,039	102,786
Year 2019, End of Month Stocks				
January	40,430	55,888	2,883	99,201
February	41,719	54,287	2,738	98,744
March	44,763	49,137	3,054	97,127
April	49,608	54,998	3,344	107,961
May	52,498	59,091	3,347	114,947
June	54,402	59,114	2,625	116,480

Notes: See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 and 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 - June 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	11,357,521	594,683	2.06	39.38	1.31	91.6	118,873	19,717	14.26	86.12	0.42	65.9
Year 2017												
January	1,111,151	58,266	2.09	39.82	1.26	89.7	9,669	1,609	11.97	72.02	0.46	75.3
February	1,007,951	52,810	2.06	39.28	1.30	107.4	6,294	1,044	11.67	70.33	0.49	62.2
March	976,663	50,872	2.07	39.71	1.35	101.5	12,196	2,053	11.62	69.03	0.54	113.5
April	901,976	46,731	2.08	40.06	1.33	102.9	6,356	1,055	11.62	69.98	0.48	65.2
May	957,276	49,830	2.09	40.13	1.33	95.8	6,638	1,108	11.44	68.50	0.47	59.9
June	1,042,460	54,220	2.07	39.86	1.31	90.4	7,471	1,241	10.91	65.68	0.47	65.9
July	1,095,129	57,572	2.06	39.15	1.22	81.1	6,695	1,121	10.90	65.08	0.48	65.6
August	1,187,341	62,125	2.05	39.16	1.29	92.8	7,022	1,162	11.12	67.19	0.47	63.6
Sept	1,015,150	53,538	2.02	38.29	1.23	95.9	6,518	1,083	11.68	70.30	0.49	61.6
October	999,170	52,462	2.03	38.70	1.27	102.4	7,578	1,255	11.93	72.04	0.52	69.1
November	984,968	52,087	2.04	38.56	1.26	99.9	9,787	1,622	12.29	74.17	0.47	88.5
December	981,795	51,851	2.04	38.66	1.26	86.8	10,753	1,773	13.99	84.87	0.46	46.8
Year 2018												
January	951,750	50,275	2.07	39.16	1.24	76.3	29,693	4,947	13.68	82.51	0.48	50.7
February	849,609	44,615	2.07	39.43	1.26	95.1	10,931	1,797	12.60	76.84	0.47	118.6
March	939,471	48,770	2.04	39.36	1.33	106.9	7,265	1,210	13.39	80.46	0.42	76.8
April	818,670	42,632	2.07	39.74	1.32	102.3	6,423	1,060	13.73	83.20	0.41	63.2
May	892,834	46,150	2.05	39.61	1.37	95.0	8,730	1,441	14.29	86.69	0.34	74.1
June	931,118	48,533	2.05	39.26	1.35	85.0	8,103	1,346	15.01	90.40	0.32	65.8
July	991,966	52,164	2.06	39.10	1.28	80.4	6,858	1,129	14.69	89.18	0.33	60.6
August	1,075,669	56,419	2.06	39.28	1.30	87.1	6,522	1,079	15.26	92.25	0.38	54.4
Sept	945,615	49,944	2.05	38.87	1.25	90.8	7,457	1,240	15.31	92.07	0.38	63.8
October	1,000,696	52,323	2.05	39.19	1.35	105.7	8,675	1,435	15.61	94.37	0.42	75.5
November	948,007	49,881	2.06	39.21	1.32	94.4	7,922	1,325	15.73	94.08	0.46	72.2
December	1,012,118	52,977	2.12	40.45	1.30	93.4	10,295	1,708	13.83	83.38	0.47	90.5
Year 2019												
January	1,003,542	52,346	2.10	40.34	1.32	91.8	8,642	1,430	12.41	74.98	0.46	53.6
February	847,217	44,418	2.07	39.54	1.28	96.3	8,421	1,380	13.15	80.25	0.48	89.1
March	820,726	41,993	2.08	40.69	1.51	93.2	6,949	1,148	14.27	86.40	0.47	72.9
April	864,431	44,576	2.07	40.16	1.37	129.6	6,683	1,106	14.77	89.26	0.52	72.8
May	883,506	45,571	2.05	39.75	1.38	111.1	6,550	1,089	14.46	86.97	0.50	57.8
June	864,524	44,676	2.03	39.26	1.35	99.0	6,735	1,120	13.66	82.15	0.49	61.3
Year to Date												
2017	5,997,477	312,729	2.08	39.80	1.31	97.2	48,624	8,111	11.56	69.32	0.49	73.9
2018	5,383,451	280,975	2.06	39.42	1.31	91.9	71,145	11,801	13.73	82.97	0.42	63.7
2019	5,283,946	273,580	2.07	39.96	1.37	101.8	43,980	7,273	13.70	82.85	0.49	66.0
Rolling 12 Months Ending in June												
2018	11,647,004	610,610	2.05	39.07	1.28	92.1	119,498	19,818	13.09	79.06	0.45	63.4
2019	11,258,016	587,288	2.07	39.64	1.33	95.9	91,708	15,189	14.39	86.87	0.45	67.7

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

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

- Values for 2017 and prior years are final. Values for 2018 and 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 - June 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	72.6	10,366,144	10,039,232	3.55	3.67	83.0	2.80
Year 2017												
January	7,058	251	2.14	60.16	5.67	55.9	715,582	691,578	4.11	4.25	88.6	2.88
February	7,593	271	2.00	56.03	5.85	78.1	628,949	608,845	3.56	3.67	89.9	2.63
March	8,628	309	2.06	57.51	5.29	87.2	734,674	711,169	3.35	3.46	90.3	2.66
April	5,835	208	2.00	55.96	5.34	86.1	689,233	667,137	3.38	3.49	90.6	2.65
May	6,776	242	2.05	57.46	5.57	59.6	766,572	742,712	3.48	3.59	91.4	2.70
June	8,657	308	2.11	59.32	5.55	69.9	910,687	881,511	3.29	3.40	91.0	2.64
July	8,498	302	2.09	58.85	5.50	70.1	1,133,095	1,095,411	3.21	3.32	90.6	2.64
August	7,972	284	2.08	58.24	5.47	72.8	1,076,917	1,041,412	3.13	3.23	90.9	2.56
Sept	7,915	284	2.10	58.73	5.43	80.6	910,005	879,186	3.16	3.27	90.2	2.56
October	8,347	297	2.31	64.88	5.61	94.6	823,614	797,394	3.13	3.24	89.7	2.54
November	7,469	266	2.49	69.77	5.67	71.4	720,648	697,890	3.35	3.46	89.3	2.62
December	8,088	287	2.17	60.99	5.74	78.0	841,838	814,486	3.63	3.75	89.2	2.80
Year 2018												
January	7,009	248	2.38	67.41	5.31	58.8	779,006	754,166	5.02	5.19	82.6	3.50
February	7,769	277	2.43	68.09	5.49	81.9	688,539	667,072	3.61	3.72	81.8	2.79
March	7,841	281	2.54	70.89	5.54	91.6	749,405	725,132	3.18	3.29	82.9	2.57
April	6,564	232	2.56	72.38	6.09	71.7	706,952	685,216	3.13	3.23	83.2	2.58
May	4,344	152	2.41	68.58	6.09	67.7	814,786	789,317	3.04	3.14	81.4	2.56
June	7,382	260	2.73	77.61	5.97	68.7	927,153	897,864	3.11	3.21	83.8	2.61
July	8,307	293	2.71	76.81	5.73	70.4	1,149,841	1,113,981	3.29	3.39	81.8	2.73
August	8,443	298	2.79	78.94	5.67	75.4	1,130,270	1,095,233	3.28	3.38	82.8	2.69
Sept	8,158	288	2.94	83.35	5.63	74.1	1,002,984	970,993	3.11	3.21	83.3	2.62
October	5,892	208	2.48	70.32	5.77	78.8	881,837	854,142	3.39	3.50	84.2	2.71
November	6,696	235	2.21	63.10	5.87	75.3	764,243	740,250	4.16	4.29	83.8	3.01
December	6,718	238	2.03	57.24	5.90	63.5	771,128	745,864	4.73	4.89	85.3	3.25
Year 2019												
January	5,447	192	2.08	59.13	5.93	50.5	858,607	831,137	4.01	4.14	85.8	2.98
February	4,486	155	2.27	65.75	5.78	47.2	786,645	758,901	3.64	3.77	85.4	2.85
March	3,725	130	2.43	69.63	6.15	41.0	802,316	777,031	3.45	3.56	84.8	2.78
April	3,159	111	2.71	76.93	5.65	49.3	729,027	706,381	2.88	2.98	84.0	2.48
May	4,631	162	2.24	63.78	5.41	46.8	835,996	810,857	2.77	2.86	86.0	2.43
June	3,740	130	2.18	62.61	5.15	48.9	972,385	942,261	2.59	2.67	85.4	2.36
Year to Date												
2017	44,548	1,589	2.06	57.82	5.55	71.0	4,445,697	4,302,953	3.52	3.63	90.3	2.70
2018	40,908	1,450	2.52	70.96	5.72	72.8	4,665,842	4,518,768	3.51	3.62	82.6	2.77
2019	25,189	881	2.29	65.47	5.69	47.2	4,984,976	4,826,567	3.21	3.32	85.2	2.65
Rolling 12 Months Ending in June												
2018	89,197	3,170	2.35	66.00	5.64	75.1	10,171,960	9,844,548	3.37	3.48	86.5	2.69
2019	69,402	2,441	2.46	69.96	5.73	60.8	10,685,278	10,347,032	3.41	3.52	84.2	2.74

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

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

- Values for 2017 and prior years are final. Values for 2018 and 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 - June 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	8,386,175	438,023	2.11	40.39	1.18	92.0	74,884	12,324	14.22	86.46	0.37	69.1
Year 2017												
January	797,433	41,477	2.14	41.15	1.14	88.2	6,680	1,100	11.15	67.71	0.44	75.9
February	737,614	38,372	2.11	40.53	1.20	107.5	4,658	770	11.60	70.11	0.46	66.9
March	706,986	36,570	2.12	41.05	1.20	101.9	10,582	1,778	11.59	68.99	0.53	132.1
April	650,562	33,339	2.14	41.82	1.22	105.4	4,760	788	11.41	68.97	0.46	68.2
May	702,581	36,058	2.16	42.07	1.21	95.9	4,694	778	11.40	68.79	0.45	60.1
June	786,845	40,393	2.13	41.51	1.20	91.9	5,771	951	10.93	66.29	0.47	72.2
July	821,488	42,591	2.11	40.78	1.11	81.6	4,826	803	10.96	65.87	0.45	68.3
August	890,849	46,092	2.11	40.79	1.18	93.7	5,210	855	11.12	67.72	0.46	67.4
Sept	741,814	38,857	2.08	39.69	1.10	98.1	4,823	792	11.80	71.87	0.48	65.9
October	733,109	38,175	2.09	40.12	1.15	104.8	5,030	825	12.05	73.47	0.49	63.2
November	726,042	38,128	2.11	40.23	1.13	105.8	7,044	1,156	12.00	73.12	0.41	98.5
December	716,306	37,543	2.11	40.20	1.11	89.5	6,345	1,043	12.93	78.67	0.42	58.0
Year 2018												
January	690,227	36,292	2.08	39.64	1.11	75.7	12,565	2,096	13.91	83.50	0.43	47.5
February	638,278	33,348	2.10	40.24	1.16	97.7	8,008	1,303	12.43	76.46	0.46	119.0
March	699,005	36,379	2.10	40.26	1.17	112.0	5,017	827	13.19	79.99	0.36	77.9
April	605,929	31,436	2.12	40.90	1.22	102.9	5,034	826	13.61	83.01	0.36	73.0
May	658,792	34,012	2.09	40.57	1.23	96.1	6,271	1,028	14.30	87.27	0.29	79.0
June	693,365	36,117	2.10	40.34	1.20	84.7	5,985	986	14.68	89.15	0.28	73.1
July	745,064	39,045	2.10	40.14	1.14	80.5	5,128	836	14.29	87.66	0.27	70.9
August	806,053	42,128	2.11	40.46	1.18	87.7	4,686	769	15.08	91.87	0.34	60.9
Sept	701,123	36,855	2.12	40.31	1.14	91.0	5,414	897	15.44	93.24	0.35	66.3
October	718,353	37,512	2.10	40.23	1.21	104.9	5,772	942	15.64	95.78	0.39	71.2
November	688,957	36,216	2.10	40.01	1.17	94.8	4,765	789	15.74	94.99	0.41	65.3
December	741,030	38,682	2.17	41.58	1.17	92.7	6,239	1,026	13.70	83.32	0.43	89.0
Year 2019												
January	735,197	38,212	2.16	41.64	1.18	92.1	6,100	1,008	12.56	76.05	0.42	64.1
February	628,506	32,866	2.14	40.93	1.15	97.9	6,343	1,033	12.99	79.78	0.46	103.0
March	585,094	29,813	2.14	42.07	1.37	93.5	5,584	917	14.15	86.20	0.42	87.1
April	642,276	33,093	2.13	41.42	1.21	134.8	5,087	837	14.60	88.81	0.47	86.1
May	654,777	33,745	2.11	41.03	1.21	111.0	4,877	804	14.09	85.48	0.48	66.7
June	645,744	33,285	2.11	40.91	1.20	98.9	5,129	848	13.26	80.17	0.47	65.1
Year to Date												
2017	4,382,021	226,209	2.13	41.34	1.19	97.6	37,144	6,166	11.36	68.46	0.48	79.9
2018	3,985,596	207,585	2.10	40.31	1.18	93.0	42,879	7,065	13.68	83.08	0.37	68.3
2019	3,891,593	201,014	2.13	41.33	1.22	102.8	33,119	5,446	13.56	82.46	0.45	76.6
Rolling 12 Months Ending in June												
2018	8,615,204	448,971	2.10	40.32	1.15	93.8	76,158	12,539	12.89	78.30	0.41	68.6
2019	8,292,173	431,453	2.12	40.87	1.19	96.2	65,124	10,705	14.24	86.62	0.41	73.4

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W = Withheld to avoid disclosure of individual company data.

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

- Values for 2017 and prior years are final. Values for 2018 and 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 - June 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	4,976,093	4,822,698	3.69	3.81	87.1	2.76
Year 2017												
January	7,058	251	2.14	60.16	5.67	83.3	337,596	326,324	4.31	4.46	95.7	2.82
February	7,593	271	2.00	56.03	5.85	124.3	294,616	285,401	3.80	3.92	96.7	2.62
March	8,628	309	2.06	57.51	5.29	143.9	355,096	343,820	3.53	3.64	97.0	2.67
April	5,835	208	2.00	55.96	5.34	188.7	338,000	327,213	3.52	3.63	97.7	2.65
May	6,776	242	2.05	57.46	5.57	91.5	383,433	371,812	3.68	3.80	98.5	2.73
June	8,386	298	2.14	60.07	5.55	105.5	442,214	428,256	3.55	3.66	97.6	2.67
July	8,245	292	2.11	59.61	5.49	107.5	554,383	536,001	3.45	3.57	96.5	2.68
August	7,676	273	2.11	59.17	5.45	119.8	519,749	502,748	3.42	3.53	96.7	2.62
Sept	7,658	274	2.12	59.07	5.42	130.2	435,093	420,539	3.54	3.66	96.4	2.65
October	7,454	265	2.37	66.84	5.58	154.2	389,312	377,140	3.54	3.66	97.1	2.63
November	7,084	252	2.52	70.93	5.66	107.1	342,138	331,585	3.64	3.76	96.6	2.66
December	8,088	287	2.17	60.99	5.74	123.5	402,754	389,987	3.71	3.83	95.5	2.74
Year 2018												
January	7,009	248	2.38	67.41	5.31	83.4	386,450	374,413	5.13	5.29	88.3	3.29
February	7,769	277	2.43	68.09	5.49	117.9	330,518	320,418	3.81	3.93	89.0	2.76
March	7,841	281	2.54	70.89	5.54	141.5	360,699	349,214	3.48	3.60	89.3	2.61
April	6,564	232	2.56	72.38	6.09	119.0	342,450	332,235	3.30	3.40	89.2	2.60
May	4,344	152	2.41	68.58	6.09	108.3	400,819	388,233	3.24	3.35	84.5	2.60
June	7,382	260	2.73	77.61	5.97	96.2	464,827	450,427	3.27	3.38	87.6	2.63
July	8,147	287	2.73	77.48	5.73	100.4	552,025	534,990	3.28	3.38	82.9	2.65
August	8,183	288	2.82	80.03	5.67	105.4	534,991	518,832	3.34	3.45	84.9	2.65
Sept	7,493	263	3.05	86.74	5.59	101.2	476,033	460,962	3.28	3.39	85.4	2.65
October	5,415	191	2.55	72.24	5.80	120.4	421,712	408,928	3.56	3.67	88.6	2.71
November	6,524	229	2.23	63.55	5.88	116.4	355,558	345,025	4.25	4.38	88.9	2.89
December	6,541	232	2.04	57.52	5.91	96.0	350,009	339,020	4.95	5.11	91.7	3.12
Year 2019												
January	5,447	192	2.08	59.13	5.93	73.8	401,692	389,481	4.19	4.32	91.5	2.93
February	4,486	155	2.27	65.75	5.78	69.4	377,502	363,249	3.80	3.94	90.5	2.82
March	3,725	130	2.43	69.63	6.15	66.9	383,043	371,475	3.66	3.77	90.0	2.81
April	3,159	111	2.71	76.93	5.65	101.5	352,341	341,468	3.07	3.17	88.7	2.53
May	4,631	162	2.24	63.78	5.41	73.8	418,290	406,239	2.96	3.04	91.3	2.49
June	3,740	130	2.18	62.61	5.15	85.7	491,980	476,918	2.76	2.84	89.6	2.44
Year to Date												
2017	44,277	1,580	2.07	57.95	5.55	113.5	2,150,954	2,082,825	3.72	3.84	97.3	2.70
2018	40,908	1,450	2.52	70.96	5.72	108.5	2,285,764	2,214,941	3.70	3.81	87.9	2.75
2019	25,189	881	2.29	65.47	5.69	76.0	2,424,848	2,348,830	3.38	3.49	90.3	2.67
Rolling 12 Months Ending in June												
2018	87,112	3,094	2.36	66.51	5.63	115.2	4,929,193	4,772,942	3.61	3.73	92.3	2.70
2019	67,491	2,370	2.48	70.63	5.73	92.0	5,115,177	4,956,588	3.54	3.65	88.2	2.72

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

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- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - June 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	2,805,911	148,687	1.89	35.76	1.70	92.6	41,671	7,021	14.38	85.59	0.45	77.9
Year 2017												
January	297,849	16,042	1.92	35.75	1.59	96.7	2,862	488	13.96	82.04	0.47	103.9
February	254,381	13,690	1.88	34.92	1.59	110.9	1,514	254	11.89	70.84	0.50	70.2
March	251,712	13,439	1.88	35.27	1.75	103.1	1,436	247	11.97	69.71	0.44	91.2
April	235,324	12,633	1.85	34.48	1.66	99.2	1,436	242	12.28	72.85	0.44	83.2
May	238,355	12,976	1.86	34.11	1.67	97.1	1,790	306	11.55	67.69	0.45	79.3
June	239,687	13,070	1.86	34.15	1.67	87.3	1,559	267	10.88	63.53	0.42	64.2
July	257,789	14,218	1.85	33.64	1.55	80.5	1,775	303	10.73	62.88	0.48	79.4
August	279,845	15,249	1.83	33.52	1.64	91.5	1,702	289	11.16	65.68	0.43	72.3
Sept	258,366	13,963	1.82	33.65	1.63	92.0	1,543	267	11.35	65.70	0.42	68.5
October	250,339	13,545	1.83	33.87	1.60	99.0	2,399	406	11.71	69.17	0.50	121.1
November	243,578	13,224	1.79	33.00	1.64	88.3	2,544	434	13.15	77.15	0.56	113.8
December	248,991	13,519	1.83	33.70	1.68	81.5	4,145	688	15.82	95.35	0.43	43.1
Year 2018												
January	246,150	13,243	2.00	37.16	1.60	79.5	16,721	2,787	13.51	81.73	0.48	60.0
February	197,472	10,603	1.94	36.08	1.58	91.3	2,735	465	13.30	78.46	0.44	202.6
March	225,377	11,669	1.85	35.75	1.83	97.6	2,014	345	14.02	81.94	0.43	111.2
April	199,704	10,574	1.88	35.52	1.61	105.1	1,236	210	14.27	83.89	0.44	58.3
May	219,931	11,454	1.87	36.00	1.78	94.7	2,311	389	14.24	85.04	0.48	88.7
June	223,656	11,737	1.85	35.21	1.84	87.4	2,011	344	16.11	94.38	0.43	79.1
July	232,451	12,416	1.88	35.17	1.73	80.8	1,592	271	15.97	93.81	0.45	61.5
August	256,223	13,648	1.87	35.05	1.68	87.0	1,701	288	15.85	93.45	0.41	56.8
Sept	232,368	12,512	1.82	33.92	1.56	92.7	1,887	318	15.00	88.95	0.39	82.9
October	270,387	14,235	1.89	35.93	1.72	111.7	2,723	464	15.61	91.70	0.40	123.7
November	245,201	12,983	1.92	36.34	1.73	95.5	2,951	503	15.83	93.00	0.42	125.6
December	256,990	13,613	1.95	36.83	1.68	97.9	3,789	639	14.06	83.33	0.46	131.7
Year 2019												
January	255,058	13,482	1.90	36.07	1.76	93.8	2,359	393	11.93	71.58	0.50	55.3
February	205,832	10,934	1.83	34.49	1.67	95.2	1,879	314	13.63	81.50	0.46	95.1
March	222,160	11,549	1.88	36.18	1.88	94.7	1,239	210	14.88	87.69	0.54	67.2
April	209,175	10,854	1.84	35.47	1.87	121.9	1,373	233	15.69	92.33	0.51	68.5
May	216,008	11,203	1.83	35.24	1.92	115.8	1,581	270	15.62	91.40	0.49	73.1
June	207,073	10,824	1.75	33.55	1.85	102.7	1,476	250	15.09	89.05	0.48	73.2
Year to Date												
2017	1,517,307	81,849	1.88	34.82	1.65	98.6	10,597	1,803	12.30	72.31	0.45	82.2
2018	1,312,291	69,280	1.90	35.99	1.71	91.4	27,028	4,539	13.85	82.92	0.46	70.7
2019	1,315,306	68,846	1.84	35.21	1.82	102.5	9,906	1,672	14.21	84.21	0.50	69.4
Rolling 12 Months Ending in June												
2018	2,851,199	152,997	1.86	34.66	1.66	89.7	41,135	6,925	13.52	80.62	0.47	69.9
2019	2,808,926	148,252	1.87	35.40	1.75	97.6	24,549	4,154	14.82	87.60	0.45	83.1

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - June 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	4,608,011	4,456,582	3.41	3.52	87.6	2.82
Year 2017												
January	0	0	--	--	--	0.0	308,232	297,759	3.99	4.13	93.5	2.92
February	0	0	--	--	--	0.0	266,747	257,955	3.34	3.45	94.3	2.58
March	0	0	--	--	--	0.0	308,990	298,914	3.22	3.33	94.1	2.58
April	0	0	--	--	--	0.0	284,267	275,005	3.20	3.31	94.1	2.55
May	0	0	--	--	--	0.0	315,859	305,704	3.21	3.31	94.8	2.58
June	0	0	--	--	--	0.0	401,526	388,362	2.93	3.02	94.2	2.49
July	0	0	--	--	--	0.0	510,414	493,178	2.88	2.98	93.8	2.50
August	0	0	--	--	--	0.0	490,671	474,207	2.74	2.84	94.5	2.37
Sept	0	0	--	--	--	0.0	411,228	396,942	2.66	2.75	93.8	2.30
October	0	0	--	--	--	0.0	370,640	358,457	2.60	2.69	93.3	2.29
November	0	0	--	--	--	0.0	310,865	300,737	3.03	3.13	93.2	2.47
December	0	0	--	--	--	0.0	366,717	354,352	3.64	3.77	94.0	2.91
Year 2018												
January	0	0	--	--	--	0.0	323,796	313,096	5.25	5.43	86.6	3.95
February	0	0	--	--	--	0.0	297,893	288,320	3.36	3.48	84.5	2.78
March	0	0	--	--	--	0.0	328,275	317,199	2.86	2.96	87.1	2.44
April	0	0	--	--	--	0.0	303,547	293,740	2.94	3.04	87.7	2.49
May	0	0	--	--	--	0.0	351,345	340,277	2.77	2.86	86.5	2.43
June	0	0	--	--	--	0.0	397,507	384,422	2.87	2.96	87.7	2.49
July	0	0	--	--	--	0.0	530,641	513,551	3.34	3.45	87.0	2.85
August	0	0	--	--	--	0.0	527,203	510,315	3.21	3.32	87.3	2.74
Sept	0	0	--	--	--	0.0	460,133	444,978	2.88	2.98	88.1	2.51
October	0	0	--	--	--	0.0	395,265	382,024	3.16	3.27	88.1	2.64
November	0	0	--	--	--	0.0	338,095	326,516	4.09	4.24	88.7	3.15
December	0	0	--	--	--	0.0	354,311	342,143	4.48	4.64	91.4	3.37
Year 2019												
January	0	0	--	--	--	0.0	383,596	370,465	3.83	3.96	90.7	3.01
February	0	0	--	--	--	0.0	344,458	333,039	3.47	3.60	90.6	2.83
March	0	0	--	--	--	0.0	352,850	341,038	3.25	3.36	89.9	2.69
April	0	0	--	--	--	0.0	312,071	302,090	2.63	2.72	89.1	2.32
May	0	0	--	--	--	0.0	351,590	340,361	2.51	2.60	90.3	2.26
June	0	0	--	--	--	0.0	416,414	403,165	2.33	2.41	89.6	2.15
Year to Date												
2017	0	0	--	--	--	0.0	1,885,621	1,823,699	3.30	3.41	94.2	2.62
2018	0	0	--	--	--	0.0	2,002,362	1,937,055	3.33	3.44	86.7	2.78
2019	0	0	--	--	--	0.0	2,160,980	2,090,158	3.01	3.11	90.0	2.55
Rolling 12 Months Ending in June												
2018	0	0	--	--	--	0.0	4,462,897	4,314,928	3.09	3.20	90.5	2.61
2019	0	0	--	--	--	0.0	4,766,629	4,609,686	3.25	3.36	89.0	2.72

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2009 - June 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	6.0	0	0	--	--	--	0.0
February	31	1	2.92	66.05	3.19	2.5	0	0	--	--	--	0.0
March	5	0	2.92	66.20	3.16	0.4	0	0	--	--	--	0.0
April	0	0	--	--	--	0.0	0	0	--	--	--	0.0
May	0	0	--	--	--	0.0	0	0	--	--	--	0.0
June	0	0	--	--	--	0.0	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	0	0	--	--	--	0.0	0	0	--	--	--	0.0
Sept	0	0	--	--	--	0.0	0	0	--	--	--	0.0
October	52	2	2.94	66.53	2.87	5.4	0	0	--	--	--	0.0
November	62	3	2.94	66.44	2.99	5.6	0	0	--	--	--	0.0
December	46	2	2.97	66.83	3.05	4.3	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	0.3	0	0	--	--	--	0.0
Year to Date												
2017	336	15	2.77	63.19	3.00	4.7	0	0	--	--	--	0.0
2018	130	6	2.92	66.44	3.13	1.9	0	0	--	--	--	0.0
2019	117	5	2.90	65.75	2.96	1.9	0	0	--	--	--	0.0
Rolling 12 Months Ending in June												
2018	342	15	2.84	64.62	3.04	2.5	0	0	--	--	--	0.0
2019	277	12	2.93	66.23	2.96	2.2	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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- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - June 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	5.7	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	6.0	3.56
February	0	0	--	--	--	0.0	709	688	3.72	3.84	5.5	3.69
March	0	0	--	--	--	0.0	768	746	3.59	3.69	5.8	3.58
April	0	0	--	--	--	0.0	732	713	3.49	3.58	5.9	3.49
May	0	0	--	--	--	0.0	776	758	3.47	3.55	6.3	3.47
June	0	0	--	--	--	0.0	670	650	3.57	3.67	5.1	3.57
July	0	0	--	--	--	0.0	790	760	3.39	3.52	5.4	3.39
August	0	0	--	--	--	0.0	786	764	3.42	3.52	5.4	3.42
Sept	0	0	--	--	--	0.0	744	723	3.38	3.48	5.6	3.38
October	0	0	--	--	--	0.0	792	770	3.36	3.45	6.1	3.33
November	0	0	--	--	--	0.0	723	701	3.41	3.52	5.6	3.37
December	0	0	--	--	--	0.0	756	732	3.41	3.52	5.6	3.39
Year 2019												
January	0	0	--	--	--	0.0	778	751	3.40	3.52	5.4	3.38
February	0	0	--	--	--	0.0	772	745	3.37	3.50	5.9	3.35
March	0	0	--	--	--	0.0	839	812	3.36	3.47	6.3	3.33
April	0	0	--	--	--	0.0	775	748	3.30	3.41	6.4	3.29
May	0	0	--	--	--	0.0	811	782	3.26	3.38	6.5	3.26
June	0	0	--	--	--	0.0	807	776	3.23	3.36	6.3	3.22
Year to Date												
2017	0	0	--	--	--	0.0	3,601	3,492	3.94	4.06	4.8	3.84
2018	0	0	--	--	--	0.0	4,499	4,374	3.58	3.68	5.8	3.56
2019	0	0	--	--	--	0.0	4,782	4,613	3.32	3.44	6.1	3.31
Rolling 12 Months Ending in June												
2018	0	0	--	--	--	0.0	8,739	8,475	3.65	3.76	5.4	3.62
2019	0	0	--	--	--	0.0	9,372	9,063	3.36	3.47	5.8	3.34

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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 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - June 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	165,145	7,960	2.49	51.58	1.24	63.8	2,319	372	13.46	83.97	1.35	15.1
Year 2017												
January	15,758	742	2.51	53.37	1.38	58.7	128	21	11.64	72.27	1.06	12.8
February	15,865	744	2.57	54.74	1.18	69.1	121	19	11.56	72.24	1.36	15.1
March	17,861	858	2.48	51.66	1.34	75.2	178	29	10.66	66.36	1.22	18.7
April	16,089	759	2.62	55.59	1.23	75.3	160	26	11.82	74.12	1.27	16.7
May	16,329	796	2.44	50.13	1.16	76.3	155	25	11.19	69.26	1.21	17.7
June	15,911	757	2.41	50.55	1.37	72.5	142	23	10.34	64.95	1.11	17.9
July	15,852	763	2.46	51.07	1.30	73.3	95	15	10.75	66.88	1.30	12.4
August	16,644	784	2.51	53.36	1.36	74.7	110	18	10.55	65.94	1.55	14.1
Sept	14,897	715	2.52	52.38	1.17	72.2	151	24	11.07	69.03	1.51	17.3
October	15,687	741	2.52	53.40	1.36	67.5	149	24	11.43	71.09	1.58	16.1
November	15,335	734	2.46	51.43	1.43	68.2	199	32	11.67	72.03	1.71	13.2
December	16,408	785	2.40	50.09	1.89	68.9	263	42	11.14	69.14	1.79	13.5
Year 2018												
January	15,278	735	2.47	51.33	1.12	59.1	408	65	12.64	79.32	1.32	12.2
February	13,828	662	2.49	52.04	1.26	59.6	187	30	11.38	71.32	1.20	19.7
March	15,083	722	2.52	52.66	1.24	63.3	234	38	12.59	78.52	1.32	22.4
April	13,037	622	2.53	53.03	1.29	61.3	153	24	13.24	83.77	1.23	16.2
May	14,112	684	2.53	52.15	1.18	65.7	149	24	14.33	87.27	1.47	14.5
June	14,097	679	2.50	51.83	1.23	68.7	107	17	13.54	84.39	1.48	7.5
July	14,451	703	2.42	49.82	1.26	71.8	138	22	14.64	89.87	1.42	12.0
August	13,393	643	2.50	52.09	1.23	68.2	135	22	14.45	89.97	1.39	13.2
Sept	12,124	578	2.55	53.48	1.28	59.1	155	25	14.38	89.73	1.12	14.4
October	11,903	574	2.47	51.33	1.30	61.5	180	29	14.50	91.01	1.37	17.0
November	13,787	679	2.52	51.10	1.08	66.7	206	33	14.01	87.74	1.58	19.0
December	14,052	680	2.35	48.52	1.41	63.0	268	43	13.75	85.58	1.46	22.2
Year 2019												
January	13,260	650	2.54	51.79	1.12	59.1	183	29	13.34	83.33	1.29	9.2
February	12,842	617	2.61	54.43	1.16	61.7	199	33	13.77	82.99	1.45	18.9
March	13,424	629	2.68	57.20	1.49	66.8	126	21	13.43	82.27	1.63	12.7
April	12,978	629	2.63	54.29	1.15	69.1	223	36	12.89	79.74	1.54	20.8
May	12,720	623	2.51	51.21	0.97	67.9	92	15	14.12	86.68	1.48	8.9
June	11,705	567	2.49	51.38	1.22	64.6	131	21	13.04	79.96	1.55	14.0
Year to Date												
2017	97,814	4,656	2.50	52.62	1.28	70.8	883	142	11.18	69.71	1.21	16.4
2018	85,435	4,104	2.51	52.15	1.22	62.7	1,238	198	12.80	79.93	1.31	14.2
2019	76,929	3,715	2.58	53.41	1.19	64.6	955	155	13.37	82.15	1.48	13.5
Rolling 12 Months Ending in June												
2018	180,258	8,626	2.49	52.04	1.33	66.7	2,205	354	12.09	75.31	1.45	14.2
2019	156,639	7,571	2.52	52.17	1.22	64.8	2,036	329	13.82	85.54	1.44	14.9

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

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - June 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	7.9	772,950	751,129	3.36	3.46	57.3	3.23
Year 2017												
January	0	0	--	--	--	0.0	69,093	66,857	3.62	3.75	62.4	3.43
February	0	0	--	--	--	0.0	66,939	64,865	3.19	3.29	67.1	3.08
March	0	0	--	--	--	0.0	69,909	67,773	2.90	3.00	65.7	2.83
April	0	0	--	--	--	0.0	66,465	64,429	3.26	3.36	65.2	3.15
May	0	0	--	--	--	0.0	66,784	64,714	3.30	3.41	63.8	3.15
June	271	9	1.25	35.84	5.75	9.5	66,331	64,299	3.26	3.36	61.6	3.10
July	253	9	1.25	34.50	5.85	9.4	67,662	65,619	3.21	3.31	58.6	3.07
August	296	11	1.25	34.50	5.85	10.9	65,688	63,679	3.08	3.17	58.7	2.97
Sept	257	9	1.77	48.91	5.85	11.7	62,978	61,019	3.10	3.20	59.4	3.00
October	893	32	1.77	48.91	5.85	35.3	63,058	61,209	3.08	3.17	58.8	2.97
November	386	14	1.77	48.91	5.85	16.1	66,895	64,843	3.01	3.11	62.6	2.93
December	0	0	--	--	--	0.0	71,633	69,435	3.11	3.21	60.6	3.00
Year 2018												
January	0	0	--	--	--	0.0	67,916	65,839	3.57	3.69	57.4	3.42
February	0	0	--	--	--	0.0	59,419	57,646	3.42	3.52	56.8	3.26
March	0	0	--	--	--	0.0	59,663	57,973	2.85	2.93	54.4	2.81
April	0	0	--	--	--	0.0	60,223	58,528	2.92	3.00	56.1	2.87
May	0	0	--	--	--	0.0	61,846	60,048	2.98	3.07	57.7	2.92
June	0	0	--	--	--	0.0	64,149	62,365	3.13	3.22	58.5	3.03
July	160	6	1.70	45.10	5.83	7.5	66,384	64,680	3.02	3.10	57.7	2.93
August	260	10	1.78	46.99	5.55	13.4	67,289	65,321	3.11	3.21	57.6	3.03
Sept	664	25	1.78	47.54	6.02	30.8	66,074	64,330	3.11	3.19	59.5	3.04
October	477	17	1.76	48.96	5.45	21.3	64,068	62,421	3.40	3.49	58.2	3.27
November	172	6	1.69	46.62	5.85	9.2	69,866	68,008	3.97	4.07	59.4	3.75
December	178	6	1.70	47.00	5.53	7.8	66,052	63,969	4.70	4.85	54.6	4.31
Year 2019												
January	0	0	--	--	--	0.0	72,541	70,439	3.77	3.89	58.5	3.60
February	0	0	--	--	--	0.0	63,912	61,868	3.45	3.56	57.8	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	58.8	2.84
May	0	0	--	--	--	0.0	65,305	63,475	2.75	2.83	58.2	2.73
June	0	0	--	--	--	0.0	63,184	61,402	2.63	2.71	56.6	2.63
Year to Date												
2017	271	9	1.25	35.84	5.75	1.8	405,521	392,936	3.26	3.36	64.3	3.12
2018	0	0	--	--	--	0.0	373,216	362,398	3.15	3.25	56.8	3.06
2019	0	0	--	--	--	0.0	394,367	382,965	3.11	3.20	57.9	3.05
Rolling 12 Months Ending in June												
2018	2,085	76	1.63	45.11	5.85	7.8	771,130	748,203	3.12	3.22	58.3	3.02
2019	1,911	71	1.75	47.47	5.74	7.9	794,101	771,696	3.33	3.43	57.8	3.22

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

- Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary.
- See Glossary for definitions.
- Starting in January 2013, there may have been a shift in the continuity of Chapter 4 tables due to changes in the sample design of Form EIA-923 and the imputation process.
- See the EIA-923 section of the Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
- See the Technical Notes for fuel conversion factors.
- Totals may not equal the sum of components because of independent rounding.

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	3	3	-0.5%	0	0	3	3	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	3	3	-0.5%	0	0	3	3	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,430	1,660	-14.0%	0	0	1,430	1,649	0	0	0	11
New Jersey	56	47	19.0%	0	0	56	47	0	0	0	0
New York	0	28	-100.0%	0	0	0	28	0	0	0	0
Pennsylvania	1,373	1,584	-13.0%	0	0	1,373	1,573	0	0	0	11
East North Central	9,590	10,821	-11.0%	5,368	6,333	4,076	4,310	0	0	146	179
Illinois	2,627	2,945	-11.0%	394	492	2,087	2,300	0	0	146	152
Indiana	2,060	2,381	-13.0%	1,900	2,214	161	167	0	0	0	0
Michigan	2,170	1,948	11.0%	2,157	1,930	13	18	0	0	0	0
Ohio	2,026	2,039	-0.7%	211	215	1,815	1,824	0	0	0	0
Wisconsin	707	1,508	-53.0%	707	1,481	0	0	0	0	0	27
West North Central	8,523	9,383	-9.2%	8,264	9,113	0	0	0	0	259	270
Iowa	1,534	1,296	18.0%	1,338	1,090	0	0	0	0	195	206
Kansas	980	1,087	-9.8%	980	1,087	0	0	0	0	0	0
Minnesota	879	849	3.5%	879	849	0	0	0	0	0	0
Missouri	2,155	2,995	-28.0%	2,155	2,995	0	0	0	0	0	0
Nebraska	1,170	1,098	6.5%	1,107	1,034	0	0	0	0	63	64
North Dakota	1,649	1,915	-14.0%	1,649	1,915	0	0	0	0	0	0
South Dakota	156	142	9.9%	156	142	0	0	0	0	0	0
South Atlantic	6,842	6,196	10.0%	6,173	5,372	613	766	0	0	56	58
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	873	1,001	-13.0%	873	996	0	0	0	0	0	5
Georgia	1,181	1,187	-0.5%	1,171	1,187	0	0	0	0	10	0
Maryland	166	426	-61.0%	0	0	166	415	0	0	0	11
North Carolina	1,176	798	47.0%	1,156	779	2	2	0	0	18	17
South Carolina	632	456	39.0%	628	456	0	0	0	0	3	0
Virginia	227	308	-27.0%	174	239	29	45	0	0	24	24
West Virginia	2,587	2,018	28.0%	2,171	1,715	417	303	0	0	0	0
East South Central	4,285	5,198	-18.0%	4,227	4,826	0	303	0	0	58	69
Alabama	1,198	1,324	-9.5%	1,198	1,324	0	0	0	0	0	0
Kentucky	2,418	2,785	-13.0%	2,418	2,785	0	0	0	0	0	0
Mississippi	92	433	-79.0%	92	130	0	303	0	0	0	0
Tennessee	577	656	-12.0%	519	587	0	0	0	0	58	69
West South Central	7,371	8,610	-14.0%	3,759	4,655	3,608	3,916	0	0	5	39
Arkansas	1,056	1,277	-17.0%	920	1,038	131	232	0	0	5	8
Louisiana	398	657	-39.0%	348	495	49	162	0	0	0	0
Oklahoma	459	652	-30.0%	330	569	129	52	0	0	0	31
Texas	5,459	6,023	-9.4%	2,160	2,553	3,299	3,470	0	0	0	0
Mountain	5,997	6,413	-6.5%	5,344	5,790	653	623	0	0	0	0
Arizona	1,112	1,310	-15.0%	1,112	1,310	0	0	0	0	0	0
Colorado	1,104	1,312	-16.0%	1,104	1,312	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	530	540	-1.9%	23	21	507	519	0	0	0	0
Nevada	183	108	70.0%	121	85	62	23	0	0	0	0
New Mexico	726	651	12.0%	726	651	0	0	0	0	0	0
Utah	932	980	-4.9%	894	943	38	37	0	0	0	0
Wyoming	1,410	1,512	-6.8%	1,364	1,468	46	44	0	0	0	0
Pacific Contiguous	549	173	216.0%	123	14	382	105	0	0	43	54
California	43	54	-20.0%	0	0	0	0	0	0	43	54
Oregon	123	14	784.0%	123	14	0	0	0	0	0	0
Washington	382	105	263.0%	0	0	382	105	0	0	0	0
Pacific Noncontiguous	88	76	15.0%	27	14	60	62	0	0	0	0
Alaska	27	14	93.0%	27	14	0	0	0	0	0	0
Hawaii	60	62	-3.1%	0	0	60	62	0	0	0	0
U.S. Total	44,676	48,533	-7.9%	33,285	36,117	10,824	11,737	0	0	567	679

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 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) June 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	84	147	-43.0%	49	45	36	102	0	0	0	0
Connecticut	0	67	-100.0%	0	0	0	67	0	0	0	0
Maine	36	34	3.2%	0	0	36	34	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	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	10,070	9,787	2.9%	0	0	10,037	9,724	0	0	32	63
New Jersey	301	320	-5.7%	0	0	301	320	0	0	0	0
New York	69	200	-66.0%	0	0	69	191	0	0	0	9
Pennsylvania	9,699	9,267	4.7%	0	0	9,667	9,213	0	0	32	55
East North Central	61,769	63,968	-3.4%	35,459	38,035	25,398	24,952	0	0	912	981
Illinois	18,333	20,358	-9.9%	3,488	4,032	13,961	15,389	0	0	884	937
Indiana	14,653	14,407	1.7%	13,622	13,441	1,031	966	0	0	0	0
Michigan	9,947	9,129	9.0%	9,871	9,045	76	80	0	0	0	3
Ohio	11,611	11,100	4.6%	1,281	2,583	10,331	8,518	0	0	0	0
Wisconsin	7,224	8,974	-20.0%	7,196	8,934	0	0	0	0	28	40
West North Central	49,737	53,828	-7.6%	48,177	52,229	0	0	5	6	1,554	1,593
Iowa	7,434	6,921	7.4%	6,334	5,798	0	0	0	0	1,100	1,123
Kansas	5,419	5,437	-0.3%	5,419	5,437	0	0	0	0	0	0
Minnesota	5,820	5,486	6.1%	5,752	5,427	0	0	0	0	68	59
Missouri	13,779	17,461	-21.0%	13,774	17,455	0	0	5	6	0	0
Nebraska	6,141	5,920	3.7%	5,756	5,509	0	0	0	0	386	411
North Dakota	10,307	11,775	-12.0%	10,307	11,775	0	0	0	0	0	0
South Dakota	836	829	0.9%	836	829	0	0	0	0	0	0
South Atlantic	38,914	37,546	3.6%	34,546	31,833	3,920	5,225	0	0	448	488
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	4,676	5,646	-17.0%	4,652	5,596	0	0	0	0	23	50
Georgia	7,522	6,500	16.0%	7,451	6,432	0	0	0	0	71	68
Maryland	1,493	2,146	-30.0%	0	0	1,401	2,042	0	0	92	105
North Carolina	6,377	5,482	16.0%	6,236	5,314	21	37	0	0	120	132
South Carolina	4,039	2,800	44.0%	4,028	2,797	0	0	0	0	11	3
Virginia	1,441	2,386	-40.0%	1,137	1,999	175	256	0	0	130	130
West Virginia	13,295	12,586	5.6%	11,042	9,695	2,252	2,891	0	0	0	0
East South Central	26,710	27,889	-4.2%	25,159	25,936	1,231	1,477	0	0	319	476
Alabama	6,629	7,763	-15.0%	6,629	7,763	0	0	0	0	0	0
Kentucky	15,184	15,083	0.7%	15,184	15,083	0	0	0	0	0	0
Mississippi	1,926	2,207	-13.0%	695	730	1,231	1,477	0	0	0	0
Tennessee	2,971	2,836	4.7%	2,652	2,361	0	0	0	0	319	476
West South Central	44,586	47,899	-6.9%	23,504	25,743	20,972	21,957	0	0	110	199
Arkansas	6,593	7,418	-11.0%	5,509	5,988	1,049	1,382	0	0	35	48
Louisiana	3,065	3,361	-8.8%	2,348	2,147	718	1,214	0	0	0	0
Oklahoma	2,599	4,446	-42.0%	2,382	3,838	143	458	0	0	75	151
Texas	32,329	32,674	-1.1%	13,266	13,770	19,063	18,904	0	0	0	0
Mountain	37,812	38,167	-0.9%	33,228	33,659	4,583	4,508	0	0	0	0
Arizona	7,150	7,854	-9.0%	7,150	7,854	0	0	0	0	0	0
Colorado	7,053	7,150	-1.4%	7,053	7,150	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	3,956	3,911	1.2%	136	92	3,820	3,818	0	0	0	0
Nevada	936	320	193.0%	638	85	298	235	0	0	0	0
New Mexico	3,907	3,020	29.0%	3,907	3,020	0	0	0	0	0	0
Utah	5,199	5,477	-5.1%	4,990	5,275	208	202	0	0	0	0
Wyoming	9,610	10,436	-7.9%	9,354	10,183	257	252	0	0	0	0
Pacific Contiguous	3,381	1,290	162.0%	735	14	2,307	971	0	0	339	305
California	339	305	11.0%	0	0	0	0	0	0	339	305
Oregon	735	14	NM	735	14	0	0	0	0	0	0
Washington	2,307	971	138.0%	0	0	2,307	971	0	0	0	0
Pacific Noncontiguous	519	454	14.0%	158	90	361	364	0	0	0	0
Alaska	158	90	74.0%	158	90	0	0	0	0	0	0
Hawaii	361	364	-0.7%	0	0	361	364	0	0	0	0
U.S. Total	273,580	280,975	-2.6%	201,014	207,585	68,846	69,280	5	6	3,715	4,104

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

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

Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, June 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	2	54	-97.0%	1	1	1	53	0	0	0	0
Connecticut	0	53	-100.0%	0	0	0	53	0	0	0	0
Maine	1	0	NM	0	0	1	0	0	0	0	0
Massachusetts	0	0	-100.0%	0	0	0	0	0	0	0	0
New Hampshire	1	1	37.0%	1	1	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	19	152	-88.0%	0	96	15	52	0	0	4	4
New Jersey	0	8	-98.0%	0	0	0	8	0	0	0	0
New York	2	98	-98.0%	0	96	2	2	0	0	0	0
Pennsylvania	16	46	-65.0%	0	0	12	42	0	0	4	4
East North Central	80	73	9.1%	49	43	27	29	0	0	4	1
Illinois	6	7	-19.0%	1	1	6	7	0	0	0	0
Indiana	22	20	14.0%	22	20	0	0	0	0	0	0
Michigan	15	15	0.8%	13	14	0	0	0	0	2	1
Ohio	34	25	38.0%	10	2	22	23	0	0	2	0
Wisconsin	2	7	-63.0%	2	7	0	0	0	0	0	0
West North Central	56	60	-7.0%	56	60	0	0	0	0	0	0
Iowa	20	10	98.0%	20	10	0	0	0	0	0	0
Kansas	9	7	25.0%	9	7	0	0	0	0	0	0
Minnesota	4	9	-56.0%	4	9	0	0	0	0	0	0
Missouri	17	23	-27.0%	17	23	0	0	0	0	0	0
Nebraska	1	1	6.2%	1	1	0	0	0	0	0	0
North Dakota	6	9	-33.0%	6	9	0	0	0	0	0	0
South Dakota	0	2	-100.0%	0	2	0	0	0	0	0	0
South Atlantic	143	214	-33.0%	97	170	33	32	0	0	13	13
Delaware	0	4	-100.0%	0	0	0	4	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	36	22	62.0%	35	19	0	0	0	0	1	4
Georgia	16	16	-4.2%	7	13	0	0	0	0	9	4
Maryland	32	27	21.0%	0	0	32	27	0	0	0	0
North Carolina	20	20	1.6%	19	17	0	0	0	0	2	3
South Carolina	14	11	25.0%	13	9	0	0	0	0	1	2
Virginia	5	93	-95.0%	4	92	0	2	0	0	0	0
West Virginia	20	21	-4.8%	20	21	0	0	0	0	0	0
East South Central	16	23	-28.0%	16	23	0	0	0	0	0	0
Alabama	1	7	-87.0%	1	7	0	0	0	0	0	0
Kentucky	5	7	-29.0%	5	7	0	0	0	0	0	0
Mississippi	2	3	-24.0%	2	3	0	0	0	0	0	0
Tennessee	8	6	43.0%	8	6	0	0	0	0	0	0
West South Central	16	19	-16.0%	16	17	0	2	0	0	0	0
Arkansas	5	5	3.3%	5	4	0	1	0	0	0	0
Louisiana	1	2	-35.0%	1	2	0	0	0	0	0	0
Oklahoma	2	1	303.0%	2	1	0	0	0	0	0	0
Texas	7	11	-37.0%	7	10	0	1	0	0	0	0
Mountain	50	19	171.0%	48	17	3	2	0	0	0	0
Arizona	11	6	73.0%	11	6	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	3	1	159.0%	0	0	3	1	0	0	0	0
Nevada	3	2	68.0%	3	1	0	1	0	0	0	0
New Mexico	4	0	NM	4	0	0	0	0	0	0	0
Utah	21	2	916.0%	21	2	0	0	0	0	0	0
Wyoming	8	7	19.0%	8	7	0	0	0	0	0	0
Pacific Contiguous	3	1	150.0%	0	0	3	1	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	3	1	150.0%	0	0	3	1	0	0	0	0
Pacific Noncontiguous	734	731	0.4%	566	559	169	172	0	0	0	0
Alaska	2	0	694.0%	2	0	0	0	0	0	0	0
Hawaii	732	731	0.1%	563	559	169	172	0	0	0	0
U.S. Total	1,120	1,346	-17.0%	848	986	250	344	0	0	21	17

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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 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) June 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	191	1,139	-83.0%	8	115	183	1,024	0	0	0	0
Connecticut	6	183	-97.0%	0	0	6	183	0	0	0	0
Maine	127	253	-50.0%	0	0	127	253	0	0	0	0
Massachusetts	51	420	-88.0%	0	12	51	408	0	0	0	0
New Hampshire	8	183	-95.0%	8	103	0	80	0	0	0	0
Rhode Island	0	100	-100.0%	0	0	0	100	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	631	2,691	-77.0%	295	839	303	1,805	0	0	34	47
New Jersey	22	216	-90.0%	0	0	22	216	0	0	0	0
New York	379	1,899	-80.0%	295	839	85	1,048	0	0	0	12
Pennsylvania	229	577	-60.0%	0	0	196	541	0	0	34	36
East North Central	481	418	15.0%	267	232	192	171	0	0	22	15
Illinois	48	42	13.0%	2	2	46	40	0	0	0	0
Indiana	106	87	22.0%	106	86	0	1	0	0	0	0
Michigan	69	83	-18.0%	61	79	0	0	0	0	7	4
Ohio	235	163	44.0%	83	33	138	119	0	0	15	11
Wisconsin	23	42	-45.0%	15	31	8	11	0	0	0	0
West North Central	271	270	0.7%	271	270	0	0	0	0	0	0
Iowa	64	73	-13.0%	64	73	0	0	0	0	0	0
Kansas	49	48	1.2%	49	48	0	0	0	0	0	0
Minnesota	20	15	36.0%	20	15	0	0	0	0	0	0
Missouri	83	91	-8.1%	83	91	0	0	0	0	0	0
Nebraska	11	3	215.0%	11	3	0	0	0	0	0	0
North Dakota	45	36	25.0%	45	36	0	0	0	0	0	0
South Dakota	0	4	-100.0%	0	4	0	0	0	0	0	0
South Atlantic	700	2,572	-73.0%	523	1,803	80	636	0	0	96	134
Delaware	1	75	-99.0%	0	0	1	75	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	85	270	-69.0%	65	246	0	0	0	0	20	24
Georgia	114	163	-30.0%	64	108	1	25	0	0	48	29
Maryland	66	387	-83.0%	0	0	66	387	0	0	0	0
North Carolina	155	645	-76.0%	141	617	0	0	0	0	15	27
South Carolina	55	263	-79.0%	50	188	0	43	0	0	5	33
Virginia	107	613	-83.0%	87	506	12	85	0	0	8	21
West Virginia	117	157	-26.0%	117	137	0	20	0	0	0	0
East South Central	158	202	-22.0%	146	142	8	58	0	0	3	2
Alabama	17	98	-82.0%	9	40	8	58	0	0	0	0
Kentucky	76	61	24.0%	76	61	0	0	0	0	0	0
Mississippi	15	12	27.0%	15	12	0	0	0	0	0	0
Tennessee	50	32	58.0%	47	30	0	0	0	0	3	2
West South Central	126	93	36.0%	94	73	32	20	0	0	0	0
Arkansas	38	29	34.0%	25	22	13	7	0	0	0	0
Louisiana	6	5	9.0%	6	5	0	0	0	0	0	0
Oklahoma	21	16	34.0%	21	16	0	0	0	0	0	0
Texas	61	43	41.0%	42	30	19	13	0	0	0	0
Mountain	221	144	53.0%	205	132	16	12	0	0	0	0
Arizona	81	48	70.0%	81	48	0	0	0	0	0	0
Colorado	2	4	-46.0%	2	4	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	13	8	64.0%	0	0	13	8	0	0	0	0
Nevada	14	8	81.0%	11	5	3	3	0	0	0	0
New Mexico	25	9	177.0%	25	9	0	0	0	0	0	0
Utah	55	42	33.0%	55	40	0	1	0	0	0	0
Wyoming	30	25	16.0%	30	25	0	0	0	0	0	0
Pacific Contiguous	14	3	364.0%	6	0	8	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	14	3	364.0%	6	0	8	3	0	0	0	0
Pacific Noncontiguous	4,479	4,269	4.9%	3,630	3,459	849	810	0	0	0	0
Alaska	10	0	NM	10	0	0	0	0	0	0	0
Hawaii	4,469	4,269	4.7%	3,620	3,459	849	810	0	0	0	0
U.S. Total	7,273	11,801	-38.0%	5,446	7,065	1,672	4,539	0	0	155	198

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 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	34	41	-17.0%	34	41	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	32	36	-12.0%	32	36	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	2	5	-53.0%	2	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	38	75	-50.0%	38	75	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	38	75	-50.0%	38	75	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	58	143	-59.0%	58	143	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	58	143	-59.0%	58	143	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	130	260	-50.0%	130	260	0	0	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.
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) June 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 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	129	303	-57.0%	129	303	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	109	274	-60.0%	109	274	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	21	29	-30.0%	21	29	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	229	450	-49.0%	229	450	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	229	450	-49.0%	229	450	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	522	697	-25.0%	522	697	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	522	697	-25.0%	522	697	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	881	1,450	-39.0%	881	1,450	0	0	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.
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, June 2019 and 2018
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	24,428	26,335	-7.2%	14	106	24,414	26,229	0	0	0	0
Connecticut	11,240	10,763	4.4%	0	0	11,240	10,763	0	0	0	0
Maine	502	1,111	-55.0%	0	0	502	1,111	0	0	0	0
Massachusetts	7,090	8,447	-16.0%	10	69	7,080	8,378	0	0	0	0
New Hampshire	2,500	3,043	-18.0%	4	37	2,496	3,006	0	0	0	0
Rhode Island	3,097	2,972	4.2%	0	0	3,097	2,972	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	107,270	95,332	13.0%	7,995	9,123	98,522	85,364	0	0	753	845
New Jersey	22,918	20,822	10.0%	0	0	22,918	20,822	0	0	0	0
New York	28,811	30,672	-6.1%	7,995	9,123	20,260	20,932	0	0	556	617
Pennsylvania	55,541	43,839	27.0%	0	0	55,344	43,611	0	0	197	228
East North Central	81,050	71,035	14.0%	27,783	24,890	51,675	44,565	590	501	1,001	1,079
Illinois	7,539	6,989	7.9%	757	1,037	6,780	5,946	0	0	2	5
Indiana	15,844	15,416	2.8%	7,369	7,173	8,475	8,242	0	0	0	0
Michigan	18,444	18,527	-0.4%	4,733	5,779	12,748	11,758	590	501	373	489
Ohio	28,067	21,904	28.0%	4,879	4,059	22,763	17,455	0	0	425	389
Wisconsin	11,156	8,200	36.0%	10,046	6,841	908	1,163	0	0	201	196
West North Central	17,312	17,635	-1.8%	14,588	15,330	2,141	1,684	186	150	397	471
Iowa	6,286	6,820	-7.8%	5,905	6,359	0	0	0	0	381	462
Kansas	2,145	2,768	-23.0%	2,145	2,768	0	0	0	0	0	0
Minnesota	3,751	3,103	21.0%	3,644	3,018	90	75	0	1	16	9
Missouri	4,621	4,579	0.9%	2,384	2,821	2,051	1,609	185	149	0	0
Nebraska	313	284	10.0%	313	284	0	0	0	0	0	0
North Dakota	196	80	145.0%	196	80	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	242,966	228,976	6.1%	204,588	189,284	35,497	36,782	0	0	2,881	2,910
Delaware	2,073	1,835	13.0%	0	0	2,073	1,835	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	121,785	112,491	8.3%	116,398	107,504	4,979	4,614	0	0	408	374
Georgia	32,656	30,267	7.9%	24,513	22,887	7,489	6,655	0	0	654	725
Maryland	7,502	7,535	-0.5%	2,217	2,519	5,285	4,729	0	0	0	287
North Carolina	23,734	26,855	-12.0%	18,724	23,579	4,763	3,033	0	0	247	243
South Carolina	16,869	16,113	4.7%	16,691	12,830	106	3,205	0	0	72	78
Virginia	36,626	32,733	12.0%	25,829	19,951	9,918	11,991	0	0	879	792
West Virginia	1,721	1,147	50.0%	217	14	885	721	0	0	619	412
East South Central	83,507	83,731	-0.3%	55,771	55,401	25,345	26,796	0	0	2,392	1,533
Alabama	36,554	35,710	2.4%	13,410	12,478	23,145	23,232	0	0	0	0
Kentucky	7,634	7,555	1.0%	7,423	7,393	210	163	0	0	0	0
Mississippi	27,030	30,875	-12.0%	25,040	27,474	1,990	3,402	0	0	0	0
Tennessee	12,289	9,590	28.0%	9,897	8,057	0	0	0	0	2,392	1,533
West South Central	273,463	261,143	4.7%	88,997	82,752	132,743	125,243	0	0	51,723	53,149
Arkansas	12,437	12,391	0.4%	11,179	11,101	1,084	1,130	0	0	174	160
Louisiana	52,137	42,275	23.0%	29,818	22,346	4,335	3,690	0	0	17,985	16,240
Oklahoma	29,615	32,004	-7.5%	17,699	20,160	11,447	11,583	0	0	469	262
Texas	179,274	174,474	2.8%	30,301	29,145	115,878	108,841	0	0	33,095	36,488
Mountain	70,888	68,722	3.2%	61,988	55,615	8,862	13,059	0	0	38	49
Arizona	31,562	26,370	20.0%	23,668	17,445	7,894	8,925	0	0	0	0
Colorado	9,410	11,129	-15.0%	8,603	9,559	807	1,570	0	0	0	0
Idaho	911	755	21.0%	911	755	0	0	0	0	0	0
Montana	210	213	-1.7%	210	213	0	0	0	0	0	0
Nevada	16,290	17,622	-7.6%	16,290	17,622	0	0	0	0	0	0
New Mexico	7,549	8,629	-13.0%	7,389	6,065	160	2,563	0	0	0	0
Utah	4,788	3,892	23.0%	4,750	3,844	0	0	0	0	38	49
Wyoming	168	112	49.0%	168	112	0	1	0	0	0	0
Pacific Contiguous	41,320	44,950	-8.1%	15,137	17,921	23,967	24,700	0	0	2,216	2,328
California	30,580	38,103	-20.0%	9,919	13,993	18,444	21,781	0	0	2,216	2,328
Oregon	6,791	3,779	80.0%	2,653	1,917	4,138	1,861	0	0	0	0
Washington	3,950	3,069	29.0%	2,565	2,010	1,384	1,058	0	0	0	0
Pacific Noncontiguous	57	5	NM	57	5	0	0	0	0	0	0
Alaska	57	5	NM	57	5	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	942,261	897,864	4.9%	476,918	450,427	403,165	384,422	776	650	61,402	62,365

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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) June 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	134,838	131,251	2.7%	55	154	134,783	131,097	0	0	0	0
Connecticut	62,248	54,322	15.0%	0	0	62,248	54,322	0	0	0	0
Maine	3,278	4,426	-26.0%	0	0	3,278	4,426	0	0	0	0
Massachusetts	46,802	52,908	-12.0%	38	105	46,764	52,803	0	0	0	0
New Hampshire	8,072	5,911	37.0%	16	49	8,056	5,862	0	0	0	0
Rhode Island	14,438	13,685	5.5%	0	0	14,438	13,685	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	552,817	476,026	16.0%	39,054	38,184	508,794	432,610	0	0	4,969	5,232
New Jersey	123,670	110,991	11.0%	0	0	123,670	110,991	0	0	0	0
New York	147,706	145,078	1.8%	39,054	38,184	104,950	103,175	0	0	3,702	3,719
Pennsylvania	281,441	219,957	28.0%	0	0	280,173	218,444	0	0	1,268	1,513
East North Central	459,518	402,698	14.0%	152,286	145,356	296,235	246,367	3,573	3,306	7,424	7,669
Illinois	33,846	30,269	12.0%	3,184	2,929	30,648	27,322	0	0	14	19
Indiana	89,153	76,128	17.0%	36,566	35,676	52,587	40,452	0	0	0	0
Michigan	110,947	121,705	-8.8%	25,588	34,379	78,620	80,570	3,573	3,306	3,166	3,450
Ohio	162,471	125,843	29.0%	29,513	28,817	129,907	94,267	0	0	3,052	2,759
Wisconsin	63,101	48,753	29.0%	57,435	43,556	4,473	3,757	0	0	1,193	1,441
West North Central	82,737	79,943	3.5%	71,458	68,945	8,048	7,741	1,041	1,068	2,190	2,189
Iowa	28,787	29,524	-2.5%	26,648	27,360	0	0	0	0	2,139	2,165
Kansas	8,658	11,780	-26.0%	8,658	11,780	0	0	0	0	0	0
Minnesota	21,128	16,730	26.0%	20,895	16,232	180	470	3	3	51	24
Missouri	21,902	20,512	6.8%	12,995	12,177	7,868	7,271	1,038	1,064	0	0
Nebraska	1,325	1,096	21.0%	1,325	1,096	0	0	0	0	0	0
North Dakota	937	300	212.0%	937	300	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,216,484	1,132,786	7.4%	1,018,043	934,030	180,424	181,349	0	0	18,016	17,407
Delaware	9,983	14,914	-33.0%	0	0	9,983	14,914	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	585,460	554,313	5.6%	566,701	532,599	16,562	19,812	0	0	2,197	1,902
Georgia	167,593	158,602	5.7%	127,339	120,288	36,113	33,719	0	0	4,141	4,596
Maryland	45,326	35,571	27.0%	14,329	7,239	29,845	26,981	0	0	1,151	1,351
North Carolina	139,720	141,349	-1.2%	112,908	125,529	25,300	14,369	0	0	1,512	1,450
South Carolina	80,951	64,008	26.0%	75,592	53,093	4,833	10,436	0	0	525	479
Virginia	180,987	157,988	15.0%	120,365	94,286	55,397	58,870	0	0	5,226	4,832
West Virginia	6,463	6,042	7.0%	809	997	2,391	2,248	0	0	3,264	2,798
East South Central	441,389	459,109	-3.9%	294,257	308,981	133,471	140,589	0	0	13,661	9,539
Alabama	177,230	178,728	-0.8%	61,776	59,199	115,454	119,529	0	0	0	0
Kentucky	44,430	52,802	-16.0%	42,995	49,220	1,435	3,582	0	0	0	0
Mississippi	156,036	179,743	-13.0%	139,454	162,265	16,582	17,478	0	0	0	0
Tennessee	63,693	47,836	33.0%	50,032	38,298	0	0	0	0	13,661	9,539
West South Central	1,326,761	1,285,591	3.2%	387,024	369,388	616,689	610,075	0	0	323,047	306,128
Arkansas	58,066	66,235	-12.0%	49,980	58,360	6,692	6,679	0	0	1,395	1,196
Louisiana	257,500	223,388	15.0%	129,547	106,569	17,995	18,063	0	0	109,958	98,756
Oklahoma	129,724	132,917	-2.4%	79,064	76,924	48,277	54,303	0	0	2,383	1,690
Texas	881,470	863,051	2.1%	128,434	127,535	543,725	531,030	0	0	209,311	204,486
Mountain	342,301	290,316	18.0%	288,235	247,066	53,989	42,905	0	0	77	345
Arizona	139,646	95,385	46.0%	103,863	73,686	35,783	21,700	0	0	0	0
Colorado	55,351	54,866	0.9%	48,244	47,478	7,108	7,388	0	0	0	0
Idaho	3,829	1,111	245.0%	3,829	1,111	0	0	0	0	0	0
Montana	1,225	1,309	-6.4%	1,225	1,309	0	0	0	0	0	0
Nevada	74,249	78,666	-5.6%	74,249	78,666	0	0	0	0	0	0
New Mexico	37,630	38,346	-1.9%	26,542	24,536	11,089	13,810	0	0	0	0
Utah	29,275	20,086	46.0%	29,198	19,741	0	0	0	0	77	345
Wyoming	1,096	548	100.0%	1,086	540	10	8	0	0	0	0
Pacific Contiguous	269,425	260,242	3.5%	98,121	102,032	157,725	144,321	0	0	13,579	13,889
California	201,760	211,761	-4.7%	69,156	80,131	119,025	117,741	0	0	13,579	13,889
Oregon	47,562	33,495	42.0%	17,089	14,171	30,473	19,324	0	0	0	0
Washington	20,103	14,986	34.0%	11,875	7,730	8,227	7,256	0	0	0	0
Pacific Noncontiguous	298	805	-63.0%	298	805	0	0	0	0	0	0
Alaska	298	805	-63.0%	298	805	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	4,826,567	4,518,768	6.8%	2,348,830	2,214,941	2,090,158	1,937,055	4,613	4,374	382,965	362,398

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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, June 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	W	2.04	W	--	--	W	2.04
New Jersey	W	W	W	--	--	W	W
New York	--	W	W	--	--	--	W
Pennsylvania	1.77	W	W	--	--	1.77	W
East North Central	1.95	1.96	-0.5%	2.11	2.09	1.75	1.78
Illinois	W	W	W	1.91	1.88	W	W
Indiana	W	W	W	2.15	2.08	W	W
Michigan	W	W	W	2.07	2.08	W	W
Ohio	1.75	1.77	-1.1%	1.75	1.74	1.75	1.77
Wisconsin	2.35	2.29	2.6%	2.35	2.29	--	--
West North Central	1.63	1.69	-3.6%	1.63	1.69	--	--
Iowa	1.55	1.61	-3.7%	1.55	1.61	--	--
Kansas	1.61	1.72	-6.4%	1.61	1.72	--	--
Minnesota	2.04	2.19	-6.8%	2.04	2.19	--	--
Missouri	1.62	1.75	-7.4%	1.62	1.75	--	--
Nebraska	1.22	1.23	-0.8%	1.22	1.23	--	--
North Dakota	1.81	1.60	13.0%	1.81	1.60	--	--
South Dakota	1.69	1.88	-10.0%	1.69	1.88	--	--
South Atlantic	2.54	2.62	-3.1%	2.57	2.67	2.29	2.28
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.90	2.88	0.7%	2.90	2.88	--	--
Georgia	2.76	2.83	-2.5%	2.76	2.83	--	--
Maryland	2.60	2.40	8.3%	--	--	2.60	2.40
North Carolina	W	W	W	2.71	3.06	W	W
South Carolina	3.21	3.31	-3.0%	3.21	3.31	--	--
Virginia	W	W	W	2.83	2.68	W	W
West Virginia	W	W	W	2.09	2.12	W	W
East South Central	2.10	W	W	2.10	2.08	--	W
Alabama	2.49	2.25	11.0%	2.49	2.25	--	--
Kentucky	1.90	1.96	-3.1%	1.90	1.96	--	--
Mississippi	2.81	W	W	2.81	2.49	--	W
Tennessee	2.14	2.22	-3.6%	2.14	2.22	--	--
West South Central	1.85	1.89	-2.1%	2.15	2.11	1.52	1.60
Arkansas	W	W	W	1.99	1.93	W	W
Louisiana	W	W	W	3.44	3.28	W	W
Oklahoma	W	W	W	1.66	1.74	W	W
Texas	1.72	1.76	-2.3%	2.09	2.04	1.47	1.54
Mountain	W	W	W	2.06	2.03	W	W
Arizona	2.59	2.47	4.9%	2.59	2.47	--	--
Colorado	1.86	1.67	11.0%	1.86	1.67	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	2.00	1.93	W	W
Nevada	W	W	W	2.93	3.03	W	W
New Mexico	2.52	2.44	3.3%	2.52	2.44	--	--
Utah	1.96	2.07	-5.3%	1.96	2.07	--	--
Wyoming	W	W	W	1.50	1.63	W	W
Pacific Contiguous	W	W	W	2.19	2.19	W	W
California	--	--	--	--	--	--	--
Oregon	2.19	2.19	0.0%	2.19	2.19	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.35	3.38	W	W
Alaska	3.35	3.38	-0.9%	3.35	3.38	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.02	2.04	-1.0%	2.11	2.10	1.75	1.85

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	W	W	W	3.54	3.61	W	W
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	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.97	2.32	-15.0%	--	--	1.97	2.32
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.91	2.25	-15.0%	--	--	1.91	2.25
East North Central	1.99	1.97	1.0%	2.12	2.09	1.82	1.80
Illinois	1.82	1.76	3.4%	1.97	1.85	1.78	1.73
Indiana	W	W	W	2.14	2.10	W	W
Michigan	W	W	W	2.08	2.12	W	W
Ohio	W	W	W	1.84	1.78	W	W
Wisconsin	2.25	2.25	0.0%	2.25	2.25	--	--
West North Central	1.64	1.72	-4.7%	1.64	1.72	--	--
Iowa	1.56	1.70	-8.2%	1.56	1.70	--	--
Kansas	1.64	1.70	-3.5%	1.64	1.70	--	--
Minnesota	2.03	2.14	-5.1%	2.03	2.14	--	--
Missouri	1.69	1.83	-7.7%	1.69	1.83	--	--
Nebraska	1.22	1.25	-2.4%	1.22	1.25	--	--
North Dakota	1.60	1.52	5.3%	1.60	1.52	--	--
South Dakota	1.81	1.91	-5.2%	1.81	1.91	--	--
South Atlantic	2.62	2.63	-0.4%	2.65	2.70	2.35	2.25
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.90	2.89	0.3%	2.90	2.89	--	--
Georgia	2.73	2.80	-2.5%	2.73	2.80	--	--
Maryland	2.70	2.52	7.1%	--	--	2.70	2.52
North Carolina	W	W	W	2.97	3.07	W	W
South Carolina	3.27	3.35	-2.4%	3.27	3.35	--	--
Virginia	W	W	W	2.77	2.66	W	W
West Virginia	W	W	W	2.10	2.15	W	W
East South Central	W	W	W	2.10	2.09	W	W
Alabama	2.37	2.29	3.5%	2.37	2.29	--	--
Kentucky	1.94	1.96	-1.0%	1.94	1.96	--	--
Mississippi	W	W	W	3.15	2.65	W	W
Tennessee	2.22	2.15	3.3%	2.22	2.15	--	--
West South Central	1.91	1.85	3.2%	2.15	2.00	1.63	1.66
Arkansas	W	W	W	2.04	1.93	W	W
Louisiana	W	W	W	3.25	2.43	W	W
Oklahoma	W	W	W	1.77	1.75	W	W
Texas	1.78	1.78	0.0%	2.08	2.02	1.58	1.59
Mountain	W	W	W	2.12	2.01	W	W
Arizona	2.66	2.45	8.6%	2.66	2.45	--	--
Colorado	1.79	1.64	9.1%	1.79	1.64	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.99	1.89	W	W
Nevada	W	W	W	2.82	3.03	W	W
New Mexico	2.48	2.35	5.5%	2.48	2.35	--	--
Utah	1.98	2.05	-3.4%	1.98	2.05	--	--
Wyoming	W	W	W	1.82	1.76	W	W
Pacific Contiguous	W	W	W	2.18	2.19	W	W
California	--	--	--	--	--	--	--
Oregon	2.18	2.19	-0.5%	2.18	2.19	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.43	3.35	W	W
Alaska	3.43	3.35	2.4%	3.43	3.35	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.06	2.05	0.5%	2.13	2.10	1.84	1.90

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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, June 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018
New England	W	W	W	9.96	9.37	W	W
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	--	W	W	--	--	--	W
New Hampshire	9.96	9.37	6.3%	9.96	9.37	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	13.68	W	W	--	16.29	13.68	W
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	16.29	W	W
Pennsylvania	W	W	W	--	--	W	W
East North Central	14.11	16.92	-17.0%	13.82	17.16	14.63	16.58
Illinois	14.41	16.30	-12.0%	14.10	17.01	14.44	16.23
Indiana	14.04	16.85	-17.0%	14.04	16.85	--	--
Michigan	13.41	16.37	-18.0%	13.41	16.37	--	--
Ohio	14.49	16.72	-13.0%	14.08	17.17	14.68	16.68
Wisconsin	12.96	19.72	-34.0%	12.96	19.72	--	--
West North Central	13.91	16.56	-16.0%	13.91	16.56	--	--
Iowa	13.85	16.40	-16.0%	13.85	16.40	--	--
Kansas	13.59	16.31	-17.0%	13.59	16.31	--	--
Minnesota	14.50	16.83	-14.0%	14.50	16.83	--	--
Missouri	13.93	16.57	-16.0%	13.93	16.57	--	--
Nebraska	14.12	16.78	-16.0%	14.12	16.78	--	--
North Dakota	14.11	16.46	-14.0%	14.11	16.46	--	--
South Dakota	--	17.13	--	--	17.13	--	--
South Atlantic	W	W	W	14.67	11.80	W	W
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	14.51	16.77	-13.0%	14.51	16.77	--	--
Georgia	16.00	15.91	0.6%	16.00	15.91	--	--
Maryland	W	W	W	--	--	W	W
North Carolina	13.96	16.19	-14.0%	13.96	16.19	--	--
South Carolina	15.09	16.68	-9.5%	15.09	16.68	--	--
Virginia	W	W	W	15.11	8.01	W	W
West Virginia	14.82	17.51	-15.0%	14.82	17.51	--	--
East South Central	13.95	16.57	-16.0%	13.95	16.57	--	--
Alabama	14.56	17.81	-18.0%	14.56	17.81	--	--
Kentucky	13.84	16.34	-15.0%	13.84	16.34	--	--
Mississippi	13.89	15.61	-11.0%	13.89	15.61	--	--
Tennessee	13.97	15.90	-12.0%	13.97	15.90	--	--
West South Central	W	W	W	14.10	16.28	W	W
Arkansas	14.15	W	W	14.15	16.07	--	W
Louisiana	13.24	15.99	-17.0%	13.24	15.99	--	--
Oklahoma	14.48	17.31	-16.0%	14.48	17.31	--	--
Texas	W	W	W	14.12	16.39	W	W
Mountain	W	W	W	15.61	19.71	W	W
Arizona	17.30	17.08	1.3%	17.30	17.08	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	16.84	18.93	W	W
New Mexico	19.19	17.44	10.0%	19.19	17.44	--	--
Utah	14.42	18.47	-22.0%	14.42	18.47	--	--
Wyoming	14.19	22.52	-37.0%	14.19	22.52	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	12.71	14.65	W	W
Alaska	15.64	19.39	-19.0%	15.64	19.39	--	--
Hawaii	W	W	W	12.70	14.65	W	W
U.S. Total	13.67	15.03	-9.0%	13.26	14.68	15.09	16.11

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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) June 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	10.31	W	W	16.92	11.39	10.03	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	15.00	W	W
New Hampshire	16.92	W	W	16.92	11.00	--	W
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	12.88	13.52	-4.7%	11.93	12.28	13.84	14.28
New Jersey	W	15.07	W	--	--	W	15.07
New York	12.58	13.05	-3.6%	11.93	12.28	14.97	13.72
Pennsylvania	W	15.80	W	--	--	W	15.80
East North Central	W	16.00	W	14.85	16.21	W	15.70
Illinois	16.91	W	W	15.63	15.85	16.97	W
Indiana	14.86	W	W	14.86	16.08	--	W
Michigan	13.86	15.66	-11.0%	13.86	15.66	--	--
Ohio	W	15.75	W	15.57	16.27	W	15.61
Wisconsin	W	17.94	W	14.80	17.94	W	--
West North Central	14.71	16.06	-8.4%	14.71	16.06	--	--
Iowa	14.69	16.04	-8.4%	14.69	16.04	--	--
Kansas	15.08	16.19	-6.9%	15.08	16.19	--	--
Minnesota	15.24	16.60	-8.2%	15.24	16.60	--	--
Missouri	14.55	15.94	-8.7%	14.55	15.94	--	--
Nebraska	14.91	16.00	-6.8%	14.91	16.00	--	--
North Dakota	14.35	15.87	-9.6%	14.35	15.87	--	--
South Dakota	--	17.15	--	--	17.15	--	--
South Atlantic	14.72	14.35	2.6%	14.83	14.48	14.00	13.91
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	14.79	16.02	-7.7%	14.79	16.02	--	--
Georgia	W	W	W	14.81	15.41	W	W
Maryland	W	14.25	W	--	--	W	14.25
North Carolina	14.74	17.07	-14.0%	14.74	17.07	--	--
South Carolina	15.30	16.83	-9.1%	15.30	16.83	--	--
Virginia	W	W	W	14.00	9.64	W	W
West Virginia	15.40	W	W	15.40	16.74	--	W
East South Central	W	W	W	14.60	15.78	W	W
Alabama	W	W	W	15.11	16.11	W	W
Kentucky	14.66	15.76	-7.0%	14.66	15.76	--	--
Mississippi	14.44	15.20	-5.0%	14.44	15.20	--	--
Tennessee	14.47	15.61	-7.3%	14.47	15.61	--	--
West South Central	W	15.95	W	14.52	15.93	W	16.03
Arkansas	W	W	W	14.96	15.99	W	W
Louisiana	14.78	14.74	0.3%	14.78	14.74	--	--
Oklahoma	15.56	15.94	-2.4%	15.56	15.94	--	--
Texas	W	W	W	13.69	16.09	W	W
Mountain	W	17.85	W	16.74	17.90	W	17.25
Arizona	16.89	16.16	4.5%	16.89	16.16	--	--
Colorado	17.36	17.17	1.1%	17.36	17.17	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	15.43	18.76	W	W
New Mexico	18.41	17.69	4.1%	18.41	17.69	--	--
Utah	16.39	W	W	16.39	19.04	--	W
Wyoming	16.05	19.30	-17.0%	16.05	19.30	--	--
Pacific Contiguous	W	W	W	16.52	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	16.52	--	W	W
Pacific Noncontiguous	W	W	W	13.11	13.11	W	W
Alaska	15.56	19.39	-20.0%	15.56	19.39	--	--
Hawaii	W	W	W	13.10	13.11	W	W
U.S. Total	13.71	13.74	-0.2%	13.56	13.68	14.21	13.85

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 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Petroleum 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, June 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.55	1.51	2.6%	1.55	1.51	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.52	1.47	3.4%	1.52	1.47	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.94	1.77	9.6%	1.94	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.76	3.41	-19.0%	2.76	3.41	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.76	3.41	-19.0%	2.76	3.41	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.16	2.71	-20.0%	2.16	2.71	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.16	2.71	-20.0%	2.16	2.71	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.18	2.73	-20.0%	2.18	2.73	--	--

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.59	1.55	2.6%	1.59	1.55	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.54	1.53	0.7%	1.54	1.53	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.89	1.77	6.8%	1.89	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.76	3.00	-8.0%	2.76	3.00	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.76	3.00	-8.0%	2.76	3.00	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.25	2.60	-13.0%	2.25	2.60	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.25	2.60	-13.0%	2.25	2.60	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.29	2.52	-9.1%	2.29	2.52	--	--

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019	June 2018	Percentage Change	June 2019	June 2018	June 2019	June 2018
New England	W	W	W	4.17	4.15	W	W
Connecticut	2.30	2.72	-15.0%	--	--	2.30	2.72
Maine	W	--	W	--	--	W	--
Massachusetts	3.02	2.76	9.4%	2.28	3.51	3.02	2.75
New Hampshire	W	W	W	8.35	5.30	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.30	2.61	-12.0%	2.47	2.84	2.29	2.59
New Jersey	2.40	2.62	-8.4%	--	--	2.40	2.62
New York	2.45	2.87	-15.0%	2.47	2.84	2.45	2.88
Pennsylvania	2.19	2.44	-10.0%	--	--	2.19	2.44
East North Central	2.38	2.92	-18.0%	2.55	3.05	2.28	2.85
Illinois	2.43	2.87	-15.0%	2.35	2.92	2.44	2.86
Indiana	2.48	2.98	-17.0%	2.76	3.14	2.25	2.84
Michigan	2.43	3.03	-20.0%	2.61	3.24	2.37	2.93
Ohio	2.25	2.79	-19.0%	2.49	2.78	2.20	2.80
Wisconsin	2.41	2.98	-19.0%	2.41	2.98	--	--
West North Central	W	W	W	2.28	2.76	W	W
Iowa	2.03	2.55	-20.0%	2.03	2.55	--	--
Kansas	2.21	2.80	-21.0%	2.21	2.80	--	--
Minnesota	W	W	W	2.81	3.24	W	W
Missouri	W	W	W	2.01	2.59	W	W
Nebraska	2.53	3.20	-21.0%	2.53	3.20	--	--
North Dakota	3.29	5.38	-39.0%	3.29	5.38	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.24	3.71	-13.0%	3.33	3.79	2.59	3.18
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.55	4.04	W	W
Georgia	W	W	W	2.86	3.50	W	W
Maryland	2.68	3.35	-20.0%	2.74	3.26	2.66	3.39
North Carolina	W	W	W	3.70	3.59	W	W
South Carolina	3.00	W	W	3.00	3.47	--	W
Virginia	2.70	3.13	-14.0%	2.79	3.27	2.35	2.82
West Virginia	W	W	W	2.19	2.69	W	W
East South Central	2.70	3.11	-13.0%	2.76	3.08	2.53	3.19
Alabama	W	W	W	2.75	3.20	W	W
Kentucky	W	W	W	3.22	3.24	W	W
Mississippi	W	W	W	2.62	3.03	W	W
Tennessee	2.79	2.91	-4.1%	2.79	2.91	--	--
West South Central	2.20	2.91	-24.0%	2.17	2.86	2.23	2.95
Arkansas	W	W	W	2.38	3.09	W	W
Louisiana	W	W	W	2.54	3.13	W	W
Oklahoma	W	W	W	1.89	2.48	W	W
Texas	2.16	2.94	-27.0%	1.89	2.83	2.25	2.97
Mountain	1.97	2.68	-26.0%	1.92	2.66	2.49	3.01
Arizona	W	W	W	1.62	2.76	W	W
Colorado	W	W	W	2.77	2.97	W	W
Idaho	2.37	2.27	4.4%	2.37	2.27	--	--
Montana	0.74	0.95	-22.0%	0.74	0.95	--	--
Nevada	2.37	2.50	-5.2%	2.37	2.50	--	--
New Mexico	0.46	2.52	-82.0%	0.46	2.52	--	--
Utah	2.24	2.52	-11.0%	2.24	2.52	--	--
Wyoming	2.07	W	W	2.07	2.22	--	W
Pacific Contiguous	2.69	3.06	-12.0%	2.84	3.23	2.55	2.87
California	2.96	3.27	-9.5%	3.25	3.56	2.73	3.00
Oregon	W	W	W	1.59	1.77	W	W
Washington	W	W	W	2.69	2.66	W	W
Pacific Noncontiguous	7.87	7.76	1.4%	7.87	7.76	--	--
Alaska	7.87	7.76	1.4%	7.87	7.76	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.58	3.11	-17.0%	2.76	3.27	2.33	2.87

Displayed values of zero may represent small values that round to zero.
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W = Withheld to avoid disclosure of individual company data.

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	June 2019 YTD	June 2018 YTD	Percentage Change	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	W	5.43	W	6.83	4.21	W	5.43
Connecticut	3.93	5.17	-24.0%	--	--	3.93	5.17
Maine	W	W	W	--	--	W	W
Massachusetts	5.84	5.94	-1.7%	5.74	3.41	5.84	5.95
New Hampshire	W	W	W	9.32	5.88	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.06	3.50	-13.0%	4.02	4.57	2.98	3.39
New Jersey	3.22	3.38	-4.7%	--	--	3.22	3.38
New York	3.62	4.12	-12.0%	4.02	4.57	3.44	3.93
Pennsylvania	2.72	3.15	-14.0%	--	--	2.72	3.15
East North Central	2.82	3.03	-6.9%	2.99	3.18	2.74	2.93
Illinois	2.93	3.22	-9.0%	2.96	3.36	2.93	3.21
Indiana	2.86	3.13	-8.6%	3.02	3.30	2.75	2.98
Michigan	2.86	3.05	-6.2%	3.03	3.31	2.80	2.94
Ohio	2.68	2.84	-5.6%	2.82	2.87	2.65	2.84
Wisconsin	3.05	3.19	-4.4%	3.05	3.19	--	--
West North Central	W	W	W	2.92	2.92	W	W
Iowa	2.67	2.67	0.0%	2.67	2.67	--	--
Kansas	3.15	2.94	7.1%	3.15	2.94	--	--
Minnesota	W	W	W	3.30	3.36	W	W
Missouri	W	W	W	2.63	2.72	W	W
Nebraska	3.12	3.74	-17.0%	3.12	3.74	--	--
North Dakota	4.04	5.85	-31.0%	4.04	5.85	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.75	4.39	-15.0%	3.85	4.47	3.05	3.81
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.01	4.38	W	W
Georgia	W	W	W	3.23	3.72	W	W
Maryland	3.39	4.21	-19.0%	3.83	3.23	3.18	4.47
North Carolina	W	W	W	4.03	5.06	W	W
South Carolina	W	W	W	3.37	3.91	W	W
Virginia	3.69	4.81	-23.0%	3.93	5.57	2.88	3.01
West Virginia	W	W	W	2.83	3.27	W	W
East South Central	3.08	3.19	-3.4%	3.12	3.19	2.95	3.18
Alabama	W	W	W	3.10	3.21	W	W
Kentucky	W	W	W	3.62	3.53	W	W
Mississippi	W	W	W	3.00	3.12	W	W
Tennessee	3.07	3.01	2.0%	3.07	3.01	--	--
West South Central	2.65	2.99	-11.0%	2.65	2.99	2.65	3.00
Arkansas	W	W	W	2.79	3.05	W	W
Louisiana	W	W	W	2.88	3.22	W	W
Oklahoma	W	W	W	2.73	2.63	W	W
Texas	2.58	3.01	-14.0%	2.31	2.98	2.66	3.01
Mountain	2.84	W	W	2.81	2.97	3.09	W
Arizona	W	W	W	2.05	2.89	W	W
Colorado	W	W	W	3.35	3.72	W	W
Idaho	6.79	2.61	160.0%	6.79	2.61	--	--
Montana	1.83	1.43	28.0%	1.83	1.43	--	--
Nevada	3.51	2.77	27.0%	3.51	2.77	--	--
New Mexico	1.16	2.54	-54.0%	1.16	2.54	--	--
Utah	3.60	2.74	31.0%	3.60	2.74	--	--
Wyoming	W	W	W	2.86	2.97	W	W
Pacific Contiguous	4.27	3.10	38.0%	4.48	3.41	4.08	2.79
California	4.40	3.27	35.0%	4.86	3.69	4.02	2.87
Oregon	W	W	W	2.99	2.16	W	W
Washington	W	W	W	4.67	3.19	W	W
Pacific Noncontiguous	7.78	8.08	-3.7%	7.78	8.08	--	--
Alaska	7.78	8.08	-3.7%	7.78	8.08	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.22	3.54	-9.0%	3.38	3.70	3.01	3.33

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

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, June 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	3	0.80	10.0	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	3	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	1,101	2.59	8.7	0	--	--	0	--	--
New Jersey	56	1.73	7.8	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,045	2.63	8.7	0	--	--	0	--	--
East North Central	4,829	3.37	10.5	4,760	0.24	4.6	0	--	--
Illinois	810	3.38	20.2	1,817	0.21	4.6	0	--	--
Indiana	1,855	2.88	9.1	206	0.23	4.6	0	--	--
Michigan	138	2.42	7.6	2,032	0.25	4.5	0	--	--
Ohio	2,026	3.84	9.1	0	--	--	0	--	--
Wisconsin	0	--	--	707	0.25	4.9	0	--	--
West North Central	45	3.55	8.8	6,829	0.27	4.9	1,649	0.72	9.3
Iowa	33	3.60	7.5	1,500	0.24	4.7	0	--	--
Kansas	11	3.56	12.9	969	0.32	5.0	0	--	--
Minnesota	0	--	--	879	0.33	6.0	0	--	--
Missouri	1	0.90	7.7	2,154	0.24	4.7	0	--	--
Nebraska	0	--	--	1,170	0.25	4.8	0	--	--
North Dakota	0	--	--	0	--	--	1,649	0.72	9.3
South Dakota	0	--	--	156	0.26	5.2	0	--	--
South Atlantic	6,149	2.28	9.5	664	0.33	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	873	2.30	8.0	0	--	--	0	--	--
Georgia	517	2.30	7.8	664	0.33	4.7	0	--	--
Maryland	166	2.33	10.9	0	--	--	0	--	--
North Carolina	1,176	1.63	9.7	0	--	--	0	--	--
South Carolina	632	1.73	9.4	0	--	--	0	--	--
Virginia	227	0.89	15.1	0	--	--	0	--	--
West Virginia	2,558	2.82	9.7	0	--	--	0	--	--
East South Central	2,908	2.51	9.4	1,377	0.28	5.3	0	--	--
Alabama	477	1.05	10.9	721	0.31	5.4	0	--	--
Kentucky	1,957	2.92	9.3	460	0.24	5.1	0	--	--
Mississippi	12	0.46	10.5	80	0.32	5.1	0	--	--
Tennessee	461	2.23	8.4	116	0.27	5.5	0	--	--
West South Central	24	0.91	24.6	5,408	0.27	4.9	1,940	1.17	16.7
Arkansas	5	0.46	9.5	1,051	0.22	4.7	0	--	--
Louisiana	0	--	--	295	0.27	5.0	102	0.72	16.3
Oklahoma	19	1.05	29.3	440	0.21	4.5	0	--	--
Texas	0	--	--	3,621	0.29	4.9	1,838	1.20	16.7
Mountain	1,725	0.62	13.0	4,211	0.54	9.4	23	0.49	8.9
Arizona	431	0.56	10.4	682	0.78	12.2	0	--	--
Colorado	109	0.45	11.1	995	0.36	6.1	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	507	0.73	10.3	23	0.49	8.9
Nevada	49	0.45	12.2	134	0.39	7.4	0	--	--
New Mexico	255	1.08	24.9	471	0.84	20.3	0	--	--
Utah	882	0.56	11.7	12	1.01	8.6	0	--	--
Wyoming	0	--	--	1,410	0.40	6.5	0	--	--
Pacific Contiguous	43	0.49	9.5	505	0.33	7.8	0	--	--
California	43	0.49	9.5	0	--	--	0	--	--
Oregon	0	--	--	123	0.26	4.9	0	--	--
Washington	0	--	--	382	0.35	8.8	0	--	--
Pacific Noncontiguous	0	--	--	60	0.20	3.9	15	0.16	11.2
Alaska	0	--	--	0	--	--	15	0.16	11.2
Hawaii	0	--	--	60	0.20	3.9	0	--	--
U.S. Total	16,826	2.49	10.1	23,815	0.31	5.7	3,627	0.95	13.3

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. 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, June 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	2,186	2.94	9.0	3,181	0.25	4.6	0	--	--
Illinois	156	2.62	9.7	237	0.21	4.5	0	--	--
Indiana	1,694	2.84	9.1	206	0.23	4.6	0	--	--
Michigan	125	2.52	7.7	2,032	0.25	4.5	0	--	--
Ohio	211	4.13	8.8	0	--	--	0	--	--
Wisconsin	0	--	--	707	0.25	4.9	0	--	--
West North Central	12	3.41	12.6	6,603	0.27	4.9	1,649	0.72	9.3
Iowa	0	--	--	1,338	0.24	4.7	0	--	--
Kansas	11	3.56	12.9	969	0.32	5.0	0	--	--
Minnesota	0	--	--	879	0.33	6.0	0	--	--
Missouri	1	0.49	7.7	2,154	0.24	4.7	0	--	--
Nebraska	0	--	--	1,107	0.25	4.8	0	--	--
North Dakota	0	--	--	0	--	--	1,649	0.72	9.3
South Dakota	0	--	--	156	0.26	5.2	0	--	--
South Atlantic	5,509	2.25	9.6	664	0.33	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	873	2.30	8.0	0	--	--	0	--	--
Georgia	507	2.33	7.7	664	0.33	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,156	1.64	9.8	0	--	--	0	--	--
South Carolina	628	1.74	9.4	0	--	--	0	--	--
Virginia	174	0.89	18.3	0	--	--	0	--	--
West Virginia	2,171	2.78	9.9	0	--	--	0	--	--
East South Central	2,849	2.54	9.4	1,377	0.28	5.3	0	--	--
Alabama	477	1.05	10.9	721	0.31	5.4	0	--	--
Kentucky	1,957	2.92	9.3	460	0.24	5.1	0	--	--
Mississippi	12	0.46	10.5	80	0.32	5.1	0	--	--
Tennessee	403	2.43	8.5	116	0.27	5.5	0	--	--
West South Central	0	--	--	3,143	0.25	4.8	616	1.63	19.7
Arkansas	0	--	--	920	0.22	4.7	0	--	--
Louisiana	0	--	--	246	0.27	5.1	102	0.72	16.3
Oklahoma	0	--	--	330	0.21	4.5	0	--	--
Texas	0	--	--	1,646	0.27	5.0	513	1.84	20.5
Mountain	1,725	0.62	13.0	3,597	0.52	9.4	23	0.49	8.9
Arizona	431	0.56	10.4	682	0.78	12.2	0	--	--
Colorado	109	0.45	11.1	995	0.36	6.1	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	23	0.49	8.9
Nevada	49	0.45	12.2	73	0.42	9.1	0	--	--
New Mexico	255	1.08	24.9	471	0.84	20.3	0	--	--
Utah	882	0.56	11.7	12	1.01	8.6	0	--	--
Wyoming	0	--	--	1,364	0.39	6.6	0	--	--
Pacific Contiguous	0	--	--	123	0.26	4.9	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	123	0.26	4.9	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	15	0.16	11.2
Alaska	0	--	--	0	--	--	15	0.16	11.2
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,281	2.23	9.9	18,689	0.31	5.8	2,303	0.94	11.9

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. 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, June 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	3	0.80	10.0	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	3	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	1,101	2.59	8.7	0	--	--	0	--	--
New Jersey	56	1.73	7.8	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,045	2.63	8.7	0	--	--	0	--	--
East North Central	2,544	3.74	11.9	1,532	0.22	4.6	0	--	--
Illinois	555	3.64	26.6	1,532	0.22	4.6	0	--	--
Indiana	161	3.27	9.1	0	--	--	0	--	--
Michigan	13	1.40	6.8	0	--	--	0	--	--
Ohio	1,815	3.81	9.1	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	584	2.72	9.0	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	166	2.33	10.9	0	--	--	0	--	--
North Carolina	2	0.68	6.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	29	1.02	5.8	0	--	--	0	--	--
West Virginia	387	3.02	8.4	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	19	1.05	29.3	2,265	0.30	4.9	1,324	0.98	15.5
Arkansas	0	--	--	131	0.20	4.8	0	--	--
Louisiana	0	--	--	49	0.27	4.7	0	--	--
Oklahoma	19	1.05	29.3	110	0.22	4.7	0	--	--
Texas	0	--	--	1,975	0.31	4.9	1,324	0.98	15.5
Mountain	0	--	--	614	0.68	9.5	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	507	0.73	10.3	0	--	--
Nevada	0	--	--	62	0.35	5.3	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	46	0.52	5.7	0	--	--
Pacific Contiguous	0	--	--	382	0.35	8.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	382	0.35	8.8	0	--	--
Pacific Noncontiguous	0	--	--	60	0.20	3.9	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	60	0.20	3.9	0	--	--
U.S. Total	4,250	3.26	10.6	4,853	0.32	5.7	1,324	0.98	15.5

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. 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, June 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	3.02	7.8	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	3.02	7.8	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	0	3.02	7.8	0	--	--	0	--	--

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. 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, June 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	99	3.50	8.8	47	0.22	5.6	0	--	--
Illinois	99	3.50	8.8	47	0.22	5.6	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	33	3.60	7.5	225	0.21	4.4	0	--	--
Iowa	33	3.60	7.5	162	0.20	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	63	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	56	0.78	7.7	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	10	0.80	11.8	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	18	0.84	6.7	0	--	--	0	--	--
South Carolina	3	0.69	6.5	0	--	--	0	--	--
Virginia	24	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	58	1.00	7.9	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	58	1.00	7.9	0	--	--	0	--	--
West South Central	5	0.46	9.5	0	--	--	0	--	--
Arkansas	5	0.46	9.5	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	43	0.49	9.5	0	--	--	0	--	--
California	43	0.49	9.5	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	295	1.91	8.3	273	0.21	4.6	0	--	--

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. 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 - June 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	1,464,373	1,376,741	953,076	7,738	3,801,928
Year 2017					
January	129,212	109,488	78,809	667	318,177
February	100,968	99,640	74,534	635	275,777
March	103,096	107,173	80,530	645	291,444
April	90,725	102,589	78,899	589	272,801
May	98,281	109,872	83,134	583	291,871
June	122,543	120,013	85,399	628	328,583
July	149,900	129,277	87,806	630	367,613
August	142,007	128,481	89,134	640	360,263
Sept	118,779	118,789	83,540	618	321,726
October	102,811	113,287	82,815	626	299,539
November	98,321	104,973	79,456	598	283,347
December	122,005	109,306	80,242	664	312,216
Year 2018					
January	148,978	114,618	76,061	751	340,408
February	113,383	102,001	71,948	643	287,975
March	106,939	107,886	76,811	625	292,262
April	95,128	102,922	75,241	608	273,898
May	103,395	112,597	81,461	591	298,044
June	129,478	121,578	81,527	628	333,212
July	153,031	130,916	85,041	640	369,629
August	152,951	134,479	89,632	686	377,748
Sept	128,459	121,581	81,192	648	331,881
October	106,638	115,861	81,023	636	304,157
November	103,372	104,622	76,927	622	285,543
December	122,620	107,678	76,213	660	307,171
Year 2019					
January	132,989	111,613	78,033	664	323,300
February	116,311	102,690	72,371	677	292,049
March	112,384	107,422	77,007	685	297,498
April	90,821	103,166	76,430	617	271,034
May	99,820	110,823	80,706	610	291,959
June	119,518	115,246	80,528	626	315,918
Year to Date					
2017	644,825	648,775	481,305	3,747	1,778,652
2018	697,301	661,603	463,048	3,846	1,825,799
2019	671,843	650,961	465,076	3,879	1,791,758
Rolling 12 Months Ending in June					
2018	1,431,124	1,365,716	966,041	7,622	3,770,502
2019	1,438,915	1,366,098	955,104	7,770	3,767,888

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
Values for 2017 and prior years are final. Values for 2019 and 2018 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.
Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.2. Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - June 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	188,742	146,696	66,090	756	402,283
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	18,252	12,023	5,292	71	35,638
February	14,353	10,860	4,899	63	30,176
March	13,893	11,315	5,118	59	30,386
April	12,256	10,746	4,954	58	28,013
May	13,600	11,821	5,553	56	31,029
June	16,889	13,156	5,854	64	35,963
July	20,094	14,370	6,243	65	40,773
August	20,306	14,794	6,464	66	41,631
Sept	16,710	12,986	5,757	67	35,519
October	13,720	12,452	5,596	63	31,830
November	13,384	11,051	5,293	60	29,789
December	15,285	11,122	5,066	64	31,538
Year 2019					
January	16,580	11,484	5,138	65	33,266
February	14,768	10,801	4,838	68	30,474
March	14,414	11,219	5,184	64	30,882
April	12,044	10,848	4,988	59	27,939
May	13,300	11,666	5,415	58	30,439
June	15,949	12,547	5,568	63	34,127
Year to Date					
2017	82,531	68,349	32,528	360	183,767
2018	89,243	69,920	31,671	370	191,205
2019	87,055	68,565	31,130	377	187,127
Rolling 12 Months Ending in June					
2018	184,374	145,813	66,834	739	397,760
2019	186,553	145,341	65,549	763	398,206

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
Values for 2017 and prior years are final. Values for 2019 and 2018 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.
Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - June 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	12.89	10.66	6.93	9.77	10.58
Year 2017					
January	12.21	10.21	6.59	9.39	10.13
February	12.79	10.48	6.63	9.50	10.28
March	12.89	10.46	6.71	9.49	10.28
April	12.72	10.40	6.60	9.46	10.07
May	13.07	10.59	6.78	9.61	10.34
June	13.20	11.01	7.19	10.18	10.83
July	13.08	10.97	7.31	10.12	10.95
August	13.15	11.01	7.22	10.06	10.91
Sept	13.28	11.03	7.17	9.99	10.86
October	12.80	10.78	6.91	9.57	10.40
November	12.94	10.49	6.73	9.50	10.28
December	12.45	10.28	6.54	9.35	10.17
Year 2018					
January	12.25	10.49	6.96	9.44	10.47
February	12.66	10.65	6.81	9.84	10.48
March	12.99	10.49	6.66	9.43	10.40
April	12.88	10.44	6.58	9.48	10.23
May	13.15	10.50	6.82	9.46	10.41
June	13.04	10.82	7.18	10.16	10.79
July	13.13	10.98	7.34	10.19	11.03
August	13.28	11.00	7.21	9.69	11.02
Sept	13.01	10.68	7.09	10.30	10.70
October	12.87	10.75	6.91	9.84	10.46
November	12.95	10.56	6.88	9.72	10.43
December	12.47	10.33	6.65	9.72	10.27
Year 2019					
January	12.47	10.29	6.58	9.80	10.29
February	12.70	10.52	6.68	10.01	10.43
March	12.83	10.44	6.73	9.33	10.38
April	13.26	10.51	6.53	9.58	10.31
May	13.32	10.53	6.71	9.51	10.43
June	13.34	10.89	6.91	10.13	10.80
Year to Date					
2017	12.80	10.54	6.76	9.60	10.33
2018	12.80	10.57	6.84	9.63	10.47
2019	12.96	10.53	6.69	9.73	10.44
Rolling 12 Months Ending in June					
2018	12.88	10.68	6.92	9.70	10.55
2019	12.96	10.64	6.86	9.82	10.57

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
Values for 2017 and prior years are final. Values for 2019 and 2018 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.
Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, June 2019 and 2018 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	3,376	3,543	4,183	4,386	1,210	1,312	50	43	8,819	9,284
Connecticut	944	973	1,040	1,048	238	212	22	15	2,243	2,248
Maine	331	341	308	334	143	241	0	0	782	916
Massachusetts	1,406	1,515	2,019	2,163	498	509	26	27	3,949	4,214
New Hampshire	323	333	352	368	161	174	0	0	836	876
Rhode Island	225	233	305	309	58	65	2	2	591	608
Vermont	147	147	158	164	111	111	0	0	417	421
Middle Atlantic	10,417	10,756	12,607	13,240	6,050	5,836	311	316	29,385	30,148
New Jersey	2,641	2,660	3,203	3,300	504	581	28	25	6,377	6,565
New York	3,871	4,026	6,111	6,373	1,461	1,341	235	233	11,677	11,973
Pennsylvania	3,905	4,070	3,294	3,567	4,085	3,915	47	58	11,331	11,610
East North Central	14,322	16,738	15,059	16,212	15,186	16,199	43	50	44,610	49,198
Illinois	3,687	4,437	4,043	4,452	3,487	3,862	38	45	11,256	12,796
Indiana	2,517	2,925	2,016	2,149	3,405	3,457	2	2	7,940	8,532
Michigan	2,530	2,978	3,146	3,422	2,498	2,543	1	1	8,174	8,943
Ohio	3,995	4,573	3,897	4,147	3,813	4,034	2	3	11,708	12,756
Wisconsin	1,591	1,825	1,957	2,042	1,984	2,304	0	0	5,532	6,170
West North Central	8,198	9,823	8,515	9,193	7,310	7,460	3	3	24,026	26,480
Iowa	1,047	1,307	969	1,070	2,018	2,033	0	0	4,034	4,410
Kansas	1,259	1,554	1,356	1,446	872	860	0	0	3,487	3,860
Minnesota	1,648	1,910	1,887	2,062	1,657	1,750	2	2	5,193	5,723
Missouri	2,864	3,453	2,601	2,843	942	974	2	2	6,408	7,272
Nebraska	751	921	799	856	851	903	0	0	2,400	2,680
North Dakota	291	314	501	498	737	694	0	0	1,528	1,506
South Dakota	337	365	403	417	235	246	0	0	975	1,028
South Atlantic	32,953	33,345	27,998	28,503	11,568	11,962	115	112	72,633	73,921
Delaware	395	372	390	369	163	199	0	0	947	940
District of Columbia	210	222	684	694	18	17	28	28	940	960
Florida	12,229	11,465	8,742	8,689	1,419	1,467	7	7	22,397	21,628
Georgia	5,344	5,707	4,190	4,374	2,618	2,738	14	14	12,166	12,833
Maryland	2,229	2,194	2,452	2,528	304	313	50	43	5,035	5,078
North Carolina	5,115	5,542	4,367	4,537	2,259	2,292	2	2	11,742	12,372
South Carolina	2,850	3,053	1,990	2,064	2,168	2,325	0	0	7,009	7,441
Virginia	3,826	3,970	4,565	4,590	1,497	1,433	14	18	9,903	10,012
West Virginia	755	819	618	659	1,121	1,178	0	0	2,494	2,656
East South Central	10,349	11,144	8,187	8,587	7,923	7,994	0	0	26,459	27,726
Alabama	2,961	3,124	2,041	2,125	2,748	2,892	0	0	7,750	8,141
Kentucky	2,110	2,354	1,662	1,772	2,243	2,057	0	0	6,015	6,183
Mississippi	1,730	1,831	1,259	1,330	1,379	1,443	0	0	4,368	4,604
Tennessee	3,549	3,836	3,224	3,360	1,553	1,602	0	0	8,325	8,797
West South Central	20,588	23,474	17,293	18,804	16,359	15,471	16	17	54,257	57,765
Arkansas	1,493	1,720	1,040	1,143	1,459	1,532	0	0	3,992	4,394
Louisiana	2,966	3,166	2,238	2,312	3,014	2,996	1	1	8,218	8,475
Oklahoma	2,113	2,468	1,704	1,916	1,741	1,604	0	0	5,558	5,989
Texas	14,017	16,120	12,311	13,433	10,145	9,339	15	16	36,488	38,907
Mountain	8,935	9,816	8,463	8,819	7,628	7,364	15	13	25,041	26,013
Arizona	3,620	3,864	2,715	2,799	1,157	1,164	1	1	7,493	7,828
Colorado	1,518	1,780	1,698	1,791	1,340	1,369	9	8	4,564	4,949
Idaho	587	583	514	523	1,060	1,103	0	0	2,160	2,209
Montana	328	316	385	390	426	360	0	0	1,139	1,065
Nevada	1,350	1,517	1,073	1,113	1,287	1,026	1	1	3,710	3,657
New Mexico	572	667	809	863	724	694	0	0	2,105	2,223
Utah	763	903	973	1,037	807	800	4	4	2,547	2,745
Wyoming	198	185	298	304	827	848	0	0	1,323	1,337
Pacific Contiguous	10,013	10,485	12,476	13,372	6,885	7,517	74	74	29,449	31,447
California	6,507	6,847	8,890	9,547	3,767	4,415	63	71	19,227	20,880
Oregon	1,273	1,292	1,326	1,421	1,055	1,013	2	2	3,656	3,728
Washington	2,234	2,346	2,261	2,403	2,064	2,090	9	1	6,566	6,839
Pacific Noncontiguous	366	355	465	462	408	412	0	0	1,239	1,229
Alaska	131	136	209	209	97	105	0	0	436	450
Hawaii	235	219	256	254	311	307	0	0	803	779
U.S. Total	119,518	129,478	115,246	121,578	80,528	81,527	626	628	315,918	333,212

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values are preliminary estimates based on a cutoff model sample.
See Technical Notes for a discussion of the sample design for the Form EIA-826.
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Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through June 2019 and 2018 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	22,315	22,704	24,926	25,109	7,577	7,736	283	280	55,102	55,828
Connecticut	5,936	6,133	5,832	5,924	1,445	1,485	95	89	13,307	13,631
Maine	2,436	2,355	2,006	1,943	1,245	1,338	0	0	5,687	5,635
Massachusetts	9,318	9,549	12,307	12,371	2,945	2,916	175	177	24,745	25,013
New Hampshire	2,199	2,221	2,080	2,124	930	954	0	0	5,210	5,299
Rhode Island	1,384	1,401	1,746	1,772	337	370	14	14	3,480	3,557
Vermont	1,042	1,045	955	974	676	674	0	0	2,673	2,693
Middle Atlantic	62,961	64,823	74,866	76,261	35,208	35,366	1,937	2,010	174,972	178,460
New Jersey	12,785	13,176	18,218	18,619	3,279	3,417	156	158	34,438	35,371
New York	23,395	23,930	35,901	36,456	8,079	8,231	1,430	1,492	68,805	70,109
Pennsylvania	26,781	27,717	20,747	21,186	23,850	23,718	352	359	71,729	72,980
East North Central	88,170	93,387	87,617	90,498	90,184	91,952	345	309	266,316	276,146
Illinois	20,974	22,518	23,991	24,883	20,452	20,998	309	273	65,725	68,672
Indiana	15,701	16,724	11,428	11,802	20,416	20,369	10	11	47,555	48,906
Michigan	15,802	16,668	18,371	18,968	14,424	14,868	3	4	48,600	50,508
Ohio	24,981	26,530	22,387	23,072	23,211	23,666	21	21	70,600	73,289
Wisconsin	10,712	10,947	11,441	11,773	11,681	12,052	1	0	33,835	34,772
West North Central	51,511	54,309	49,778	51,090	43,076	42,890	25	26	144,390	148,315
Iowa	7,074	7,388	5,972	6,112	11,523	11,378	0	0	24,569	24,878
Kansas	6,222	6,793	7,404	7,604	5,322	5,279	0	0	18,948	19,677
Minnesota	10,969	11,277	11,078	11,494	10,067	10,217	13	14	32,127	33,002
Missouri	16,880	18,279	14,803	15,342	5,524	5,579	12	12	37,219	39,212
Nebraska	5,086	5,282	4,645	4,743	4,851	4,995	0	0	14,582	15,021
North Dakota	2,686	2,705	3,397	3,313	4,467	4,093	0	0	10,551	10,111
South Dakota	2,593	2,586	2,480	2,481	1,322	1,347	0	0	6,395	6,414
South Atlantic	172,691	177,288	151,503	151,391	67,737	68,273	668	639	392,600	397,591
Delaware	2,389	2,454	2,111	2,088	907	1,041	0	0	5,407	5,583
District of Columbia	1,205	1,228	3,858	3,961	99	88	158	157	5,320	5,434
Florida	57,461	56,477	45,764	45,205	8,000	8,052	44	39	111,268	109,773
Georgia	27,278	28,162	22,481	22,801	15,531	15,603	82	85	65,373	66,650
Maryland	13,395	13,889	13,998	14,298	1,817	1,802	277	256	29,488	30,245
North Carolina	28,301	29,923	23,442	23,581	13,011	13,035	9	4	64,763	66,543
South Carolina	14,519	15,304	10,364	10,499	13,132	13,328	0	0	38,015	39,131
Virginia	22,563	23,795	25,795	25,114	8,092	8,306	98	99	56,548	57,314
West Virginia	5,579	6,056	3,690	3,844	7,148	7,018	0	0	16,418	16,918
East South Central	56,475	60,458	43,538	44,768	47,317	46,902	0	0	147,330	152,128
Alabama	15,009	15,762	10,673	11,000	16,236	16,727	0	0	41,919	43,489
Kentucky	12,753	13,794	9,288	9,502	13,659	12,880	0	0	35,700	36,176
Mississippi	8,627	9,160	6,374	6,612	8,113	8,297	0	0	23,114	24,070
Tennessee	20,085	21,741	17,203	17,653	9,308	8,998	0	0	46,596	48,393
West South Central	101,725	107,752	93,453	95,081	91,983	87,507	95	94	287,256	290,434
Arkansas	8,686	9,217	5,525	5,746	8,358	8,560	0	0	22,570	23,524
Louisiana	14,043	14,946	11,504	11,840	17,268	16,988	6	6	42,821	43,781
Oklahoma	10,891	11,682	9,283	10,061	9,747	8,894	0	0	29,921	30,637
Texas	68,106	71,907	67,141	67,433	56,610	53,064	88	88	191,944	192,492
Mountain	45,137	45,462	46,559	46,872	40,353	39,591	93	79	132,141	132,005
Arizona	14,790	15,064	13,651	13,937	6,545	6,623	5	4	34,990	35,629
Colorado	8,918	9,067	9,920	9,895	7,696	7,691	58	45	26,592	26,699
Idaho	4,281	4,124	3,096	3,097	3,979	4,065	0	0	11,356	11,286
Montana	2,785	2,712	2,480	2,488	2,322	2,089	0	0	7,588	7,289
Nevada	5,467	5,680	5,616	5,627	6,086	5,695	4	4	17,174	17,006
New Mexico	3,133	3,193	4,355	4,411	4,151	3,829	0	0	11,638	11,432
Utah	4,267	4,195	5,619	5,573	4,434	4,499	26	25	14,346	14,292
Wyoming	1,495	1,426	1,822	1,845	5,139	5,100	0	0	8,456	8,371
Pacific Contiguous	68,606	68,792	75,967	77,713	39,357	40,463	433	410	184,363	187,379
California	39,457	39,994	53,266	54,927	21,479	22,791	380	393	114,582	118,105
Oregon	9,901	9,819	8,094	8,015	5,825	5,585	14	13	23,834	23,431
Washington	19,249	18,979	14,607	14,772	12,052	12,087	39	4	45,947	45,843
Pacific Noncontiguous	2,251	2,326	2,753	2,819	2,284	2,368	0	0	7,288	7,513
Alaska	1,007	1,041	1,342	1,367	592	664	0	0	2,941	3,073
Hawaii	1,244	1,284	1,411	1,452	1,692	1,704	0	0	4,347	4,441
U.S. Total	671,843	697,301	650,961	661,603	465,076	463,048	3,879	3,846	1,791,758	1,825,799

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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 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, June 2019 and 2018 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	717	721	682	696	158	163	5	3	1,562	1,584
Connecticut	218	210	182	175	33	32	3	2	437	419
Maine	60	55	38	39	13	20	0	0	112	115
Massachusetts	301	320	332	353	71	74	1	1	706	748
New Hampshire	66	65	55	57	20	16	0	0	141	139
Rhode Island	46	43	48	47	9	9	0	0	103	100
Vermont	26	27	26	25	12	12	0	0	64	64
Middle Atlantic	1,690	1,776	1,599	1,701	383	402	36	38	3,709	3,916
New Jersey	422	416	415	422	54	60	3	2	894	901
New York	718	777	902	964	77	80	30	32	1,728	1,853
Pennsylvania	550	582	282	315	252	261	3	4	1,087	1,163
East North Central	1,964	2,226	1,545	1,633	1,039	1,130	3	3	4,551	4,993
Illinois	488	557	360	399	221	249	3	3	1,072	1,209
Indiana	317	351	218	221	250	249	0	0	785	822
Michigan	407	479	366	377	177	184	0	0	950	1,040
Ohio	508	578	382	413	235	273	0	0	1,125	1,264
Wisconsin	244	261	220	222	155	174	0	0	619	657
West North Central	1,088	1,303	908	982	581	599	0	0	2,577	2,884
Iowa	153	180	112	117	160	165	0	0	424	463
Kansas	168	209	146	155	65	65	0	0	379	429
Minnesota	228	269	208	232	133	141	0	0	570	643
Missouri	367	457	275	309	74	79	0	0	716	846
Nebraska	93	104	78	79	67	70	0	0	239	253
North Dakota	36	38	48	48	63	59	0	0	148	146
South Dakota	43	45	40	40	19	19	0	0	102	105
South Atlantic	4,033	3,988	2,614	2,653	751	795	9	9	7,407	7,445
Delaware	49	49	35	36	12	15	0	0	96	100
District of Columbia	25	27	80	83	1	1	3	3	109	114
Florida	1,470	1,303	830	785	111	113	1	1	2,411	2,202
Georgia	666	700	402	424	153	172	1	1	1,222	1,297
Maryland	296	305	241	263	23	25	4	3	564	597
North Carolina	593	623	382	389	144	148	0	0	1,119	1,160
South Carolina	365	394	208	222	136	147	0	0	709	764
Virginia	481	492	381	389	103	97	1	1	966	980
West Virginia	88	95	55	61	68	77	0	0	211	233
East South Central	1,202	1,262	880	900	460	491	0	0	2,543	2,653
Alabama	378	388	234	240	166	184	0	0	779	812
Kentucky	235	248	172	169	125	121	0	0	531	539
Mississippi	197	211	130	141	78	91	0	0	406	443
Tennessee	392	414	344	351	91	95	0	0	827	859
West South Central	2,326	2,565	1,393	1,546	867	870	1	1	4,588	4,982
Arkansas	155	172	93	86	90	84	0	0	338	341
Louisiana	286	297	194	196	158	153	0	0	639	646
Oklahoma	222	265	142	163	88	87	0	0	452	515
Texas	1,664	1,832	964	1,101	531	546	1	1	3,159	3,480
Mountain	1,099	1,211	859	894	506	505	1	1	2,466	2,612
Arizona	465	509	297	316	74	80	0	0	835	905
Colorado	195	219	186	193	102	103	1	1	484	515
Idaho	60	62	42	44	75	82	0	0	177	187
Montana	40	37	41	41	20	18	0	0	100	96
Nevada	159	177	88	85	92	77	0	0	339	339
New Mexico	75	89	85	93	38	38	0	0	199	220
Utah	82	96	89	91	51	51	0	0	223	239
Wyoming	24	23	31	31	54	57	0	0	108	111
Pacific Contiguous	1,722	1,735	1,948	2,037	725	802	7	7	4,402	4,580
California	1,358	1,363	1,634	1,702	566	651	5	7	3,563	3,722
Oregon	143	142	116	129	64	59	0	0	324	330
Washington	221	230	198	206	95	92	1	0	515	528
Pacific Noncontiguous	107	102	119	114	97	98	0	0	323	314
Alaska	31	31	43	39	16	20	0	0	90	89
Hawaii	76	72	76	75	81	78	0	0	233	225
U.S. Total	15,949	16,889	12,547	13,156	5,568	5,854	63	64	34,127	35,963

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	4,746	4,670	4,108	4,081	993	1,007	30	26	9,877	9,784
Connecticut	1,346	1,294	1,021	992	202	207	16	12	2,585	2,504
Maine	376	376	244	239	112	122	0	0	733	737
Massachusetts	2,090	2,087	2,050	2,076	428	428	12	12	4,580	4,603
New Hampshire	446	437	337	337	124	123	0	0	907	896
Rhode Island	309	289	304	290	55	56	3	2	670	638
Vermont	178	187	152	148	73	71	0	0	402	406
Middle Atlantic	9,810	10,298	8,875	9,272	2,332	2,489	214	221	21,231	22,280
New Jersey	2,064	2,062	2,253	2,265	339	346	14	14	4,669	4,686
New York	4,104	4,355	4,804	5,088	447	503	174	180	9,529	10,126
Pennsylvania	3,643	3,881	1,818	1,919	1,546	1,640	26	27	7,033	7,468
East North Central	11,752	12,321	8,946	9,160	6,272	6,464	25	21	26,994	27,965
Illinois	2,738	2,856	2,157	2,223	1,352	1,397	22	18	6,269	6,493
Indiana	1,945	1,978	1,237	1,215	1,510	1,456	1	1	4,693	4,650
Michigan	2,432	2,612	2,083	2,130	1,043	1,091	0	0	5,559	5,833
Ohio	3,072	3,294	2,214	2,306	1,477	1,603	2	2	6,765	7,205
Wisconsin	1,564	1,582	1,254	1,286	890	917	0	0	3,708	3,784
West North Central	5,962	6,352	4,723	4,907	3,116	3,096	2	2	13,802	14,357
Iowa	885	904	591	585	733	714	0	0	2,209	2,203
Kansas	782	890	747	793	390	392	0	0	1,919	2,075
Minnesota	1,442	1,470	1,153	1,178	786	778	1	1	3,382	3,427
Missouri	1,759	1,985	1,287	1,407	360	386	1	1	3,407	3,780
Nebraska	536	544	412	416	368	374	0	0	1,315	1,334
North Dakota	269	268	302	296	377	347	0	0	948	912
South Dakota	290	291	231	231	102	104	0	0	623	626
South Atlantic	20,601	20,873	14,243	14,305	4,237	4,416	54	49	39,134	39,644
Delaware	302	311	209	202	69	80	0	0	581	593
District of Columbia	160	157	472	468	8	7	16	14	657	647
Florida	6,832	6,603	4,374	4,288	615	628	4	3	11,825	11,522
Georgia	3,121	3,188	2,168	2,222	861	901	4	5	6,154	6,315
Maryland	1,798	1,846	1,435	1,504	142	152	21	19	3,395	3,521
North Carolina	3,265	3,330	2,045	2,034	786	797	1	0	6,097	6,162
South Carolina	1,824	1,966	1,058	1,119	768	822	0	0	3,650	3,908
Virginia	2,693	2,780	2,147	2,103	561	567	8	8	5,409	5,458
West Virginia	606	690	334	366	427	463	0	0	1,367	1,519
East South Central	6,427	6,715	4,661	4,699	2,723	2,737	0	0	13,811	14,151
Alabama	1,900	1,937	1,233	1,247	960	1,003	0	0	4,093	4,187
Kentucky	1,355	1,429	927	908	736	716	0	0	3,017	3,053
Mississippi	988	1,048	677	711	490	501	0	0	2,155	2,260
Tennessee	2,185	2,301	1,824	1,833	538	517	0	0	4,546	4,651
West South Central	11,281	11,599	7,602	7,860	4,828	4,739	6	8	23,718	24,206
Arkansas	846	909	481	461	490	473	0	0	1,817	1,843
Louisiana	1,326	1,387	1,021	1,055	904	891	1	1	3,252	3,334
Oklahoma	1,079	1,181	703	786	477	456	0	0	2,259	2,424
Texas	8,030	8,121	5,396	5,558	2,957	2,919	6	7	16,389	16,605
Mountain	5,343	5,424	4,407	4,496	2,506	2,494	9	7	12,264	12,422
Arizona	1,872	1,932	1,407	1,483	404	418	0	0	3,683	3,833
Colorado	1,085	1,078	999	981	559	554	5	4	2,647	2,616
Idaho	423	423	240	249	242	267	0	0	905	939
Montana	309	298	255	252	132	101	0	0	696	652
Nevada	658	692	438	444	336	326	0	0	1,432	1,462
New Mexico	392	399	425	438	229	220	0	0	1,047	1,057
Utah	440	441	467	470	262	261	3	3	1,171	1,175
Wyoming	165	161	176	179	341	347	0	0	682	688
Pacific Contiguous	10,494	10,358	10,306	10,460	3,574	3,680	37	36	24,411	24,533
California	7,578	7,467	8,307	8,453	2,632	2,795	32	34	18,549	18,750
Oregon	1,077	1,061	722	721	365	334	1	1	2,166	2,117
Washington	1,838	1,829	1,277	1,286	577	551	4	0	3,696	3,666
Pacific Noncontiguous	640	634	696	679	549	549	0	0	1,885	1,862
Alaska	226	226	268	255	101	117	0	0	595	598
Hawaii	414	408	428	424	448	432	0	0	1,290	1,265
U.S. Total	87,055	89,243	68,565	69,920	31,130	31,671	377	370	187,127	191,205

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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, June 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	21.23	20.36	16.30	15.88	13.09	12.45	10.35	7.80	17.71	17.06
Connecticut	23.10	21.62	17.53	16.65	13.85	15.04	15.61	11.56	19.47	18.62
Maine	18.18	16.15	12.39	11.71	9.24	8.43	--	--	14.26	12.50
Massachusetts	21.43	21.10	16.46	16.33	14.22	14.46	5.20	4.94	17.88	17.75
New Hampshire	20.34	19.63	15.62	15.59	12.66	9.40	--	--	16.87	15.89
Rhode Island	20.29	18.64	15.76	15.15	15.10	14.11	18.05	17.24	17.43	16.38
Vermont	17.52	18.50	16.16	15.44	10.96	10.84	--	--	15.25	15.30
Middle Atlantic	16.22	16.51	12.68	12.85	6.34	6.88	11.67	12.09	12.62	12.99
New Jersey	15.97	15.64	12.95	12.80	10.80	10.40	8.99	8.23	14.01	13.72
New York	18.56	19.30	14.76	15.12	5.25	5.99	12.95	13.65	14.80	15.47
Pennsylvania	14.08	14.31	8.57	8.83	6.17	6.66	6.91	7.49	9.60	10.01
East North Central	13.71	13.30	10.26	10.07	6.84	6.98	7.90	6.75	10.20	10.15
Illinois	13.24	12.56	8.90	8.96	6.35	6.46	7.73	6.53	9.53	9.44
Indiana	12.61	12.02	10.81	10.30	7.34	7.21	11.28	10.33	9.89	9.64
Michigan	16.08	16.07	11.63	11.03	7.10	7.25	10.59	10.63	11.62	11.63
Ohio	12.70	12.64	9.79	9.96	6.17	6.76	7.48	7.47	9.60	9.91
Wisconsin	15.32	14.28	11.26	10.89	7.82	7.57	15.03	14.73	11.19	10.65
West North Central	13.27	13.26	10.66	10.68	7.94	8.03	10.93	11.65	10.73	10.89
Iowa	14.57	13.81	11.52	10.95	7.92	8.13	--	--	10.51	10.50
Kansas	13.30	13.46	10.75	10.71	7.49	7.51	--	--	10.85	11.11
Minnesota	13.86	14.09	11.04	11.27	8.00	8.07	10.44	11.08	10.97	11.23
Missouri	12.81	13.23	10.59	10.88	7.82	8.16	11.48	12.27	11.17	11.63
Nebraska	12.43	11.31	9.77	9.26	7.90	7.73	--	--	9.94	9.45
North Dakota	12.47	12.07	9.68	9.68	8.61	8.56	--	--	9.70	9.66
South Dakota	12.79	12.39	10.02	9.68	7.96	7.74	--	--	10.48	10.18
South Atlantic	12.24	11.96	9.34	9.31	6.49	6.64	8.09	8.02	10.20	10.07
Delaware	12.50	13.21	9.05	9.67	7.22	7.39	--	--	10.17	10.59
District of Columbia	12.10	12.06	11.64	11.99	8.12	8.50	10.08	9.12	11.63	11.87
Florida	12.02	11.37	9.49	9.04	7.79	7.68	8.27	7.53	10.76	10.18
Georgia	12.46	12.26	9.59	9.70	5.85	6.28	6.23	5.89	10.04	10.10
Maryland	13.26	13.92	9.83	10.41	7.60	7.93	7.34	7.98	11.19	11.75
North Carolina	11.59	11.24	8.74	8.58	6.39	6.46	8.25	7.82	9.53	9.38
South Carolina	12.81	12.91	10.46	10.76	6.28	6.34	--	--	10.12	10.26
Virginia	12.56	12.40	8.36	8.48	6.86	6.76	8.53	8.22	9.76	9.79
West Virginia	11.68	11.57	8.93	9.25	6.04	6.52	--	--	8.46	8.76
East South Central	11.62	11.32	10.75	10.48	5.81	6.14	--	--	9.61	9.57
Alabama	12.77	12.41	11.48	11.29	6.06	6.37	--	--	10.05	9.98
Kentucky	11.15	10.56	10.33	9.53	5.55	5.89	--	--	8.83	8.71
Mississippi	11.40	11.55	10.35	10.57	5.66	6.30	--	--	9.28	9.62
Tennessee	11.05	10.79	10.67	10.43	5.86	5.91	--	--	9.93	9.77
West South Central	11.30	10.93	8.06	8.22	5.30	5.62	6.61	8.36	8.46	8.62
Arkansas	10.35	9.99	8.97	7.49	6.17	5.49	11.94	9.84	8.46	7.77
Louisiana	9.66	9.37	8.68	8.48	5.24	5.12	9.65	9.65	7.77	7.63
Oklahoma	10.50	10.72	8.33	8.52	5.07	5.40	--	--	8.13	8.59
Texas	11.87	11.36	7.83	8.20	5.23	5.84	6.38	8.26	8.66	8.94
Mountain	12.31	12.34	10.15	10.14	6.64	6.86	9.71	9.73	9.85	10.04
Arizona	12.84	13.16	10.93	11.30	6.37	6.88	11.08	11.45	11.15	11.56
Colorado	12.84	12.28	10.96	10.79	7.63	7.52	9.16	9.22	10.61	10.42
Idaho	10.29	10.58	8.12	8.38	7.10	7.41	--	--	8.21	8.48
Montana	12.06	11.85	10.67	10.49	4.62	4.90	--	--	8.81	9.00
Nevada	11.80	11.67	8.21	7.64	7.12	7.46	8.80	8.26	9.14	9.26
New Mexico	13.14	13.37	10.55	10.73	5.31	5.53	--	--	9.45	9.90
Utah	10.74	10.63	9.19	8.78	6.35	6.38	10.62	10.62	8.76	8.69
Wyoming	11.88	12.30	10.28	10.24	6.56	6.71	--	--	8.19	8.29
Pacific Contiguous	17.20	16.55	15.61	15.23	10.53	10.67	8.78	9.21	14.95	14.57
California	20.87	19.90	18.38	17.82	15.03	14.74	8.67	9.21	18.53	17.82
Oregon	11.27	11.02	8.74	9.08	6.11	5.80	9.31	9.16	8.86	8.86
Washington	9.90	9.79	8.75	8.59	4.59	4.42	9.51	8.73	7.84	7.73
Pacific Noncontiguous	29.26	28.83	25.56	24.56	23.80	23.83	--	--	26.07	25.55
Alaska	23.51	22.51	20.45	18.49	17.05	18.76	--	--	20.61	19.77
Hawaii	32.45	32.76	29.72	29.55	25.90	25.56	--	--	29.04	28.88
U.S. Total	13.34	13.04	10.89	10.82	6.91	7.18	10.13	10.16	10.80	10.79

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD	June 2019 YTD	June 2018 YTD
New England	21.27	20.57	16.48	16.25	13.11	13.02	10.67	9.33	17.92	17.53
Connecticut	22.68	21.10	17.51	16.74	13.97	13.94	16.62	13.09	19.42	18.37
Maine	15.45	15.98	12.17	12.28	9.02	9.09	--	--	12.89	13.07
Massachusetts	22.43	21.86	16.66	16.78	14.53	14.68	6.79	6.85	18.51	18.40
New Hampshire	20.29	19.66	16.18	15.85	13.33	12.89	--	--	17.41	16.91
Rhode Island	22.32	20.60	17.39	16.38	16.30	15.23	19.00	17.01	19.25	17.92
Vermont	17.04	17.90	15.92	15.19	10.76	10.54	--	--	15.05	15.08
Middle Atlantic	15.58	15.89	11.85	12.16	6.62	7.04	11.05	10.98	12.13	12.48
New Jersey	16.14	15.65	12.37	12.16	10.33	10.13	8.70	8.52	13.56	13.25
New York	17.54	18.20	13.38	13.96	5.53	6.11	12.17	12.06	13.85	14.44
Pennsylvania	13.60	14.00	8.76	9.06	6.48	6.91	7.52	7.58	9.81	10.23
East North Central	13.33	13.19	10.21	10.12	6.95	7.03	7.27	6.79	10.14	10.13
Illinois	13.05	12.68	8.99	8.93	6.61	6.65	7.10	6.56	9.54	9.46
Indiana	12.39	11.82	10.83	10.30	7.39	7.15	11.07	10.55	9.87	9.51
Michigan	15.39	15.67	11.34	11.23	7.23	7.34	10.39	10.93	11.44	11.55
Ohio	12.30	12.42	9.89	9.99	6.36	6.77	7.16	7.16	9.58	9.83
Wisconsin	14.60	14.45	10.96	10.92	7.62	7.61	13.83	13.96	10.96	10.88
West North Central	11.57	11.70	9.49	9.60	7.23	7.22	8.46	8.66	9.56	9.68
Iowa	12.51	12.24	9.90	9.57	6.36	6.28	--	--	8.99	8.85
Kansas	12.56	13.10	10.09	10.43	7.33	7.43	--	--	10.13	10.55
Minnesota	13.14	13.03	10.41	10.25	7.81	7.61	9.74	9.47	10.53	10.38
Missouri	10.42	10.86	8.69	9.17	6.52	6.92	7.10	7.76	9.15	9.64
Nebraska	10.53	10.30	8.88	8.76	7.58	7.49	--	--	9.02	8.88
North Dakota	10.01	9.92	8.89	8.93	8.44	8.49	--	--	8.98	9.02
South Dakota	11.19	11.24	9.30	9.33	7.72	7.71	--	--	9.74	9.76
South Atlantic	11.93	11.77	9.40	9.45	6.26	6.47	8.02	7.71	9.97	9.97
Delaware	12.66	12.68	9.90	9.68	7.63	7.65	--	--	10.74	10.62
District of Columbia	13.26	12.81	12.24	11.81	8.36	8.24	10.36	9.23	12.34	11.90
Florida	11.89	11.69	9.56	9.48	7.69	7.80	8.25	8.00	10.63	10.50
Georgia	11.44	11.32	9.65	9.74	5.54	5.77	5.05	5.38	9.41	9.47
Maryland	13.42	13.29	10.25	10.52	7.82	8.44	7.46	7.26	11.51	11.64
North Carolina	11.54	11.13	8.72	8.63	6.04	6.11	8.26	8.13	9.41	9.26
South Carolina	12.56	12.85	10.21	10.66	5.85	6.17	--	--	9.60	9.99
Virginia	11.94	11.68	8.32	8.37	6.93	6.82	8.19	8.31	9.57	9.52
West Virginia	10.86	11.39	9.05	9.52	5.97	6.59	--	--	8.33	8.98
East South Central	11.38	11.11	10.71	10.50	5.76	5.84	--	--	9.37	9.30
Alabama	12.66	12.29	11.55	11.33	5.91	6.00	--	--	9.76	9.63
Kentucky	10.62	10.36	9.98	9.55	5.39	5.56	--	--	8.45	8.44
Mississippi	11.45	11.44	10.63	10.76	6.04	6.04	--	--	9.32	9.39
Tennessee	10.88	10.58	10.60	10.39	5.77	5.75	--	--	9.76	9.61
West South Central	11.09	10.76	8.13	8.27	5.25	5.42	6.69	8.52	8.26	8.33
Arkansas	9.74	9.87	8.71	8.02	5.86	5.52	11.80	11.23	8.05	7.84
Louisiana	9.44	9.28	8.88	8.91	5.24	5.25	9.32	9.89	7.59	7.62
Oklahoma	9.91	10.11	7.57	7.81	4.89	5.13	--	--	7.55	7.91
Texas	11.79	11.29	8.04	8.24	5.22	5.50	6.49	8.41	8.54	8.63
Mountain	11.84	11.93	9.46	9.59	6.21	6.30	9.39	9.49	9.28	9.41
Arizona	12.66	12.82	10.30	10.64	6.18	6.31	9.64	9.76	10.53	10.76
Colorado	12.16	11.89	10.07	9.91	7.26	7.20	8.96	8.95	9.95	9.80
Idaho	9.88	10.26	7.74	8.05	6.09	6.56	--	--	7.97	8.32
Montana	11.10	11.00	10.28	10.14	5.69	4.84	--	--	9.18	8.94
Nevada	12.04	12.17	7.80	7.89	5.52	5.73	7.74	7.91	8.34	8.60
New Mexico	12.51	12.50	9.77	9.93	5.52	5.74	--	--	8.99	9.24
Utah	10.30	10.52	8.30	8.43	5.92	5.81	10.58	10.67	8.16	8.22
Wyoming	11.01	11.28	9.69	9.72	6.63	6.81	--	--	8.07	8.21
Pacific Contiguous	15.30	15.06	13.57	13.46	9.08	9.09	8.60	8.71	13.24	13.09
California	19.21	18.67	15.60	15.39	12.25	12.26	8.49	8.68	16.19	15.88
Oregon	10.88	10.81	8.92	8.99	6.27	5.98	9.14	9.22	9.09	9.04
Washington	9.55	9.64	8.74	8.71	4.79	4.56	9.44	9.46	8.04	8.00
Pacific Noncontiguous	28.42	27.26	25.28	24.09	24.05	23.19	--	--	25.86	24.79
Alaska	22.44	21.68	19.97	18.65	17.08	17.59	--	--	20.23	19.45
Hawaii	33.26	31.79	30.34	29.21	26.48	25.38	--	--	29.68	28.48
U.S. Total	12.96	12.80	10.53	10.57	6.69	6.84	9.73	9.63	10.44	10.47

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 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 - June 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	133,960,222	18,548,645	799,996	85	153,308,948
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	133,344,237	18,511,591	796,731	83	152,652,642
February	132,950,019	18,387,369	773,724	83	152,111,195
March	133,912,760	18,524,464	784,718	83	153,222,025
April	133,452,513	18,481,484	784,792	83	152,718,872
May	134,227,643	18,565,843	808,290	83	153,601,859
June	134,050,605	18,566,686	816,627	83	153,434,001
July	133,981,066	18,548,375	819,030	86	153,348,557
August	134,537,841	18,621,883	825,213	88	153,985,025
Sept	133,925,550	18,535,656	802,444	88	153,263,738
October	134,471,360	18,650,412	806,702	88	153,928,562
November	134,278,555	18,571,446	788,374	86	153,638,461
December	134,390,512	18,618,535	793,306	86	153,802,439
Year 2019					
January	134,962,234	18,643,058	897,380	83	154,502,755
February	133,460,501	18,505,879	879,321	82	152,845,783
March	135,407,177	18,613,703	884,954	82	154,905,916
April	135,174,509	18,587,483	893,594	82	154,655,668
May	135,493,468	18,667,812	914,521	81	155,075,882
June	135,132,941	18,590,724	920,435	81	154,644,181
Rolling 12 Months Ending in June					
2018	133,274,948	18,456,059	819,928	84	152,551,019
2019	134,601,310	18,596,247	852,106	84	154,049,747

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors. NA = Not available. See Glossary for definitions.
Geographic coverage is the 50 States and the District of Columbia. Values include energy service provider (power marketer) data.
Values for 2017 and prior years are final. Values for 2019 and 2018 are preliminary estimates based on a cutoff model sample. See Technical Notes for a discussion of the sample design for the Form EIA-826. Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule. Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications. Sales and net generation may not correspond exactly for a particular month for a variety of reasons (i.e., sales data may include purchases of electricity from nonutilities or imported electricity). Net generation is for the calendar month while sales and associated revenue accumulate from bills collected for periods of time (28 to 35 days) that vary dependent upon customer class and consumption occurring in and outside the calendar month.
Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.8. Number of Ultimate Customers Served by Sector by State: June 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	6,406,613	6,370,632	899,820	894,318	19,546	20,168	6	6	7,325,985	7,285,124
Connecticut	1,510,530	1,504,009	154,330	153,951	4,146	4,281	3	3	1,669,009	1,662,244
Maine	697,278	711,459	97,112	99,840	2,725	3,071	0	0	797,115	814,370
Massachusetts	2,802,824	2,790,585	420,708	416,867	7,619	7,760	2	2	3,231,153	3,215,214
New Hampshire	628,367	623,494	108,805	108,031	3,149	3,167	0	0	740,321	734,692
Rhode Island	449,537	423,960	61,193	58,446	1,767	1,753	1	1	512,498	484,160
Vermont	318,077	317,125	57,672	57,183	140	136	0	0	375,889	374,444
Middle Atlantic	16,250,044	16,157,853	2,363,077	2,344,509	32,804	29,806	19	20	18,645,944	18,532,188
New Jersey	3,595,537	3,568,060	521,192	523,237	11,445	11,814	6	6	4,128,180	4,103,117
New York	7,233,921	7,193,666	1,124,029	1,107,190	6,568	6,681	8	8	8,364,526	8,307,545
Pennsylvania	5,420,586	5,396,127	717,856	714,082	14,791	11,311	5	6	6,153,238	6,121,526
East North Central	20,367,764	20,249,841	2,520,586	2,504,330	43,024	46,867	10	9	22,931,384	22,801,047
Illinois	5,331,706	5,295,061	620,575	614,215	3,980	4,085	3	3	5,956,264	5,913,364
Indiana	2,887,702	2,856,185	358,525	352,907	15,155	15,196	1	1	3,261,383	3,224,289
Michigan	4,405,447	4,395,451	550,656	549,736	NM	NM	2	2	4,961,753	4,950,823
Ohio	4,998,269	4,979,502	630,394	629,503	13,209	17,019	2	2	5,641,874	5,626,026
Wisconsin	2,744,640	2,723,642	360,436	357,969	NM	NM	2	1	3,110,110	3,086,545
West North Central	9,627,644	9,545,123	1,475,313	1,465,203	116,704	115,362	3	3	11,219,664	11,125,691
Iowa	1,406,108	1,395,936	246,464	245,352	NM	NM	0	0	1,659,521	1,648,233
Kansas	1,288,316	1,275,845	235,901	236,088	25,844	26,085	0	0	1,550,061	1,538,018
Minnesota	2,436,492	2,413,765	293,957	291,060	NM	NM	1	1	2,738,949	2,713,157
Missouri	2,835,556	2,816,521	386,189	383,124	6,577	6,736	2	2	3,228,324	3,206,383
Nebraska	867,251	858,985	162,141	161,598	56,816	56,094	0	0	1,086,208	1,076,677
North Dakota	386,418	380,244	75,125	73,927	8,905	8,085	0	0	470,448	462,256
South Dakota	407,503	403,827	75,536	74,054	NM	NM	0	0	486,153	480,967
South Atlantic	28,359,162	27,956,250	3,826,252	3,804,846	79,355	79,362	13	13	32,264,782	31,840,471
Delaware	435,002	429,162	55,435	54,757	568	593	0	0	491,005	484,512
District of Columbia	282,015	273,730	26,463	26,294	1	1	3	3	308,482	300,028
Florida	9,522,167	9,375,842	1,247,695	1,237,075	20,650	20,625	2	2	10,790,514	10,633,544
Georgia	4,452,894	4,387,017	587,424	585,596	19,946	19,968	1	1	5,060,265	4,992,582
Maryland	2,352,353	2,333,345	255,340	253,441	8,791	8,735	5	5	2,616,489	2,595,526
North Carolina	4,648,177	4,566,271	704,898	704,561	9,847	9,932	1	1	5,362,923	5,280,765
South Carolina	2,339,272	2,296,638	371,200	367,892	4,250	4,315	0	0	2,714,722	2,668,845
Virginia	3,471,635	3,437,330	432,723	430,857	3,837	3,778	1	1	3,908,196	3,871,966
West Virginia	855,647	856,915	145,074	144,373	11,465	11,415	0	0	1,012,186	1,012,703
East South Central	8,551,560	8,477,249	1,414,115	1,403,578	22,380	23,206	0	0	9,988,055	9,904,033
Alabama	2,280,107	2,258,258	370,402	371,124	8,245	8,317	0	0	2,658,754	2,637,699
Kentucky	2,015,851	1,999,251	307,743	303,097	5,450	6,107	0	0	2,329,044	2,308,455
Mississippi	1,327,769	1,318,048	239,551	239,943	7,836	7,933	0	0	1,575,156	1,565,924
Tennessee	2,927,833	2,901,692	496,419	489,414	849	849	0	0	3,425,101	3,391,955
West South Central	16,364,388	16,253,057	2,244,714	2,301,957	312,607	203,836	6	6	18,921,715	18,758,856
Arkansas	1,407,516	1,395,965	193,642	192,440	35,627	38,371	2	2	1,636,787	1,626,778
Louisiana	2,100,439	2,100,933	292,958	294,457	18,466	18,759	1	1	2,411,864	2,414,150
Oklahoma	1,803,583	1,786,627	286,197	285,938	19,626	18,016	0	0	2,109,406	2,090,581
Texas	11,052,850	10,969,532	1,471,917	1,529,122	238,888	128,690	3	3	12,763,658	12,627,347
Mountain	9,953,998	9,797,874	1,413,362	1,396,178	91,005	90,309	5	5	11,458,370	11,284,366
Arizona	2,828,615	2,786,043	327,659	321,783	6,411	6,412	2	2	3,162,687	3,114,240
Colorado	2,363,129	2,323,184	368,473	364,724	14,670	14,694	1	1	2,746,273	2,702,603
Idaho	759,269	740,965	112,062	110,440	28,990	28,735	0	0	900,321	880,140
Montana	518,119	511,770	112,179	110,416	NM	8,936	0	0	639,473	631,122
Nevada	1,201,984	1,185,942	166,076	165,380	NM	NM	1	1	1,371,566	1,354,809
New Mexico	910,156	902,278	140,904	139,521	8,653	8,561	0	0	1,059,713	1,050,360
Utah	1,096,385	1,073,423	126,686	124,904	9,672	9,642	1	1	1,232,744	1,207,970
Wyoming	276,341	274,269	59,323	59,010	9,929	9,843	0	0	345,593	343,122
Pacific Contiguous	18,522,983	18,515,527	2,318,816	2,337,995	200,768	205,483	19	21	21,042,586	21,059,026
California	13,648,752	13,665,468	1,680,304	1,687,951	144,467	149,736	12	13	15,473,535	15,503,168
Oregon	1,776,580	1,786,846	240,948	255,020	26,972	26,404	2	2	2,044,502	2,068,272
Washington	3,097,651	3,063,213	397,564	395,024	29,329	29,343	5	6	3,524,549	3,487,586
Pacific Noncontiguous	728,785	727,199	114,669	113,772	NM	NM	0	0	845,696	843,199
Alaska	291,070	291,397	54,782	53,978	NM	NM	0	0	347,281	346,805
Hawaii	437,715	435,802	59,887	59,794	813	798	0	0	498,415	496,394
U.S. Total	135,132,941	134,050,605	18,590,724	18,566,686	920,435	816,627	81	83	154,644,181	153,434,001

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 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), May 2019 to June 2019

		As of End of May 2019	Activity During June 2019 as Reported to EIA		As of End of June 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*	*96,840.6*	*1,244.1*	*2.2*	*98,082.5*	*1,241.9*	*3,816.5*	*9,260.2*	*856.4*	*11,132.0*	*0.0*	*75.0*	*856.4*	*11,057.0*	*98,938.9*	*109,139.5*
..... *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	96,869.9	1,244.1	2.2	98,111.8	1,241.9	3,816.5	9,260.2	856.4	11,132.0	0.0	75.0	856.4	11,057.0	98,968.2	109,168.8
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*31,233.3*	*361.0*	*4.4*	*31,589.9*	*356.6*	*1,419.4*	*4,157.0*	*429.8*	*9,676.7*	*0.0*	*0.0*	*429.8*	*9,676.7*	*32,019.7*	*41,266.6*
..... *Solar Thermal without Energy Storage*	*Utility Scale Facilities*	*1,352.5*	*0.0*	*0.0*	*1,352.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1,352.5*	*1,352.5*
..... *Solar Thermal with Energy Storage*	*Utility Scale Facilities*	*405.4*	*0.0*	*0.0*	*405.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*405.4*	*405.4*
..... Solar Subtotal	Utility Scale Facilities	32,991.2	361.0	4.4	33,347.8	356.6	1,419.4	4,157.0	429.8	9,676.7	0.0	0.0	429.8	9,676.7	33,777.6	43,024.5
..... Conventional Hydroelectric	Utility Scale Facilities	79,876.4	5.5	1.4	79,880.5	4.1	-12.6	100.8	3.2	105.0	5.6	115.1	-2.4	-10.1	79,878.1	79,870.4
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,558.7*	*29.4*	*69.5*	*8,518.6*	*-40.1*	*-236.1*	*-290.2*	*116.0*	*130.5*	*0.0*	*89.3*	*116.0*	*41.2*	*8,634.6*	*8,559.8*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,047.0*	*9.1*	*9.1*	*2,047.0*	*0.0*	*-20.4*	*-25.2*	*1.0*	*6.0*	*0.0*	*81.4*	*1.0*	*-75.4*	*2,048.0*	*1,971.6*
..... *Municipal Solid Waste*	*Utility Scale Facilities*	*2,199.3*	*0.0*	*10.0*	*2,189.3*	*-10.0*	*-45.7*	*-45.7*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*2,189.3*	*2,189.3*
..... *Other Waste Biomass*	*Utility Scale Facilities*	*750.9*	*0.0*	*4.2*	*746.7*	*-4.2*	*-26.4*	*-26.8*	*2.0*	*48.7*	*0.0*	*6.5*	*2.0*	*42.2*	*748.7*	*788.9*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,555.9	38.5	92.8	13,501.6	-54.3	-328.6	-387.9	119.0	185.2	0.0	177.2	119.0	8.0	13,620.6	13,509.6
..... Geothermal	Utility Scale Facilities	2,439.6	201.7	0.0	2,641.3	201.7	100.5	142.0	0.0	0.0	0.0	0.0	0.0	0.0	2,641.3	2,641.3
... Renewable Sources Subtotal	***Utility Scale Facilities***	***225,733.0***	***1,850.8***	***100.8***	***227,483.0***	***1,750.0***	***4,995.2***	***13,272.1***	***1,408.4***	***21,098.9***	***5.6***	***367.3***	***1,402.8***	***20,731.6***	***228,885.8***	***248,214.6***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*269,360.6*	*1,056.1*	*1,617.2*	*268,799.5*	*-561.1*	*5,038.9*	*13,077.4*	*79.5*	*7,623.2*	*0.0*	*737.6*	*79.5*	*6,885.6*	*268,879.0*	*275,685.1*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*128,389.9*	*374.4*	*120.1*	*128,644.2*	*254.3*	*823.9*	*1,689.7*	*136.4*	*2,569.1*	*0.0*	*742.0*	*136.4*	*1,827.1*	*128,780.6*	*130,471.3*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*73,559.2*	*364.7*	*305.6*	*73,618.3*	*59.1*	*-1,120.9*	*-2,760.9*	*0.0*	*0.0*	*0.0*	*2,780.6*	*0.0*	*-2,780.6*	*73,618.3*	*70,837.7*
..... *Natural Gas Internal Combustion Engine*	*Utility Scale Facilities*	*4,870.8*	*23.0*	*3.4*	*4,890.4*	*19.6*	*256.2*	*504.1*	*19.6*	*233.3*	*0.0*	*23.8*	*19.6*	*209.5*	*4,910.0*	*5,099.9*
..... *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*	*172.2*	*2.8*	*0.0*	*175.0*	*2.8*	*53.0*	*53.2*	*5.0*	*46.3*	*0.0*	*0.0*	*5.0*	*46.3*	*180.0*	*221.3*
..... Natural Gas Subtotal	Utility Scale Facilities	476,462.7	1,821.0	2,046.3	476,237.4	-225.3	5,051.1	12,563.5	240.5	10,471.9	0.0	4,284.0	240.5	6,187.9	476,477.9	482,425.3
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*235,923.2*	*58.3*	*557.3*	*235,424.2*	*-499.0*	*-7,293.6*	*-9,551.8*	*0.0*	*68.0*	*1,012.5*	*8,577.4*	*-1,012.5*	*-8,509.4*	*234,411.7*	*226,914.8*
..... *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	236,679.2	58.3	557.3	236,180.2	-499.0	-7,293.6	-9,551.8	0.0	68.0	1,012.5	8,577.4	-1,012.5	-8,509.4	235,167.7	227,670.8
..... Petroleum Coke	Utility Scale Facilities	1,532.2	0.0	0.0	1,532.2	0.0	4.3	4.3	0.0	0.0	0.0	67.0	0.0	-67.0	1,532.2	1,465.2
..... Petroleum Liquids	Utility Scale Facilities	32,134.1	117.9	1,665.2	30,586.8	-1,547.3	-939.5	-956.1	14.5	23.9	5.7	70.4	8.8	-46.5	30,595.6	30,540.3
..... Other Gases	Utility Scale Facilities	2,393.3	5.6	0.0	2,398.9	5.6	23.1	23.1	0.0	5.0	0.0	0.0	0.0	5.0	2,398.9	2,403.9
... Fossil Fuels Subtotal	***Utility Scale Facilities***	***749,201.5***	***2,002.8***	***4,268.8***	***746,935.5***	***-2,266.0***	***-3,154.6***	***2,083.0***	***255.0***	***10,568.8***	***1,018.2***	***12,998.8***	***-763.2***	***-2,430.0***	***746,172.3***	***744,505.5***
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,852.2	57.0	0.0	22,909.2	57.0	53.8	53.8	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	922.0	40.4	16.0	946.4	24.4	104.4	182.6	11.5	111.6	0.0	0.0	11.5	111.6	957.9	1,058.0
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,821.2***	***97.4***	***16.0***	***23,902.6***	***81.4***	***158.2***	***236.4***	***11.5***	***303.2***	***0.0***	***0.0***	***11.5***	***303.2***	***23,914.1***	***24,205.8***
... Nuclear	***Utility Scale Facilities***	***98,908.9***	***0.0***	***0.0***	***98,908.9***	***0.0***	***-446.0***	***-743.7***	***0.0***	***0.0***	***0.0***	***2,715.3***	***0.0***	***-2,715.3***	***98,908.9***	***96,193.6***
... All Other	***Utility Scale Facilities***	***1,453.5***	***17.3***	***0.0***	***1,470.8***	***17.3***	***-710.5***	***-709.6***	***47.9***	***47.9***	***0.0***	***0.0***	***47.9***	***47.9***	***1,518.7***	***1,518.7***
TOTAL	**UTILITY SCALE FACILITIES**	**1,099,118.1**	**3,968.3**	**4,385.6**	**1,098,700.8**	**-417.3**	**842.3**	**14,138.2**	**1,722.8**	**32,018.8**	**1,023.8**	**16,081.4**	**699.0**	**15,937.4**	**1,099,399.8**	**1,114,638.2**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*21,018.7*			*21,285.7*	*267.0*	*1,764.2*	*3,398.3*								
..... Estimated Total Solar Photovoltaic	All Facilities	52,252.0			52,875.6	623.6	3,183.6	7,555.3								
... Estimated Total Solar	***All Facilities***	***54,009.9***			***54,633.5***	***623.6***	***3,183.6***	***7,555.3***								

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 - June 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	30,170.5	19,521.5	49,692.0
Year 2017			
January	20,603.7	12,970.1	33,573.8
February	20,792.6	13,272.0	34,064.6
March	21,177.9	13,558.9	34,736.8
April	21,700.6	13,815.1	35,515.7
May	22,006.1	14,115.3	36,121.4
June	22,242.6	14,401.8	36,644.4
July	22,356.4	14,670.8	37,027.2
August	22,547.7	15,018.7	37,566.4
Sept	22,762.8	15,216.3	37,979.1
October	23,095.3	15,456.6	38,551.9
November	23,660.0	15,719.9	39,379.9
December	25,209.0	16,147.8	41,356.8
Year 2018			
January	25,983.4	16,496.2	42,479.6
February	26,073.2	16,757.7	42,830.9
March	26,576.0	17,048.0	43,624.0
April	26,854.0	17,306.3	44,160.3
May	27,275.1	17,600.7	44,875.8
June	27,432.9	17,887.4	45,320.3
July	27,556.8	18,145.8	45,702.6
August	27,635.9	18,426.4	46,062.3
Sept	27,951.5	18,712.4	46,663.9
October	28,103.5	19,000.5	47,104.0
November	28,630.8	19,278.1	47,908.9
December	30,170.5	19,521.5	49,692.0
Year 2019			
January	30,622.2	19,959.0	50,581.2
February	30,360.3	20,125.8	50,486.1
March	31,136.7	20,584.9	51,721.6
April	31,234.8	20,884.6	52,119.4
May	31,233.3	21,018.7	52,252.0
June	31,589.9	21,285.7	52,875.6

Values 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 - June 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	11,664.4	6,285.8	1,571.3	19,521.5
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	9,818.4	5,312.1	1,365.7	16,496.2
February	9,985.1	5,398.4	1,374.2	16,757.7
March	10,155.4	5,501.2	1,391.4	17,048.0
April	10,313.9	5,580.1	1,412.2	17,306.3
May	10,492.1	5,676.2	1,432.4	17,600.7
June	10,660.0	5,778.0	1,449.5	17,887.4
July	10,828.8	5,858.8	1,458.2	18,145.8
August	11,011.0	5,945.3	1,470.2	18,426.4
Sept	11,178.8	6,026.4	1,507.2	18,712.4
October	11,373.1	6,105.2	1,522.1	19,000.5
November	11,552.4	6,176.0	1,549.7	19,278.1
December	11,664.4	6,285.8	1,571.3	19,521.5
Year 2019				
January	11,998.4	6,379.6	1,581.0	19,959.0
February	12,165.8	6,369.7	1,590.3	20,125.8
March	12,439.8	6,533.0	1,612.2	20,584.9
April	12,615.5	6,627.2	1,642.0	20,884.6
May	12,687.3	6,661.9	1,669.5	21,018.7
June	12,864.6	6,707.4	1,713.7	21,285.7

Values 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, June 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	5,859.2	5,723.9	24,181.9	22,836.2	1,797.4	1,797.4	42.8	28.7	3,324.5	4,018.2	48.0	320.9	35,253.8	34,725.3
Connecticut	412.6	390.3	7,870.6	6,998.4	29.4	29.4	1.6	1.6	2,073.1	2,087.8	26.0	298.9	10,413.3	9,806.4
Maine	2,290.5	2,345.6	2,478.8	2,540.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,807.5	4,924.3
Massachusetts	1,414.1	1,315.9	9,612.6	9,105.4	1,768.0	1,768.0	22.0	7.9	0.0	679.0	0.0	0.0	12,816.7	12,876.2
New Hampshire	928.1	928.9	2,289.9	2,262.9	0.0	0.0	0.0	0.0	1,251.4	1,251.4	0.0	0.0	4,469.4	4,443.2
Rhode Island	150.2	113.3	1,832.1	1,831.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,982.3	1,944.4
Vermont	663.7	629.9	97.9	97.9	0.0	0.0	3.0	3.0	0.0	0.0	0.0	0.0	764.6	730.8
Middle Atlantic	11,278.3	10,886.9	72,991.6	70,284.2	3,411.6	3,409.8	141.5	73.9	18,700.2	19,310.2	11.2	420.9	106,534.4	104,385.9
New Jersey	1,038.4	937.2	12,145.7	12,408.5	420.0	420.0	42.1	2.5	3,500.2	4,107.9	11.2	11.2	17,157.6	17,887.3
New York	7,382.5	7,097.9	26,963.5	26,697.4	1,408.6	1,406.8	51.0	21.0	5,403.0	5,405.3	0.0	221.7	41,208.6	40,850.1
Pennsylvania	2,857.4	2,851.8	33,882.4	31,178.3	1,583.0	1,583.0	48.4	50.4	9,797.0	9,797.0	0.0	188.0	48,168.2	45,648.5
East North Central	12,890.2	11,809.0	111,448.7	112,157.4	2,231.0	2,179.0	189.7	167.7	19,034.4	19,029.4	187.1	188.1	145,981.1	145,530.6
Illinois	4,967.2	4,549.9	29,069.3	29,003.9	0.0	0.0	132.7	112.7	11,582.4	11,577.4	78.0	78.0	45,829.6	45,321.9
Indiana	2,657.2	2,442.8	23,932.6	23,890.4	0.0	0.0	23.0	22.0	0.0	0.0	88.0	89.0	26,700.8	26,444.2
Michigan	2,991.1	2,643.8	20,215.1	20,774.1	2,231.0	2,179.0	1.0	0.0	4,122.2	4,122.2	0.0	0.0	29,560.4	29,719.1
Ohio	1,053.7	931.4	25,170.9	25,149.6	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	28,391.6	28,248.0
Wisconsin	1,221.0	1,241.1	13,060.8	13,339.4	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,498.7	15,797.4
West North Central	30,250.3	26,863.8	59,280.2	60,747.6	657.0	657.0	5.1	3.2	5,443.4	5,443.4	24.5	24.5	95,660.5	93,739.5
Iowa	8,970.1	7,320.8	9,808.4	9,801.5	0.0	0.0	1.1	0.0	601.4	601.4	0.0	0.0	19,381.0	17,723.7
Kansas	5,878.0	5,136.2	9,025.4	9,780.0	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	16,129.2	16,142.0
Minnesota	5,274.9	5,043.7	10,269.5	10,305.6	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,220.8	17,025.7
Missouri	1,579.0	1,578.9	17,650.0	18,387.2	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,078.2	21,815.3
Nebraska	2,329.9	1,754.6	6,202.0	6,148.4	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	9,301.9	8,673.0
North Dakota	3,741.6	3,592.8	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	8,231.7
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	20,635.3	19,029.1	161,882.0	159,916.3	7,905.2	7,905.2	76.5	94.5	24,706.6	24,602.6	408.7	452.7	215,614.3	212,000.4
Delaware	47.5	47.1	3,330.4	3,331.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,377.9	3,378.5
District of Columbia	29.9	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	38.9	32.0
Florida	3,153.7	2,402.5	52,696.5	51,921.9	0.0	0.0	14.0	14.0	3,626.0	3,572.0	348.7	348.7	59,838.9	58,259.1
Georgia	4,016.2	3,964.5	27,050.6	26,964.0	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	0.0	44.0	36,991.0	36,896.7
Maryland	1,200.9	1,152.9	11,671.1	11,082.3	0.0	0.0	7.0	13.0	1,725.8	1,707.8	6.0	6.0	14,610.8	13,962.0
North Carolina	6,836.5	6,160.1	22,127.1	21,644.3	86.0	86.0	1.0	1.0	5,149.6	5,117.6	54.0	54.0	34,254.2	33,063.0
South Carolina	2,257.5	2,140.8	12,171.3	12,137.2	2,716.0	2,716.0	4.0	0.0	6,576.2	6,576.2	0.0	0.0	23,725.0	23,570.2
Virginia	2,066.0	2,111.1	19,048.1	19,044.9	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,923.1	27,965.0
West Virginia	1,027.1	1,027.1	13,777.9	13,781.3	0.0	0.0	49.5	65.5	0.0	0.0	0.0	0.0	14,854.5	14,873.9
East South Central	8,908.8	8,769.6	62,692.3	64,815.1	1,616.3	1,616.3	1.0	1.0	11,449.1	10,984.1	1.4	1.4	84,668.9	86,187.5
Alabama	4,180.3	4,156.0	19,552.0	20,482.4	0.0	0.0	1.0	1.0	5,525.4	5,060.4	0.0	0.0	29,258.7	29,699.8
Kentucky	1,245.4	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	19,535.7	20,119.7
Mississippi	463.0	435.3	12,659.7	13,268.1	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	14,525.1	15,105.8
Tennessee	3,020.1	2,932.9	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	21,262.2
West South Central	40,448.2	36,337.2	140,090.8	139,504.0	286.0	286.0	119.7	98.3	8,910.7	8,910.7	512.5	512.7	190,367.9	185,648.9
Arkansas	1,697.1	1,694.3	11,219.7	11,193.0	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,762.6	14,733.1
Louisiana	615.5	683.2	21,012.9	20,596.7	0.0	0.0	0.5	0.5	2,132.9	2,132.9	288.5	288.7	24,050.3	23,702.0
Oklahoma	9,041.0	8,463.1	18,111.5	18,577.0	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,410.5	27,298.1
Texas	29,094.6	25,496.6	89,746.7	89,137.3	0.0	0.0	119.2	97.8	4,960.0	4,960.0	224.0	224.0	124,144.5	119,915.7
Mountain	27,573.5	26,328.9	62,546.2	62,322.8	778.8	778.8	50.6	35.6	3,937.0	3,937.0	144.5	126.3	95,030.6	93,529.4
Arizona	5,092.9	5,090.8	19,698.8	19,407.3	216.3	216.3	42.0	32.0	3,937.0	3,937.0	0.0	0.0	28,987.0	28,683.4
Colorado	4,965.7	4,364.1	11,063.0	11,119.2	562.5	562.5	5.0	1.0	0.0	0.0	10.6	9.3	16,606.8	16,056.1
Idaho	4,071.9	4,011.9	1,127.1	1,127.6	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,213.8	5,154.3
Montana	3,574.6	3,472.8	2,744.9	2,741.9	0.0	0.0	0.0	0.0	0.0	0.0	60.0	44.0	6,379.5	6,258.7
Nevada	3,885.8	3,595.6	7,821.6	7,821.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,713.9	11,423.7
New Mexico	2,493.7	2,398.8	5,956.3	5,966.8	0.0	0.0	3.6	2.6	0.0	0.0	0.0	0.0	8,453.6	8,368.2
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	6,778.2	0.0	0.0	0.0	0.0	0.0	0.0	12.4	11.5	8,673.1	8,584.1
Pacific Contiguous	68,429.0	67,280.9	47,597.0	48,047.1	4,225.9	4,225.9	259.3	220.7	3,403.0	3,417.0	106.3	106.3	124,020.5	123,297.9
California	31,409.6	30,359.2	38,529.1	38,969.2	3,911.9	3,911.9	248.1	208.3	2,240.0	2,240.0	106.3	106.3	76,445.0	75,794.9
Oregon	12,245.1	12,219.7	4,326.1	4,318.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,576.2	16,542.8
Washington	24,774.3	24,702.0	4,741.8	4,759.8	314.0	314.0	6.2	7.4	1,163.0	1,177.0	0.0	0.0	30,999.3	30,960.2
Pacific Noncontiguous	1,210.2	1,181.6	4,224.8	4,221.8	0.0	0.0	107.2	87.2	0.0	0.0	26.6	26.6	5,568.8	5,517.2
Alaska	538.2	538.2	2,166.5	2,163.5	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,750.9	2,747.9
Hawaii	672.0	643.4	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	2,769.3
U.S. Total	227,483.0	214,210.9	746,935.5	744,852.5	22,909.2	22,855.4	993.4	810.8	98,908.9	99,652.6	1,470.8	2,180.4	1,098,700.8	1,084,562.6

NM = Not meaningful due to large relative standard error.
Values 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, June 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	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	1,424.8	1,402.1	993.2	830.9	0.0	0.0	1,960.6	1,960.7	1,480.6	1,530.2	0.0	0.0	5,859.2	5,723.9	2,510.4	1,971.5	3,503.6	2,802.4	3,503.6	2,802.4
Connecticut	1.0	1.0	86.8	63.6	0.0	0.0	122.2	122.2	202.6	203.5	0.0	0.0	412.6	390.3	456.2	364.2	543.0	427.8	543.0	427.8
Maine	921.6	921.6	5.6	5.6	0.0	0.0	733.5	732.4	629.8	686.0	0.0	0.0	2,290.5	2,345.6	51.8	37.9	57.4	43.5	57.4	43.5
Massachusetts	96.1	94.4	765.7	668.8	0.0	0.0	267.0	267.4	285.3	285.3	0.0	0.0	1,414.1	1,315.9	1,686.1	1,340.1	2,451.8	2,008.9	2,451.8	2,008.9
New Hampshire	183.1	183.1	0.0	0.0	0.0	0.0	504.0	504.8	241.0	241.0	0.0	0.0	928.1	928.9	89.8	75.9	89.8	75.9	89.8	75.9
Rhode Island	72.8	51.8	34.6	18.7	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	150.2	113.3	115.9	58.5	150.5	77.2	150.5	77.2
Vermont	150.2	150.2	100.5	74.2	0.0	0.0	331.2	331.2	81.8	74.3	0.0	0.0	663.7	629.9	110.5	95.0	211.0	169.2	211.0	169.2
Middle Atlantic	3,363.3	3,205.6	1,173.4	932.1	0.0	0.0	5,473.2	5,469.2	1,268.4	1,280.0	0.0	0.0	11,278.3	10,886.9	3,242.1	2,786.6	4,415.5	3,718.7	4,415.5	3,718.7
New Jersey	7.6	7.6	801.2	690.0	0.0	0.0	12.3	12.3	217.3	227.3	0.0	0.0	1,038.4	937.2	1,548.0	1,373.0	2,349.2	2,063.0	2,349.2	2,063.0
New York	1,985.7	1,826.2	311.4	190.3	0.0	0.0	4,561.3	4,557.3	524.1	524.1	0.0	0.0	7,382.5	7,097.9	1,346.2	1,118.7	1,657.6	1,309.0	1,657.6	1,309.0
Pennsylvania	1,370.0	1,371.8	60.8	51.8	0.0	0.0	899.6	899.6	527.0	528.6	0.0	0.0	2,857.4	2,851.8	347.9	294.9	408.7	346.7	408.7	346.7
East North Central	10,332.1	9,271.2	462.5	411.9	0.0	0.0	859.9	857.3	1,235.7	1,268.6	0.0	0.0	12,890.2	11,809.0	486.2	339.2	948.7	751.1	948.7	751.1
Illinois	4,803.7	4,380.9	40.6	34.9	0.0	0.0	34.1	34.1	88.8	100.0	0.0	0.0	4,967.2	4,549.9	116.6	60.7	157.2	95.6	157.2	95.6
Indiana	2,309.8	2,109.4	216.2	196.7	0.0	0.0	60.4	60.4	70.8	76.3	0.0	0.0	2,657.2	2,442.8	83.2	65.2	299.4	261.9	299.4	261.9
Michigan	2,061.8	1,735.8	98.2	82.0	0.0	0.0	269.9	266.9	561.2	559.1	0.0	0.0	2,991.1	2,643.8	72.5	54.7	170.7	136.7	170.7	136.7
Ohio	718.4	605.9	83.6	76.2	0.0	0.0	101.9	101.9	149.8	147.4	0.0	0.0	1,053.7	931.4	146.0	108.0	229.6	184.2	229.6	184.2
Wisconsin	438.4	439.2	23.9	22.1	0.0	0.0	393.6	394.0	365.1	385.8	0.0	0.0	1,221.0	1,241.1	67.9	50.5	91.8	72.6	91.8	72.6
West North Central	25,572.3	22,280.2	919.9	734.5	0.0	0.0	3,293.7	3,291.7	464.4	557.4	0.0	0.0	30,250.3	26,863.8	372.8	302.4	1,292.7	1,036.9	1,292.7	1,036.9
Iowa	8,791.8	7,143.8	10.5	9.2	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,970.1	7,320.8	100.4	80.8	110.9	90.0	110.9	90.0
Kansas	5,857.8	5,116.0	4.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,878.0	5,136.2	21.1	16.9	25.3	21.1	25.3	21.1
Minnesota	3,850.5	3,707.9	824.1	644.9	0.0	0.0	205.9	205.9	394.4	485.0	0.0	0.0	5,274.9	5,043.7	67.7	55.3	891.8	700.2	891.8	700.2
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	174.3	142.4	236.4	202.0	236.4	202.0
Nebraska	2,018.3	1,447.4	18.0	15.6	0.0	0.0	277.9	275.9	15.7	15.7	0.0	0.0	2,329.9	1,754.6	8.2	6.2	26.2	21.8	26.2	21.8
North Dakota	3,221.8	3,073.0	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,741.6	3,592.8	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	0.7	0.6	1.7	1.6	1.7	1.6
South Atlantic	1,086.3	1,086.3	8,123.1	6,413.0	0.0	0.0	7,226.4	7,229.2	4,199.5	4,300.6	0.0	0.0	20,635.3	19,029.1	1,913.7	1,534.2	10,036.8	7,947.2	10,036.8	7,947.2
Delaware	2.0	2.0	33.3	32.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	47.5	47.1	82.4	74.6	115.7	107.5	115.7	107.5
District of Columbia	0.0	0.0	6.9	0.0	0.0	0.0	0.0	0.0	23.0	23.0	0.0	0.0	29.9	23.0	52.1	44.0	59.0	44.0	59.0	44.0
Florida	0.0	0.0	1,918.4	1,117.2	0.0	0.0	54.5	54.5	1,180.8	1,230.8	0.0	0.0	3,153.7	2,402.5	378.9	237.1	2,297.3	1,354.3	2,297.3	1,354.3
Georgia	0.0	0.0	1,019.6	1,011.9	0.0	0.0	2,047.2	2,047.2	949.4	905.4	0.0	0.0	4,016.2	3,964.5	NM	158.1	NM	1,170.0	NM	1,170.0
Maryland	190.0	190.0	280.0	230.9	0.0	0.0	590.0	590.0	140.9	142.0	0.0	0.0	1,200.9	1,152.9	759.5	671.2	1,039.5	902.1	1,039.5	902.1
North Carolina	208.0	208.0	4,064.0	3,381.8	0.0	0.0	2,004.0	2,002.0	560.5	568.3	0.0	0.0	6,836.5	6,160.1	161.2	123.1	4,225.2	3,504.9	4,225.2	3,504.9
South Carolina	0.0	0.0	407.1	285.6	0.0	0.0	1,323.9	1,328.7	526.5	526.5	0.0	0.0	2,257.5	2,140.8	213.6	164.9	620.7	450.5	620.7	450.5
Virginia	0.0	0.0	393.8	352.7	0.0	0.0	866.0	866.0	806.2	892.4	0.0	0.0	2,066.0	2,111.1	77.6	55.0	471.4	407.7	471.4	407.7
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	7.8	6.1	7.8	6.1	7.8	6.1
East South Central	29.1	29.1	559.2	455.2	0.0	0.0	7,055.5	7,056.3	1,265.0	1,229.0	0.0	0.0	8,908.8	8,769.6	98.1	90.2	657.3	545.4	657.3	545.4
Alabama	0.0	0.0	194.1	179.3	0.0	0.0	3,292.0	3,290.8	694.2	685.9	0.0	0.0	4,180.3	4,156.0	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	72.2	72.2	0.0	0.0	1,245.4	1,245.4	25.0	20.5	51.3	46.8	51.3	46.8
Mississippi	0.0	0.0	160.6	160.6	0.0	0.0	0.0	0.0	302.4	274.7	0.0	0.0	463.0	435.3	7.6	6.9	168.2	167.5	168.2	167.5
Tennessee	29.1	29.1	178.2	89.0	0.0	0.0	2,616.6	2,618.6	196.2	196.2	0.0	0.0	3,020.1	2,932.9	57.7	56.2	235.9	145.2	235.9	145.2
West South Central	34,131.1	30,281.9	2,092.1	1,756.4	0.0	0.0	2,991.4	2,987.5	1,233.6	1,311.4	0.0	0.0	40,448.2	36,337.2	725.3	560.5	2,817.4	2,316.9	2,817.4	2,316.9
Arkansas	0.0	0.0	100.0	100.0	0.0	0.0	1,265.8	1,263.9	331.3	330.4	0.0	0.0	1,697.1	1,694.3	18.8	13.2	118.8	113.2	118.8	113.2
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	146.6	133.5	147.7	134.6	147.7	134.6
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	8.4	6.5	38.9	37.0	38.9	37.0
Texas	26,060.4	22,787.1	1,960.5	1,624.8	0.0	0.0	670.0	670.0	403.7	414.7	0.0	0.0	29,094.6	25,496.6	551.4	407.3	2,511.9	2,032.1	2,511.9	2,032.1
Mountain	9,565.8	8,914.0	5,938.7	5,608.0	473.9	473.9	10,653.4	10,575.9	175.7	174.3	766.0	582.8	27,573.5	26,328.9	2,519.6	2,189.2	8,458.3	7,797.2	8,932.2	8,271.1
Arizona	267.3	267.3	1,778.6	1,776.5	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,092.9	5,090.8	1,337.5	1,205.9	3,116.1	2,982.4	3,411.5	3,277.8
Colorado	3,703.7	3,182.7	546.9	465.3	0.0	0.0	686.4	687.4	28.7	28.7	0.0	0.0	4,965.7	4,364.1	368.8	340.9	915.7	806.2	915.7	806.2
Idaho	970.4	970.5	242.0	240.0	0.0	0.0	2,764.2	2,707.5	85.3	83.9	10.0	10.0	4,071.9	4,011.9	33.8	19.4	275.8	259.4	275.8	259.4
Montana	783.5	703.5	17.0	17.0	0.0	0.0	2,771.1	2,749.3	3.0	3.0	0.0	0.0	3,574.6	3,472.8	15.3	12.5	32.3	29.5	32.3	29.5
Nevada	150.0	150.0	1,821.7	1,707.7	178.5	178.5	1,051.4	1,051.4	9.8	9.8	674.4	498.2	3,885.8	3,595.6	355.4	258.5	2,177.1	1,966.2	2,355.6	2,144.7
New Mexico	1,815.4	1,764.5	581.4	544.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,493.7	2,398.8	151.1	132.1	732.5	676.5	732.5	676.5
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	252.4	216.0	1,111.5	1,073.1	1,111.5	1,073.1
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	5.3	3.7	97.3	3.7	97.3	3.7
Pacific Contiguous	12,340.8	12,115.0	11,203.7	10,189.7	1,284.0	1,284.0	39,863.4	39,855.4	1,904.8	1,963.3	1,832.3	1,873.5	68,429.0	67,280.9	8,801.6	7,517.9	20,005.3	17,707.6	21,289.3	18,991.6
California	6,057.5	5,831.7	10,863.7	9,937.1	1,284.0	1,284.0	10,185.9	10,198.2	1,205.7	1,254.2	1,812.8	1,854.0	31,409.6	30,359.2	8,467.1	7,260.2	19,330.8	17,197.3	20,614.8	18,481.3
Oregon	3,210.2	3,210.2	320.3	252.1	0.0	0.0	8,380.4	8,423.2	314.7	314.7	19.5	19.5	12,245.1	12,219.7	182.8	145.8	503.1	397.9	503.1	397.9
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,297.1	21,234.0	384.4	394.4	0.0	0.0	24,774.3	24,702.0	151.7	111.9	171.4	112.4	171.4	112.4
Pacific Noncontiguous	266.2	266.2	124.1	101.2	0.0	0.0	503.0	496.5	273.9	274.7	43.0	43.0	1,210.2	1,181.6	615.8	595.8	739.9	697.0	739.9	697.0
Alaska	60.6	60.6	0.0	0.0	0.0	0.0	470.6	470.6	7.0	7.0	0.0	0.0	538.2	538.2	3.7	2.6	3.7	2.6	3.7	2.6
Hawaii	205.6	205.6	124.1	101.2	0.0	0.0	32.4	25.9	266.9	267.7	43.0	43.0	672.0	643.4	612.1	593.2	736.2	694.4	736.2	694.4
U.S. Total	98,111.8	88,851.6	31,589.9	27,432.9	1,757.9	1,757.9	79,880.5	79,779.7	13,501.6	13,889.5	2,641.3	2,499.3	227,483.0	214,210.9	21,285.7	17,887.4	52,875.6	45,320.3	54,633.5	47,078.2

NM = Not meaningful due to large relative standard error.
Values 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, June 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	
	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018	June 2019	June 2018
New England	14,304.3	13,394.1	1,581.4	1,210.9	1,116.3	1,605.4	917.3	917.3	0.0	0.0	6,262.6	5,708.5	0.0	0.0	24,181.9	22,836.2
Connecticut	4,019.0	3,140.2	563.0	567.6	878.7	872.1	383.4	383.4	0.0	0.0	2,026.5	2,035.1	0.0	0.0	7,870.6	6,998.4
Maine	1,284.3	1,250.0	144.3	301.1	12.5	108.5	0.0	0.0	0.0	0.0	1,037.7	880.9	0.0	0.0	2,478.8	2,540.5
Massachusetts	5,955.8	5,985.7	857.9	331.6	199.7	199.7	0.0	0.0	0.0	0.0	2,599.2	2,588.4	0.0	0.0	9,612.6	9,105.4
New Hampshire	1,258.0	1,231.0	3.8	3.8	0.0	400.2	533.9	533.9	0.0	0.0	494.2	94.0	0.0	0.0	2,289.9	2,262.9
Rhode Island	1,787.2	1,787.2	12.4	6.8	25.4	24.9	0.0	0.0	0.0	0.0	7.1	12.2	0.0	0.0	1,832.1	1,831.1
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	97.9	0.0	0.0	97.9	97.9
Middle Atlantic	33,151.1	28,702.9	7,861.6	7,809.6	14,456.8	14,675.5	11,959.7	13,529.8	78.6	78.6	5,353.1	5,358.6	130.7	129.2	72,991.6	70,284.2
New Jersey	8,529.9	8,519.4	2,826.3	2,964.0	46.9	47.1	463.0	609.0	11.6	11.6	239.0	234.0	29.0	23.4	12,145.7	12,408.5
New York	8,938.6	8,691.4	3,173.0	3,164.4	9,661.6	9,685.5	1,631.5	1,640.2	0.0	0.0	3,558.8	3,515.9	0.0	0.0	26,963.5	26,697.4
Pennsylvania	15,682.6	11,492.1	1,862.3	1,681.2	4,748.3	4,942.9	9,865.2	11,280.6	67.0	67.0	1,555.3	1,608.7	101.7	105.8	33,882.4	31,178.3
East North Central	21,674.3	20,747.0	26,659.8	26,705.6	5,742.8	4,206.4	53,575.9	56,685.3	247.6	247.6	2,455.4	2,472.6	1,092.9	1,092.9	111,448.7	112,157.4
Illinois	3,580.2	3,580.2	10,519.8	10,449.1	1,629.8	289.9	12,626.0	13,974.0	0.0	0.0	677.0	674.2	36.5	36.5	29,069.3	29,003.9
Indiana	3,849.0	3,807.0	3,344.6	3,355.8	730.0	729.1	15,291.4	15,279.4	0.0	0.0	98.3	99.8	619.3	619.3	23,932.6	23,890.4
Michigan	4,413.6	4,421.0	3,874.0	3,969.2	2,558.5	2,383.5	8,608.3	9,216.7	47.2	47.2	463.5	486.5	250.0	250.0	20,215.1	20,774.1
Ohio	7,020.4	6,188.0	5,559.2	5,559.2	185.1	189.2	11,496.0	12,274.4	142.0	142.0	581.1	609.7	187.1	187.1	25,170.9	25,149.6
Wisconsin	2,811.1	2,750.8	3,362.2	3,372.3	639.4	614.7	5,554.2	5,940.8	58.4	58.4	635.5	602.4	0.0	0.0	13,060.8	13,339.4
West North Central	6,814.9	6,633.1	11,685.3	11,730.9	3,807.2	4,351.5	33,054.1	34,116.0	39.5	32.0	3,870.8	3,875.7	8.4	8.4	59,280.2	60,747.6
Iowa	1,779.8	1,772.6	1,260.4	1,258.2	540.5	420.5	5,371.7	5,497.9	39.5	32.0	816.5	820.3	0.0	0.0	9,808.4	9,801.5
Kansas	266.0	266.0	2,156.8	2,148.3	1,367.9	2,096.7	4,670.2	4,714.2	0.0	0.0	564.5	554.8	0.0	0.0	9,025.4	9,780.0
Minnesota	2,346.0	2,172.0	2,615.9	2,671.4	381.6	361.1	4,157.9	4,309.4	0.0	0.0	768.1	791.7	0.0	0.0	10,269.5	10,305.6
Missouri	1,794.9	1,789.9	3,400.6	3,399.6	871.1	836.4	10,470.9	11,260.8	0.0	0.0	1,112.5	1,100.5	0.0	0.0	17,650.0	18,387.2
Nebraska	338.2	342.6	1,149.0	1,150.8	525.8	516.5	3,867.0	3,817.3	0.0	0.0	322.0	321.2	0.0	0.0	6,202.0	6,148.4
North Dakota	0.0	0.0	408.0	408.0	111.6	111.6	4,042.4	4,042.4	0.0	0.0	63.2	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	60,857.5	55,045.2	31,920.6	32,061.1	6,769.2	7,387.0	53,120.7	54,752.3	142.8	142.8	8,936.2	10,392.9	135.0	135.0	161,882.0	159,916.3
Delaware	1,511.0	1,512.0	317.2	317.2	843.1	843.1	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,330.4	3,331.4
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	31,289.0	27,953.7	7,752.7	7,889.6	2,493.2	2,479.6	7,804.0	8,570.0	59.0	59.0	3,298.6	4,970.0	0.0	0.0	52,696.5	51,921.9
Georgia	7,989.0	7,954.2	7,791.0	7,787.2	842.9	832.9	9,398.5	9,360.5	83.8	83.8	945.4	945.4	0.0	0.0	27,050.6	26,964.0
Maryland	2,849.1	2,089.6	1,899.9	1,965.6	1,397.2	1,494.2	4,267.0	4,327.0	0.0	0.0	1,257.9	1,205.9	0.0	0.0	11,671.1	11,082.3
North Carolina	5,068.0	4,724.8	6,050.7	6,045.1	1.0	0.0	10,504.8	10,536.8	0.0	0.0	502.6	337.6	0.0	0.0	22,127.1	21,644.3
South Carolina	3,185.0	3,152.0	2,761.4	2,763.8	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	12,137.2
Virginia	8,966.4	7,658.9	4,245.3	4,194.3	530.3	1,068.2	2,966.4	3,778.0	0.0	0.0	2,339.7	2,345.5	0.0	0.0	19,048.1	19,044.9
West Virginia	0.0	0.0	1,093.4	1,089.3	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	13,781.3
East South Central	21,746.2	21,684.2	12,669.7	12,633.9	4,305.8	5,329.0	23,844.1	25,015.2	0.0	0.0	106.7	133.0	19.8	19.8	62,692.3	64,815.1
Alabama	9,699.0	9,618.4	2,575.8	2,532.2	1,938.8	2,766.3	5,276.0	5,503.1	0.0	0.0	42.6	42.6	19.8	19.8	19,552.0	20,482.4
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	7,847.7	1,336.8	1,344.6	2,040.8	2,236.5	1,444.0	1,804.0	0.0	0.0	9.0	35.3	0.0	0.0	12,659.7	13,268.1
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	61,381.1	60,492.3	14,423.7	13,977.4	31,846.8	31,660.5	30,628.1	31,585.8	954.7	957.9	175.6	174.8	680.8	655.3	140,090.8	139,504.0
Arkansas	4,603.4	4,566.0	702.8	702.8	796.0	802.0	5,105.3	5,110.0	0.0	0.0	12.2	12.2	0.0	0.0	11,219.7	11,193.0
Louisiana	8,430.6	7,533.0	2,349.6	2,357.9	6,057.6	6,528.4	2,833.7	2,832.6	890.9	894.1	43.1	43.3	407.4	407.4	21,012.9	20,596.7
Oklahoma	7,263.6	7,247.6	1,686.9	1,684.9	5,764.1	5,235.5	3,322.5	4,334.6	0.0	0.0	74.4	74.4	0.0	0.0	18,111.5	18,577.0
Texas	41,083.5	41,145.7	9,684.4	9,231.8	19,229.1	19,094.6	19,366.6	19,308.6	63.8	63.8	45.9	44.9	273.4	247.9	89,746.7	89,137.3
Mountain	22,510.8	22,513.8	9,149.1	8,638.9	3,615.4	3,838.9	26,765.5	26,815.5	52.0	52.0	349.9	356.3	103.5	107.4	62,546.2	62,322.8
Arizona	9,879.6	9,891.6	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	19,407.3
Colorado	3,249.5	3,240.5	2,568.1	2,572.3	639.0	639.0	4,440.0	4,499.0	0.0	0.0	166.4	168.4	0.0	0.0	11,063.0	11,119.2
Idaho	547.7	547.7	552.0	552.0	13.5	14.0	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,127.1	1,127.6
Montana	0.0	0.0	321.6	321.6	72.2	72.2	2,297.6	2,294.6	52.0	52.0	0.0	0.0	1.5	1.5	2,744.9	2,741.9
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	966.0	846.4	849.4	2,640.0	2,634.0	0.0	0.0	48.0	52.4	0.0	0.0	5,956.3	5,966.8
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	105.9	6,774.3	6,778.2
Pacific Contiguous	25,880.1	26,030.3	12,066.7	11,559.9	6,958.4	7,768.1	1,982.0	1,982.0	17.0	17.0	471.4	468.4	221.4	221.4	47,597.0	48,047.1
California	19,861.6	20,001.8	11,213.5	10,706.7	6,702.4	7,512.1	57.0	57.0	17.0	17.0	456.2	453.2	221.4	221.4	38,529.1	38,969.2
Oregon	3,382.9	3,374.9	133.8	133.8	224.4	224.4	585.0	585.0	0.0	0.0	0.0	0.0	0.0	0.0	4,326.1	4,318.1
Washington	2,635.6	2,653.6	719.4	719.4	31.6	31.6	1,340.0	1,340.0	0.0	0.0	15.2	15.2	0.0	0.0	4,741.8	4,759.8
Pacific Noncontiguous	479.2	479.2	626.3	626.3	175.0	175.0	332.8	332.8	0.0	0.0	2,605.1	2,602.1	6.4	6.4	4,224.8	4,221.8
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	733.2	730.2	0.0	0.0	2,166.5	2,163.5
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	268,799.5	255,722.1	128,644.2	126,954.5	78,793.7	80,997.3	236,180.2	245,732.0	1,532.2	1,527.9	30,586.8	31,542.9	2,398.9	2,375.8	746,935.5	744,852.5

NM = Not meaningful due to large relative standard error.
Values 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	61776		IPP	Oak Leaf Solar XXII LLC	CO	62252	53965	1.5	Solar Photovoltaic	SUN	PV
2019	1	61777		IPP	Oak Leaf Solar XXIII LLC	CO	62256	53966	1.5	Solar Photovoltaic	SUN	PV
2019	1	61780		IPP	Oak Leaf Solar XXIV LLC	CO	62253	53967	1.5	Solar Photovoltaic	SUN	PV
2019	1	61779		IPP	Oak Leaf Solar XXVI LLC	CO	62254	53970	1.5	Solar Photovoltaic	SUN	PV
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	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	7019	Gay & Robinson Inc	Industrial	Gay Robinson	HI	50333	HYD3	6.5	Conventional Hydroelectric	WAT	HY
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	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	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	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	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	61259	Altair Community Solar Garden, LLC	IPP	Altair Community Solar Garden	MN	61645	ALTA	1.0	Solar Photovoltaic	SUN	PV
2019	2	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV
2019	2	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	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
2019	2	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	11	2.8	Petroleum Liquids	DFO	IC
2019	2	61060	Cypress Creek Renewables	IPP	SCE&G Curie CSG	SC	61432	SCCU1	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	11479	Madison Gas & Electric Co	Electric Utility	Saratoga Wind Farm	IA	61070	SWE	66.0	Onshore Wind Turbine	WND	WT
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

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	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	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	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXXII	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	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
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	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

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	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	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT
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	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	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
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	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	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	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	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

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	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
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	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

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	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	19145	DTE Tuscola, LLC	Industrial	Tuscola Station	IL	55245	TG1	3.8	Natural Gas Steam Turbine	NG	ST
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	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	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	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
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	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

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	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

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	7	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	90.0
2019	7	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	7	61012	AES Distributed Energy	IPP	Williamsburg	MA	62202	WIL01	4.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.0
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA04	1.5	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.5
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA05	1.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.3
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA07	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA08	1.9	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.9
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA09	4.5	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	4.5
2019	7	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA10	1.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.3
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	(V) Under construction, more than 50 percent complete	50.0
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	(V) Under construction, more than 50 percent complete	50.0
2019	7	62627	Alchemy Renewable Energy	IPP	TPE Pennsylvania Solar 1, LLC	PA	62686	PABOE	3.6	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.6
2019	7	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
2019	7	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
2019	7	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	7	62671	Chester NY 1, LLC	IPP	Chester CSG	NY	62761	CH	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	7	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT	(TS) Construction complete, but not yet in commercial operation	58.2
2019	7	61060	Cypress Creek Renewables	IPP	Palmetto Plains	SC	62679	1405	75.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	75.0
2019	7	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Piqua Manier	OH	62792	AMPPM	12.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	12.6
2019	7	61187	DG Minnesota CSG, LLC	IPP	Haven Solar Project	MN	62651	HAVEN	3.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.0
2019	7	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2019	7	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	7	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	7	61610	Delaware River Solar, LLC	IPP	Pool Brook Rd Community Solar Farm	NY	62156	15	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	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	7	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	7	56201	Engie North America	IPP	Solomon Forks Wind Project, LLC	KS	61984	WTGS	275.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	275.6
2019	7	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	7	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	7	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	7	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	7	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	7	7140	Georgia Power Co	Electric Utility	Guyton Community Solar	GA	62392	1	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2019	7	60428	Green City Recovery, LLC	IPP	Green City Recovery, LLC	KY	60703	2	1.0	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	62674	Greenville NY 1, LLC	IPP	Greenville CSG	NY	62759	GV	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	7	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #2	CA	62418	4	1.0	Other Waste Biomass	OBG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	61952	Hanford Renewable Energy LLC	IPP	Verwey-Hanford Dairy Digester #3	CA	62419	4	1.0	Other Waste Biomass	OBG	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2019	7	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	7	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	7	9234	Indiana Municipal Power Agency	Electric Utility	Tipton Solar Park	IN	62305	STIP	5.3	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.3
2019	7	62649	KDC Solar ASGM LLC	IPP	KDC Solar ASGM	NJ	62739	ARDAH	3.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.8
2019	7	61886	Lockett Windfarm, LLC	IPP	Lockett Windfarm	TX	62356	LOC	183.8	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	183.8
2019	7	62038	MSC-Chisago01 LLC	IPP	MSC-Chisago01 LLC	MN	62536	52739	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	7	62037	MSC-Chisago02 LLC	IPP	MSC-Chisago02 LLC	MN	62538	52740	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	7	62039	MSC-Rice01 LLC	IPP	MSC-Rice01 LLC	MN	62537	52738	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	7	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	7	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	7	61396	Midway Wind, LLC	IPP	Midway Wind, LLC	TX	61776	MIDWY	162.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	162.9
2019	7	54913	NSTAR Electric Company	Electric Utility	Hampden Solar PV	MA	62073	LG390	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2019	7	62706	NY Baldwin I, LLC	IPP	Breesport Road Community Solar Farm	NY	62157	235	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	62630	NY Mooers I, LLC	IPP	Boas Rd #1 Community Solar Farm	NY	62530	496	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	62631	NY Mooers II, LLC	IPP	Boas Rd #2 Community Solar Farm	NY	62531	1010	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	62632	NY Mooers III, LLC	IPP	Boas Rd #3 Community Solar Farm	NY	62532	1011	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	7	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	18	13.5	Petroleum Liquids	DFO	GT	(TS) Construction complete, but not yet in commercial operation	15.4
2019	7	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	19	1.0	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	62149	Nautilus Goat Island Solar CSG LLC	IPP	Nautilus Goat Island Solar CSG LLC	RI	62672	GI	3.3	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.3
2019	7	61227	Nautilus Solar Solutions	IPP	Synergen Panorama, LLC CSG	MD	62327	SP	6.6	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	6.6
2019	7	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	7	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	7	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	7	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	7	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	7	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	7	61659	Panda Solar NC 7 , LLC	IPP	Panda Solar NC 7, LLC	NC	62125	20038	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	7	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	220.5
2019	7	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	7	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	7	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	7	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	7	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2019	7	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	7	61677	Sol Systems	IPP	Warren Solar Farm LLC	NC	62223	10423	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	7	61916	Spencer-Tioga Solar, LLC	IPP	Pasto Solar	NY	62389	PASTO	16.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	16.0
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	(TS) Construction complete, but not yet in commercial operation	1.7
2019	7	60947	Tesla Inc.	IPP	Blue Shld Of Cal- El Dorado Hlls Mtr B	CA	62077	PV1	2.1	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.1
2019	7	60472	Tungsten Mountain	IPP	Tungsten Mountain	NV	60785	TMSOL	7.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.3
2019	7	61881	USS King 2 CSG	IPP	USS King 2 CSG	MN	62358	USK12	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	7	61841	USS Lake Patterson Solar	IPP	USS Lake Patterson Solar CSG	MN	62337	USLP	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	8	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	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	3A	0.5	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	8	60877	Antelope DSR 3 LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	8	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	8	57449	Borrego Solar Systems Inc	Industrial	Acushnet Ball Plant 2	MA	62835	ESS-1	1.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.0
2019	8	57449	Borrego Solar Systems Inc	Industrial	Acushnet Ball Plant 2	MA	62835	ESS-2	0.5	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	0.5
2019	8	62662	Butter Solar, LLC	IPP	Cashton Solar	WI	62858	CAS3	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	62662	Butter Solar, LLC	IPP	Cumberland Solar	WI	62849	CUM4	2.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.5
2019	8	62662	Butter Solar, LLC	IPP	Elroy Solar	WI	62868	ELR5	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2019	8	62662	Butter Solar, LLC	IPP	Fennimore Solar	WI	62847	FEN6	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
2019	8	62662	Butter Solar, LLC	IPP	Forest City Solar	IA	62861	FOR7	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	8	62662	Butter Solar, LLC	IPP	New Lisbon Solar	WI	62848	NEW9	2.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.5
2019	8	62662	Butter Solar, LLC	IPP	St. Charles Solar	MN	62869	STC10	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	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	8	58871	Citizens Enterprises Corporation	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2019	8	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	7	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	8	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	8	3.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	3.3
2019	8	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	8	62648	DG 1 Acquisition Co., LLC	IPP	Solar Star Palo Alto I, LLC	CA	62732	SSPAI	1.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.3
2019	8	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	8	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	8	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	8	61610	Delaware River Solar, LLC	IPP	Hospital Rd Community Solar Farm	NY	62155	9	1.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.4
2019	8	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	8	61420	ENGIE Storage Services NA LLC	Commercial	Pacific Union College BESS	CA	61795	12649	1.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.0
2019	8	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	8	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	8	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	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPBE	2.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPSE	4.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.5
2019	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPBF	2.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPSF	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPBM	2.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	8	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPSM	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	8	60025	Greenbacker Renewable Energy Corporation	IPP	Camden Dam Solar, LLC	NC	62330	CMDND	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	8	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	8	60025	Greenbacker Renewable Energy Corporation	IPP	Mill Pond Solar, LLC	NC	62328	MLLPD	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	8	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	8	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	8	62666	KDC Solar CSCP LLC	IPP	KDC Solar CSCP LLC	NJ	62746	CSCP	3.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.4
2019	8	59898	Kawailoa Solar, LLC	IPP	Kawailoa Solar	HI	60125	KAWS	49.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	49.0
2019	8	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	8	62660	MSC-Empire01, LLC	IPP	MSC-Empire01, LLC	MN	62740	52784	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	8	62035	MSC-Scott01 LLC	IPP	MSC-Scott01 LLC	MN	62535	52737	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	8	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARFS	1.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.4
2019	8	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARMS	1.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2019	8	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	8	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	8	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	8	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	8	59170	North American Biofuels, LLC	IPP	Morehead Generating Facility	KY	62641	M3516	1.4	Landfill Gas	LFG	IC	(V) Under construction, more than 50 percent complete	1.4
2019	8	62691	Novel Martin Solar One LLC	IPP	Novel Martin Solar One LLC (McLeod)	MN	62779	MART	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	8	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	8	61614	Rollingstone Holdco LLC	IPP	Rollingstone Holdco CSG	MN	62037	ROLLI	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	8	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	8	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
2019	8	62123	SunRaise Investments, LLC	IPP	Happy Hollow CSG	MA	62652	HHESS	3.3	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	3.3
2019	8	62123	SunRaise Investments, LLC	IPP	Happy Hollow CSG	MA	62652	HHPV	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	8	60947	Tesla Inc.	IPP	Pima Community College	AZ	62075	PV1	1.1	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.1
2019	8	61883	USS DVL Solar CSG	IPP	USS DVL Solar CSG	MN	62360	USDVL	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	8	61885	USS East Hauer Watt Solar CSG	IPP	USS East Hauer Watt CSG	MN	62362	USEHW	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	8	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	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	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	9	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	9	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	9	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	9	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	9	62772	CA ODEVI LLC	IPP	Windsor Floating Solar	CA	62902	WUS15	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7474	0.3	Other Waste Biomass	AB	ST	(T) Regulatory approvals received. Not under construction	0.8
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7475	0.3	Other Waste Biomass	AB	ST	(T) Regulatory approvals received. Not under construction	0.8
2019	9	62749	Carolina Poultry Power	Electric CHP	Carolina Poultry Power Farmville	NC	62873	7476	0.1	Other Waste Biomass	AB	ST	(T) Regulatory approvals received. Not under construction	0.1
2019	9	3913	City of Colby - (KS)	Electric Utility	Colby City of	KS	1272	9	3.0	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	3.0
2019	9	8245	City of Hastings - (NE)	Electric Utility	Hastings Community Solar Farm	NE	62833	PV	0.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
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	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	9	56769	Consolidated Edison Development Inc.	IPP	CED Northampton Solar LLC	MA	62695	NSMA	4.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.3
2019	9	40215	Cordova Electric Coop, Inc	Electric Utility	Eyak Service Center BESS	AK	62714	BESS1	1.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	1.0
2019	9	61610	Delaware River Solar, LLC	IPP	Burritt Rd Community Solar Farm	NY	62480	635	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	9	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	9	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
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	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	158.0
2019	9	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	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	61728	GlidePath Power Operations LLC	IPP	Prospect Storage	TX	62753	BESS	9.9	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	9.9
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	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	60986	Imperial Valley Solar 2, LLC	IPP	Mount Signal Solar 2	CA	61353	IVS2	153.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	153.5
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	61925	Middlesex-Yates Solar, LLC	IPP	Daum Solar	NY	62412	DAUM	4.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.0
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	(V) Under construction, more than 50 percent complete	250.0
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	(L) Regulatory approvals pending. Not under construction	2.0
2019	9	16534	Sacramento Municipal Util Dist	Electric Utility	White Rock/Slab Creek	CA	435	H3	2.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	2.7
2019	9	17609	Southern California Edison Co	Electric Utility	DESI-1 Battery Energy Storage Facility	CA	60699	DESI1	2.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	2.4
2019	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	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant	AR	62682	FAYE1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	9	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant	AR	62682	FAYEB	6.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	6.0
2019	9	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant	AR	62683	FAYW1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2019	9	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant	AR	62683	FAYWB	6.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	6.0
2019	9	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	9	61980	Valta Energy	IPP	Mauka FIT One	HI	58662	3501	3.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.5
2019	9	62711	Wabasha Solar LLC	IPP	Wabasha Solar	MN	62800	WAB	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	9	62712	Winona Solar I LLC	IPP	Winona Solar	MN	62799	WIN	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	61973	Black Hills Electric Generation LLC	IPP	Busch Ranch II Wind Farm	CO	62445	WT	59.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	59.4
2019	10	16604	City of San Antonio - (TX)	Electric Utility	Commerce Solar	TX	62610	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	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	(U) Under construction, less than or equal to 50 percent complete	36.9
2019	10	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
2019	10	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
2019	10	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
2019	10	60496	Enerparc Inc.	IPP	Brush Solar Center	OR	61844	BRUSH	2.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.8
2019	10	60496	Enerparc Inc.	IPP	Morgan Solar Center	OR	61855	MORGN	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	60496	Enerparc Inc.	IPP	Vale Solar Center	OR	61856	VALE	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	60259	Green River Wind Farm, LLC	IPP	Green River Wind Farm	IL	60471	GRNRV	212.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	212.0
2019	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	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
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	60975	SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332	NIKE2	1.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.7
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG4	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG5	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG6	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG7	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	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
2019	10	60531	Standard Solar	IPP	Sugarhill Road - Solitude Solar CSG	NY	62788	X0040	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	10	62715	Westbound Solar LLC	Commercial	Amazon Denver DEN3	CO	62877	ADEN3	4.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(U) Under construction, less than or equal to 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	61544	Bani Solar, LLC	IPP	Bani Solar	SC	61938	4	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	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	60656	Chestnut Solar LLC	IPP	Chestnut Solar	NC	61011	PV1	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2019	11	62084	DG Florham Park Solar LLC	IPP	DG Florham Park Solar LLC	NJ	62586	BASF	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	2.0
2019	11	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
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #1	NY	62525	40	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #2	NY	62526	41	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #3	NY	62527	390	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Villa Roma Rd #4	NY	62528	391	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	11	61610	Delaware River Solar, LLC	IPP	Woodoak Drive Community Solar Farm	NY	62479	175	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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	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	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	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	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	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	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	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
2019	12	61617	Alpha Value Solar, LLC	IPP	Alpha Value Solar	NC	62054	AVS01	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	60281	Altus Power America Management, LLC	IPP	FastSun 2	MN	62696	FS2	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	12	15399	Avangrid Renewables LLC	IPP	Coyote Ridge	SD	61047	WT1	98.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	98.0
2019	12	15399	Avangrid Renewables LLC	IPP	Karankawa Wind LLC	TX	61343	WT1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Montague Wind Power Facility LLC	OR	58099	1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 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	(P) Planned for installation, but regulatory approvals not initiated	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	98.0
2019	12	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	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	60719	Broadlands Wind Farm LLC	IPP	Broadlands Wind Farm	IL	61161	GEN01	300.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	300.0
2019	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
2019	12	59365	Capital Power Corporation	IPP	Garrison Butte Wind, LLC	ND	60066	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2019	12	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	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	18488	City of Taunton	Electric Utility	Cleary Flood	MA	1682	BS1	2.9	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
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	56769	Consolidated Edison Development Inc.	IPP	Burt County Wind	NE	61511	BCNE	75.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.0
2019	12	60290	Crocker Wind Farm, LLC	IPP	Crocker Wind Farm	SD	60505	CRCKR	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	59550	Croda Inc.	Industrial	Croda Atlas Point CHP	DE	59783	91199	2.0	Landfill Gas	LFG	IC	(L) Regulatory approvals pending. Not under construction	2.0
2019	12	61416	Crowned Ridge Wind, LLC	IPP	Crowned Ridge Wind Energy Center	SD	60503	CTTL1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	59464	Current Energy Group	IPP	Hickory	NC	59829	5515	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0

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	61060	Cypress Creek Renewables	IPP	Crooked Run	NC	62678	299	70.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	70.1
2019	12	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
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	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	(T) Regulatory approvals received. Not under construction	5.0
2019	12	56215	E ON Climate Renewables N America LLC	IPP	Peyton Creek Wind Farm LLC	TX	62417	WT1	220.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.0
2019	12	56215	E ON Climate Renewables N America LLC	IPP	West of the Pecos Solar	TX	62415	WOTP1	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	100.0
2019	12	57170	EDF Renewable Asset Holdings, Inc.	IPP	Valentine Solar, LLC	CA	62288	VAL01	111.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	111.2
2019	12	61420	ENGIE Storage Services NA LLC	Commercial	San Diego International Airport BESS	CA	62754	BA	2.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	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	58135	Ecos Energy LLC	IPP	Weybridge 1 Solar	VT	61038	WEY1	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	61915	Emmons-Logan Wind, LLC	IPP	Emmons-Logan Wind, LLC	ND	62380	ELLLC	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2019	12	60496	Enerparc Inc.	IPP	Baker City Solar	OR	61854	BAKER	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	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	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	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
2019	12	56615	First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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
2019	12	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
2019	12	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(U) Under construction, less than or equal to 50 percent complete	211.7
2019	12	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
2019	12	61912	Grazing Yak Solar, LLC	IPP	Grazing Yak Solar	CO	62376	PV1	35.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	35.0
2019	12	60222	Haida Energy, Inc.	Electric Utility	Hiilangaay Hydro	AK	59037	GEN 1	5.0	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	12	62638	Helen Solar LLC	IPP	Helen Solar CSG	MN	62706	SC	4.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(P) Planned for installation, but regulatory approvals not initiated	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	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
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 2 Solar Park	IN	62484	SCRA2	7.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.9
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 3 Solar Park	IN	62485	SCRA3	4.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.8
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	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	1	0.5	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	12	62661	Lock 12 Hydro Partners, LLC	IPP	Ravenna Hydroelectric Project	KY	62747	4	0.5	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	12	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
2019	12	61770	Mesteno Wind	IPP	Mesteno	TX	62258	MES	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	201.6
2019	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
2019	12	12341	MidAmerican Energy Co	Electric Utility	Ida Grove II	IA	62795	1	201.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	201.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	North English II	IA	62608	1	140.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	140.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077	2	398.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	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	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	(T) Regulatory approvals received. Not under construction	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	62739	Otter River Road Solar LLC	IPP	Gardner - Otter River Road	MA	62870	79711	2.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.5
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	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
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	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	(U) Under construction, less than or equal to 50 percent complete	102.5
2019	12	61635	SR Hazlehurst III, LLC	IPP	Hazlehurst III	GA	62057	HZIII	40.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 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	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
2019	12	60897	Salinas Valley Solid Waste Authority	IPP	Crazy Horse Solar Project	CA	61285	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	16609	San Diego Gas & Electric Co	Electric Utility	Top Gun Energy Storage	CA	61366	TGES	30.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	30.0
2019	12	61321	Seabrook Solar, LLC	IPP	Seabrook Solar	SC	61701	GEN1	70.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	72.5
2019	12	62023	Skeleton Creek Energy Center	IPP	Skeleton Creek Energy Center	OK	62494	SKC	250.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	250.0
2019	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
2019	12	61677	Sol Systems	IPP	Thanksgiving Fire Solar Farm, LLC	NC	62786	12087	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	12	62766	Somerville Solar, LLC	IPP	Somerville Solar	TN	62900	PV	2.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	4.2
2019	12	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	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	61884	USS Brude Solar CSG	IPP	USS Brude Solar CSG	MN	62361	USBRU	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	12	61847	USS Centerfield Solar LLC	IPP	USS Centerfield Solar CSG	MN	62335	USCEN	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	12	61846	USS Hockey Pad Solar LLC	IPP	USS Hockey Pad Solar CSG	MN	62334	USHP	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	12	61840	USS Rapidan Solar	IPP	USS Rapidan Solar CSG	MN	62338	USRAP	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	12	62701	Vista Solar, Inc.	IPP	Shelter Creek Condominiums Solar	CA	62806	SCC01	2.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.5
2019	12	62637	Walcott Solar LLC	IPP	Walcott Solar CSG	MN	62707	SC	4.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.0
2019	12	62641	Warsaw Solar LLC	IPP	Warsaw Solar CSG	MN	62709	SC	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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	1	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	1	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	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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	9417	Interstate Power and Light Co	Electric Utility	Whispering Willow North	IA	62079	1	199.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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	61677	Sol Systems	IPP	Grove Solar, LLC	NC	62807	12083	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	1	18454	Tampa Electric Co	Electric Utility	Little Manatee River Solar	FL	62750	GEN1	74.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.5
2020	1	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(OT) Other	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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	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	2	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	2	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	2	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	2	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	2	56215	E ON Climate Renewables N America 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	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	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Park 3	IN	62770	SRIC3	6.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.6
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	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1A	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1B	194.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1S	215.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	237.2
2020	3	62747	Acorn I Energy Storage LLC	IPP	Acorn I Energy Storage LLC	CA	62874	ACOR1	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	150.0
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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	2.5
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	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
2020	3	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT2	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
2020	3	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT3	8.7	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	8.9
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN1	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60718	Energy Resources USA, Inc.	IPP	Tom Bevill Lock and Dam Hydroelectric	AL	61749	GEN3	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.0
2020	3	60496	Enerparc Inc.	IPP	Scituate RI Solar, LLC	RI	61841	SCITU	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2020	3	61873	GA Solar 4	IPP	Twiggs Solar	GA	61696	TWIGG	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	3	9234	Indiana Municipal Power Agency	Electric Utility	Scottsburg Solar Park	IN	62766	SCCOT	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
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	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	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	(L) Regulatory approvals pending. Not under construction	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

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	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	(U) Under construction, less than or equal to 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	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	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	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	4	9234	Indiana Municipal Power Agency	Electric Utility	Gas City Solar Park	IN	62767	SGASC	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2020	4	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	4	61298	Pine Gate Renewables	IPP	TWE Bowman Solar Project	SC	62828	BOW	73.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	75.0
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	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	4	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	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	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	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	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	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	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	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	3.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.0
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	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	(T) Regulatory approvals received. Not under construction	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	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	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	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	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	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	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	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	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	6	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	6	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	6	49846	Covanta Honolulu Resource Recovery	Commercial	H Power	HI	10334	PV1	2.1	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.1
2020	6	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	6	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	6	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	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	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	56201	Engie North America	IPP	ENGIE Long Draw Solar LLC	TX	62845	SP1	225.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	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	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	250.0
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Lake Charles Power	LA	60927	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	6	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	6	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	6	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	6	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	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	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	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG1	283.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	450.0
2020	6	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	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	2.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.5
2020	6	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	6	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	6	61750	Jefferson Solar	IPP	Jefferson Solar	SC	62233	47	8.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	8.2

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	6	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	6	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	6	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	6	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2020	6	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	6	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	6	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	6	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	6	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	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
2020	6	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	6	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	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	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	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	6	61794	Pee Dee Solar II	IPP	Pee Dee Solar II	SC	62283	61	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	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	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	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	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	6	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	6	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	6	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	6	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	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	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	6	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	6	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	6	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	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	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	6	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	6	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	6	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	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	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	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	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	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	6	61871	York Solar	IPP	York Solar	SC	62354	94	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	7	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Park 4	IN	62791	SRIC4	7.9	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.9
2020	7	61219	Longroad Energy Services LLC	IPP	El Campo Wind	TX	62765	CAMPO	242.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	242.8
2020	7	61219	Longroad Energy Services LLC	IPP	Prospero Solar	TX	62755	PROSP	300.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	300.0
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	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	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	7	61677	Sol Systems	IPP	Ruff Solar LLC	NC	62594	11625	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	60776	Aksamit Resource Management	IPP	Milligan III Wind Farm	NE	61159	M3001	73.4	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	73.4
2020	8	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK2	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	8	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	14232	Otter Tail Power Co	Electric Utility	Merricourt Wind Project	ND	57048	1	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	GTG1	41.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	41.0
2020	8	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	STG1	75.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	75.0
2020	8	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	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

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	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	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	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	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	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	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	56215	E ON Climate Renewables N America 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	5580	East Kentucky Power Coop, Inc	Electric Utility	Green Valley LFGTE	KY	56278	4	0.8	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	0.8
2020	10	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	61593	Pleinmont Solar 2 LLC	IPP	Pleinmont Solar 2	VA	62013	PLNM2	240.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	240.0
2020	10	61590	Richmond Spider Solar LLC	IPP	Richmond Spider Solar	VA	62011	RMDSS	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	10	60568	Sugar Creek Wind One LLC	IPP	Sugar Creek Wind One LLC	IL	58924	SUG1	175.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	175.0
2020	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	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	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	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	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	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	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	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	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	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	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

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	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	56215	E ON Climate Renewables N America 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	E ON Climate Renewables N America 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	E ON Climate Renewables N America 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	61785	EDP Renewables North America LLC	IPP	Crossing Trails Wind Farm	CO	62489	GEN1	104.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	104.0
2020	12	61785	EDP Renewables North America LLC	IPP	Headwaters Wind Farm II LLC	IN	62592	HWII	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2020	12	56987	East Blackland Solar Project 1 LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	144.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	144.0
2020	12	62667	East Line Solar, LLC	IPP	East Line Solar	AZ	62899	EASTL	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	58970	Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	17.0
2020	12	58970	Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2020	12	5860	Empire District Electric Co	Electric Utility	Kings Point Wind Energy Center	MO	62475	KPW1	149.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	149.4
2020	12	5860	Empire District Electric Co	Electric Utility	Neosho Ridge Wind Energy Center	KS	62481	NRW1	301.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	301.0
2020	12	5860	Empire District Electric Co	Electric Utility	North Fork Ridge Wind Energy Center	MO	62478	NFRW1	149.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	149.4
2020	12	59497	Eversource	IPP	Martha's Vineyard Community Battery	MA	62605	MVESS	4.9	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	4.9
2020	12	59497	Eversource	IPP	Outer Cape Community Battery	MA	62604	OCESS	25.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	25.0
2020	12	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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

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	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	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	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	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	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	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	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	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	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
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	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	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	Lake Hancock Solar	FL	61657	PV1	49.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2021	1	18454	Tampa Electric Co	Electric Utility	Mountain View Solar (FL)	FL	61664	GEN1	52.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	52.5
2021	1	19876	Virginia Electric & Power Co	Electric Utility	Coastal Virginia Offshore Wind (CVOW)	VA	59693	OSW1	12.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	12.0
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R1	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R2	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	R3	18.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-1	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	CTG-2	229.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	232.0
2021	2	59686	Coronado Power Ventures LLC	IPP	Pinecrest Energy Center	TX	59923	STG	289.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	289.0
2021	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	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	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	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	6	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	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	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	5.3
2021	10	60720	Martinsdale Wind Farm LLC	IPP	Martinsdale Wind Farm	MT	61108	MTD	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2021	10	59056	Tri Global Energy, LLC	IPP	Water Valley Wind Energy	TX	62846	WWE1	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2021	11	62734	Blue Marmot IX LLC	IPP	Blue Marmot IX	OR	62867	DVRO	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62735	Blue Marmot V LLC	IPP	Blue Marmot V	OR	62866	DNZE	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62736	Blue Marmot VI LLC	IPP	Blue Marmot VI	OR	62865	DNZW	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62737	Blue Marmot VII LLC	IPP	Blue Marmot VII	OR	62864	RSHEI	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	62738	Blue Marmot VIII LLC	IPP	Blue Marmot VIII	OR	62863	PRMLE	9.8	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2021	11	6452	Florida Power & Light Co	Electric Utility	Manatee Solar Energy Center	FL	60014	BMS	409.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	409.0
2021	11	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	3	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2021	11	61797	Hecate Energy LLC	IPP	Hecate Energy Columbia County Solar	NY	62273	HECC1	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
2021	11	61762	Long Ridge Energy Generation LLC	IPP	Hannibal Port Power Project	OH	61322	HPPP1	485.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	485.0
2021	12	61477	325MK 8me LLC	IPP	Eagle Shadow Mountain Solar Farm	NV	61852	ESMSF	300.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	300.0
2021	12	60796	91MC 8me LLC	IPP	Peak Valley Solar Farm	CA	61167	91MC8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	12	61783	Alabama Ledge Wind Farm LLC	IPP	Alabama Ledge Wind Farm LLC	NY	62261	GEN1	79.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	79.8
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	59192	Amity Energy, LLC	IPP	Amity Energy LLC	PA	59418	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2021	12	803	Arizona Public Service Co	Electric Utility	Cotton Center Solar	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	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	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	56215	E ON Climate Renewables N America 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	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	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	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	AR	62617	SEABT	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	12	62109	Searcy Solar, LLC	IPP	Searcy Solar	AR	62617	SEARC	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
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	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	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	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	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	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	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	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	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	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 1 Solar Farm	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 1 Solar Farm	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

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	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	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	NV	62248	2	75.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	75.0
2022	12	56215	E ON Climate Renewables N America LLC	IPP	Pinckard Solar	AL	62787	PCKND	79.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	85.1
2022	12	62760	EDPR CA Solar Park VI LLC	IPP	EDPR CA Solar Park VI LLC (CA)	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)	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	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG1	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.4	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.4
2022	12	56939	Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL	57622	GEN1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2022	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
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 2 Solar Farm	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 2 Solar Farm	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	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	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	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	7	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	7	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	GT
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	7	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2019	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	UNIT3	0.4	Petroleum Liquids	DFO	IC
2019	8	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	8	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2019	8	4226	Consolidated Edison Co-NY Inc	Electric Utility	Hudson Avenue	NY	2496	4	13.5	Petroleum Liquids	KER	GT
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	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN1	34.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2019	9	55795	Bethlehem Renewable Energy LLC	IPP	Bethlehem Renewable Energy LLC	PA	56572	1	3.7	Landfill Gas	LFG	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	10	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	7	480.0	Natural Gas Steam Turbine	NG	ST
2019	10	1752	Biola University	Commercial	Biola University	CA	54296	EG1	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	10	1752	Biola University	Commercial	Biola University	CA	54296	EG2	0.6	Natural Gas Internal Combustion Engine	NG	IC
2019	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	11	20424	West Texas Wind Energy Partners LLC	IPP	West Texas Wind Energy LLC	TX	55367	01	75.0	Onshore Wind Turbine	WND	WT
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	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	1	2.1	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	2	1.0	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	3	0.6	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC5	1.2	Petroleum Liquids	DFO	IC
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	IC6	1.2	Petroleum Liquids	DFO	IC
2019	12	4161	Constellation Power Source Gen	IPP	Riverside (MD)	MD	1559	GT8	20.0	Petroleum Liquids	DFO	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT05	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT06	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT07	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT08	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT09	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT10	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT11	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	6035	Exelon Power	IPP	Southeast Chicago Energy Project	IL	55281	GT12	37.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	59879	Greenleaf Energy LLC	Electric CHP	Greenleaf 2 Power Plant	CA	10349	GEN1	49.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	8688	Hofstra University	Commercial	Hofstra University	NY	51035	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2019	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Lake Road (MO)	MO	2098	4	97.1	Natural Gas Steam Turbine	NG	ST

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	12	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	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	1	71.0	Natural Gas Steam Turbine	NG	ST
2019	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	1	38.0	Natural Gas Steam Turbine	NG	ST
2019	12	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	1	307.0	Conventional Steam Coal	SUB	ST
2019	12	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	2	307.0	Conventional Steam Coal	SUB	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	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	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG1	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG2	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	2	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG3	2.8	Natural Gas Internal Combustion Engine	NG	IC
2020	3	6452	Florida Power & Light Co	Electric Utility	Indiantown Cogeneration LP	FL	50976	GEN1	330.0	Conventional Steam Coal	BIT	ST
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	5	50161	FirstEnergy Nuclear Operating Company	IPP	Davis Besse	OH	6149	1	894.0	Nuclear	NUC	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	11241	Entergy Louisiana LLC	Electric Utility	R S Nelson	LA	1393	4	424.7	Natural Gas Steam Turbine	NG	ST
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Sterlington	LA	1404	7C	47.6	Natural Gas Fired Combined Cycle	NG	CA
2020	6	11241	Entergy Louisiana LLC	Electric Utility	Waterford 1 & 2	LA	8056	1	411.0	Natural Gas Steam Turbine	NG	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	7	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	GTG1	12.0	Natural Gas Fired Combined Cycle	NG	CT
2020	7	57463	Kimberly-Clark Worldwide Inc	Industrial	Fullerton Mill CHP	CA	58083	STG1	1.0	Natural Gas Fired Combined Cycle	NG	CA
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2020	9	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	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
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	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

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
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2021	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	ST
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	ST2	385.0	Conventional Steam Coal	BIT	ST
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	1575	1.6	Conventional Hydroelectric	WAT	HY
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	500	0.5	Conventional Hydroelectric	WAT	HY
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	2	901.0	Nuclear	NUC	ST
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	1	2.6	Petroleum Liquids	DFO	IC
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	2	1.1	Petroleum Liquids	DFO	IC
2021	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	1	197.7	Conventional Steam Coal	SUB	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	1	29.5	Conventional Steam Coal	LIG	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	2	74.8	Conventional Steam Coal	LIG	ST
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	4	6452	Florida Power & Light Co	Electric Utility	Manatee	FL	6042	1	809.0	Petroleum Liquids	RFO	ST
2022	4	6452	Florida Power & Light Co	Electric Utility	Manatee	FL	6042	2	809.0	Petroleum Liquids	RFO	ST
2022	5	5109	DTE Electric Company	Electric Utility	River Rouge	MI	1740	3	272.0	Conventional Steam Coal	SUB	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	2	154.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	3	160.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	6	311.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	St Clair	MI	1743	7	440.0	Conventional Steam Coal	RC	ST
2022	5	5109	DTE Electric Company	Electric Utility	Trenton Channel	MI	1745	9	495.0	Conventional Steam Coal	SUB	ST
2022	6	11241	Entergy Louisiana LLC	Electric Utility	Sterlington	LA	1404	7A	47.6	Natural Gas Fired Combined Cycle	NG	CT
2022	6	56192	Entergy Nuclear Palisades LLC	IPP	Palisades	MI	1715	1	804.2	Nuclear	NUC	ST
2022	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	1	212.0	Natural Gas Steam Turbine	NG	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	1	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	2	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	8	60791	Monroe County (NY)	Commercial	Iola Powerhouse & Cogeneration Facility	NY	62424	3	1.4	Natural Gas Internal Combustion Engine	NG	IC
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	2	140.0	Conventional Steam Coal	BIT	ST
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	4	140.0	Conventional Steam Coal	BIT	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	2	76.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0	Natural Gas Steam Turbine	NG	ST
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	4	61.0	Petroleum Liquids	DFO	GT
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	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	1	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	2	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	3	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	ST4	64.0	Conventional Steam Coal	BIT	ST
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

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	6	18488	City of Taunton	Electric Utility	Cleary Flood	MA	1682	8	26.0	Petroleum Liquids	RFO	ST
2023	6	12685	Entergy Mississippi LLC	Electric Utility	Baxter Wilson	MS	2050	1	529.8	Natural Gas Steam Turbine	NG	ST
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	1	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	2	2.0	Petroleum Liquids	DFO	IC
2023	9	17166	Sierra Pacific Power Co	Electric Utility	Brunswick	NV	6510	3	2.0	Petroleum Liquids	DFO	IC
2023	10	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	ST
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2023	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
2023	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	1	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Laverne Battery	MN	58579	1	1.0	Batteries	MWH	BA
2023	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	6	163.0	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	1	64.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	2	90.8	Natural Gas Steam Turbine	NG	ST
2023	12	14127	Omaha Public Power District	Electric Utility	North Omaha	NE	2291	3	86.0	Natural Gas Steam Turbine	NG	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	1	245.0	Conventional Steam Coal	BIT	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	A B Brown	IN	6137	2	245.0	Conventional Steam Coal	BIT	ST
2023	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	F B Culley	IN	1012	2	90.0	Conventional Steam Coal	BIT	ST
2023	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	2	106.0	Natural Gas Steam Turbine	NG	ST
2023	12	18642	Tennessee Valley Authority	Electric Utility	Bull Run	TN	3396	1	870.0	Conventional Steam Coal	BIT	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	1	4.7	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	2	4.8	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	3	11.0	Petroleum Liquids	RFO	ST
2024	1	11843	Maui Electric Co Ltd	Electric Utility	Kahului	HI	6056	4	11.9	Petroleum Liquids	RFO	ST
2024	6	11241	Entergy Louisiana LLC	Electric Utility	Waterford 1 & 2	LA	8056	2	427.5	Natural Gas Steam Turbine	NG	ST
2024	7	1951	White Pine Electric Power LLC	IPP	White Pine Electric Power	MI	10148	GEN3	18.0	Natural Gas Steam Turbine	NG	ST
2024	11	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	1	1,122.0	Nuclear	NUC	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	1	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	2	420.0	Conventional Steam Coal	SUB	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	1	217.0	Natural Gas Steam Turbine	NG	ST
2024	12	16604	City of San Antonio - (TX)	Electric Utility	V H Braunig	TX	3612	2	230.0	Natural Gas Steam Turbine	NG	ST
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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	2	51.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	3	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	5	52.0	Petroleum Liquids	DFO	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	6	48.0	Petroleum Liquids	DFO	GT
2025	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	2	335.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	2	268.0	Conventional Steam Coal	SUB	ST
2025	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	2	65.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	2	183.0	Natural Gas Steam Turbine	NG	ST
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	2	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	3	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	2	670.0	Conventional Steam Coal	RC	ST
2025	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Craig (CO)	CO	6021	1	427.0	Conventional Steam Coal	SUB	ST
2026	1	21622	The University of Texas at Dallas	Commercial	University of Texas at Dallas	TX	54607	GEN1	3.5	Natural Gas Internal Combustion Engine	NG	IC
2026	6	11241	Entergy Louisiana LLC	Electric Utility	Little Gypsy	LA	1402	2	416.0	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	3	410.7	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	4	533.4	Natural Gas Steam Turbine	NG	ST
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	11.9	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	9.4	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	1	420.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	3	97.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	4	83.0	Natural Gas Fired Combined Cycle	NG	CA
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT1	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT2	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	2	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	56997	Marina Energy LLC	IPP	L'Oreal Piscataway	NJ	57868	UNIT1	0.8	Solar Photovoltaic	SUN	PV
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	1	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	2	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	3	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	5	47.0	Natural Gas Fired Combustion Turbine	NG	GT
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

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
2027	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	4	190.0	Natural Gas Steam Turbine	NG	ST
2028	1	56997	Marina Energy LLC	IPP	Freeze Solar	NJ	60759	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	A	0.8	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	B	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	C	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HM	0.8	Solar Photovoltaic	SUN	PV
2028	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	2	410.0	Natural Gas Steam Turbine	NG	ST
2028	12	9324	Indiana Michigan Power Co	Electric Utility	Rockport	IN	6166	1	1,300.0	Conventional Steam Coal	SUB	ST
2028	12	56997	Marina Energy LLC	IPP	ACCC Mays Landing	NJ	60802	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	12	56997	Marina Energy LLC	IPP	IFF Hazlet	NJ	60709	GRND	3.0	Solar Photovoltaic	SUN	PV
2028	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	1	112.0	Natural Gas Steam Turbine	NG	ST
2029	5	5109	DTE Electric Company	Electric Utility	Belle River	MI	6034	ST1	635.0	Conventional Steam Coal	RC	ST
2029	6	11241	Entergy Louisiana LLC	Electric Utility	Little Gypsy	LA	1402	3	524.4	Natural Gas Steam Turbine	NG	ST
2029	10	56667	Loraine Windpower Project	IPP	Loraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2030	5	5109	DTE Electric Company	Electric Utility	Belle River	MI	6034	ST2	635.0	Conventional Steam Coal	RC	ST
2030	12	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG1	60.0	Onshore Wind Turbine	WND	WT
2030	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	3	244.0	Natural Gas Steam Turbine	NG	ST
2031	6	11241	Entergy Louisiana LLC	Electric Utility	Nine Mile Point	LA	1403	6(4)	729.2	Natural Gas Steam Turbine	NG	ST
2031	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	1	243.0	Natural Gas Steam Turbine	NG	ST
2033	6	11241	Entergy Louisiana LLC	Electric Utility	Nine Mile Point	LA	1403	5	745.4	Natural Gas Steam Turbine	NG	ST
2034	6	55937	Entergy Texas Inc.	Electric Utility	Lewis Creek	TX	3457	1	252.1	Natural Gas Steam Turbine	NG	ST
2034	6	55937	Entergy Texas Inc.	Electric Utility	Lewis Creek	TX	3457	2	253.0	Natural Gas Steam Turbine	NG	ST
2034	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	3	876.0	Conventional Steam Coal	SUB	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	2	243.0	Natural Gas Steam Turbine	NG	ST
2034	12	17718	Southwestern Public Service Co	Electric Utility	Quay County	NM	58125	1	17.0	Petroleum Liquids	DFO	GT
2035	6	12685	Entergy Mississippi LLC	Electric Utility	Gerald Andrus	MS	8054	1	736.0	Natural Gas Steam Turbine	NG	ST
2036	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	1	339.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	1	532.0	Conventional Steam Coal	SUB	ST
2037	12	17718	Southwestern Public Service Co	Electric Utility	Tolk	TX	6194	2	535.0	Conventional Steam Coal	SUB	ST
2038	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	2	339.0	Conventional Steam Coal	SUB	ST
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	3	106.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	4	103.0	Natural Gas Fired Combustion Turbine	NG	GT
2040	12	17718	Southwestern Public Service Co	Electric Utility	Harrington	TX	6193	3	340.0	Conventional Steam Coal	SUB	ST
2043	12	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT
2047	7	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2056	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	3	166.0	Natural Gas Fired Combustion Turbine	NG	GT
2058	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	4	168.0	Natural Gas Fired Combustion Turbine	NG	GT

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

Table 6.7.A. Capacity Factors for Utility Scale Generators Primarily Using Fossil Fuels, January 2013-June 2019

	Coal	Natural Gas				Petroleum		
Period		Natural Gas Fired Combined Cycle	Natural Gas Fired Combustion Turbine	Steam Turbine	Internal Combustion Engine	Steam Turbine	Petroleum Liquids Fired Combustion Turbine	Internal Combustion Engine
Annual Factors								
2013	59.8%	48.2%	4.9%	10.6%	6.1%	12.1%	0.8%	2.2%
2014	61.1%	48.3%	5.2%	10.4%	8.5%	12.5%	1.1%	1.4%
2015	54.7%	55.9%	6.9%	11.5%	8.9%	13.3%	1.1%	2.2%
2016	53.3%	55.5%	8.3%	12.4%	9.6%	11.5%	1.1%	2.6%
2017	53.7%	51.3%	6.7%	10.5%	9.9%	13.5%	0.9%	2.3%
2018	54.0%	57.6%	11.8%	13.7%	NA	13.9%	2.5%	NA
Year 2017								
January	59.9%	46.7%	5.3%	4.3%	9.2%	11.6%	0.7%	3.0%
February	49.7%	44.4%	5.4%	3.8%	7.9%	10.3%	0.8%	2.4%
March	46.3%	44.8%	6.5%	7.2%	7.8%	13.0%	0.8%	2.7%
April	43.6%	42.5%	5.6%	8.7%	8.0%	10.1%	0.6%	1.9%
May	48.4%	45.8%	6.0%	9.1%	8.2%	15.9%	0.8%	2.0%
June	58.5%	56.0%	7.3%	14.1%	10.3%	15.8%	0.8%	2.0%
July	67.1%	67.0%	9.1%	20.8%	13.0%	18.5%	0.9%	2.1%
August	62.9%	65.5%	8.0%	16.1%	12.3%	14.9%	0.9%	2.3%
Sept	53.8%	55.7%	7.8%	13.3%	10.9%	14.2%	1.1%	2.3%
October	47.5%	48.2%	6.6%	12.4%	10.2%	11.7%	0.9%	2.1%
November	49.3%	45.6%	5.8%	7.0%	10.1%	12.3%	0.7%	2.1%
December	56.2%	52.3%	6.4%	8.5%	10.3%	14.3%	1.4%	2.4%
Year 2018								
January	64.3%	53.9%	11.9%	13.1%	NA	19.0%	5.0%	NA
February	49.3%	55.0%	6.9%	6.7%	NA	11.8%	0.9%	NA
March	43.9%	51.4%	9.3%	8.6%	NA	10.9%	1.4%	NA
April	41.7%	47.9%	11.4%	8.7%	NA	12.7%	1.9%	NA
May	47.0%	52.3%	11.8%	16.8%	NA	9.2%	2.3%	NA
June	58.4%	61.8%	12.0%	17.9%	NA	15.2%	3.0%	NA
July	64.3%	72.8%	18.9%	25.7%	NA	15.5%	3.6%	NA
August	64.3%	72.1%	16.5%	22.5%	NA	15.8%	2.6%	NA
Sept	56.0%	66.1%	14.6%	16.6%	NA	17.8%	3.1%	NA
October	48.9%	55.3%	12.0%	14.0%	NA	13.9%	2.2%	NA
November	54.0%	50.5%	9.7%	9.1%	NA	13.4%	1.8%	NA
December	55.0%	50.7%	6.4%	3.4%	NA	11.6%	1.7%	NA
Year 2019								
January	57.1%	56.3%	7.2%	9.1%	NA	10.7%	1.0%	NA
February	50.7%	57.9%	7.9%	7.3%	NA	10.7%	0.9%	NA
March	45.2%	52.4%	7.2%	9.3%	NA	10.2%	0.7%	NA
April	35.8%	46.2%	9.2%	11.4%	NA	8.6%	1.1%	NA
May	42.1%	50.8%	8.9%	14.3%	NA	13.3%	1.6%	NA
June	47.4%	62.9%	8.8%	17.6%	NA	14.5%	1.9%	NA

Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available

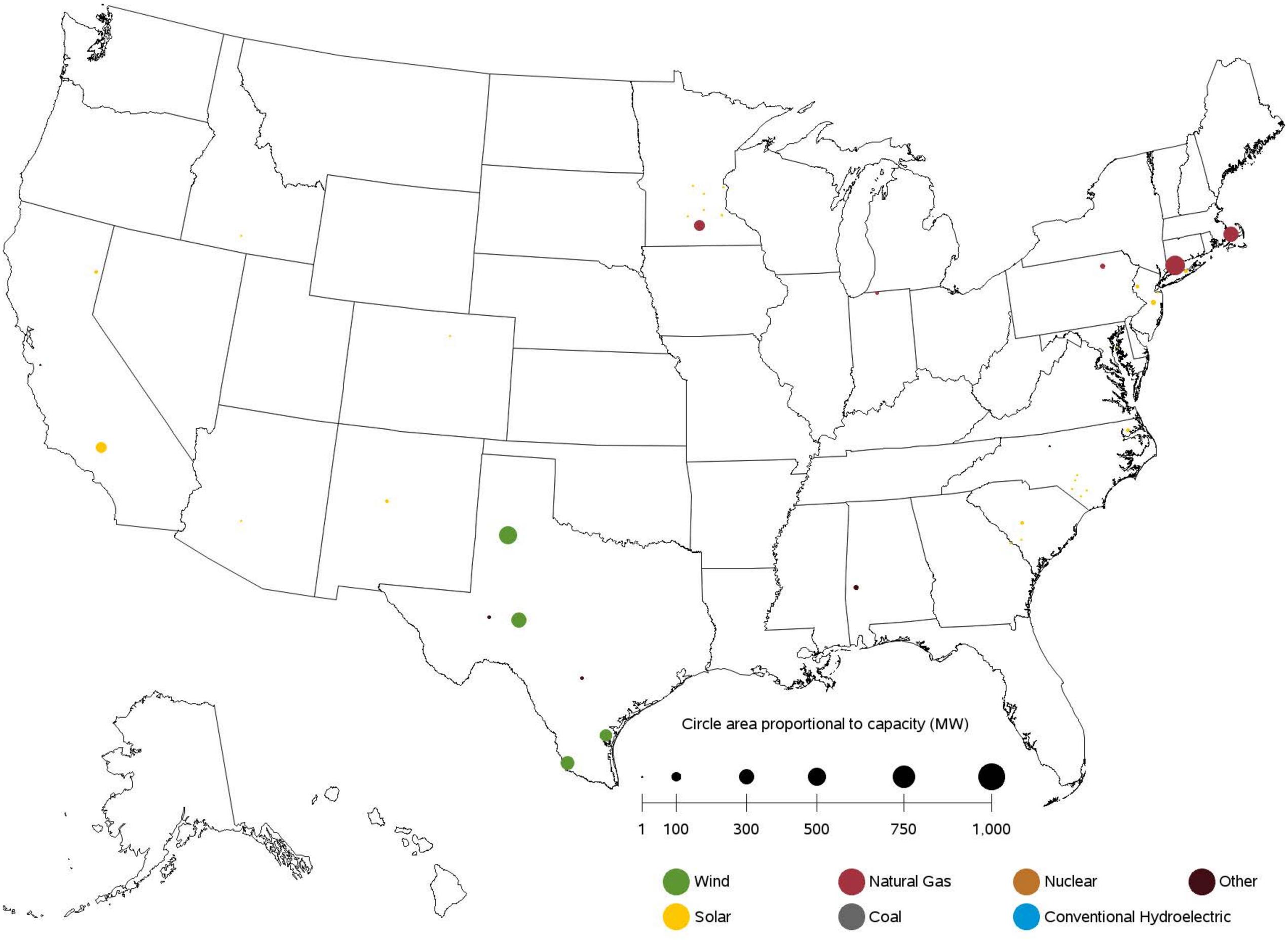
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-June 2019

Period	Nuclear	Conventional Hydropower	Wind	Solar Photovoltaic	Solar Thermal	Landfill Gas and Muncipal Solid Waste	Other Biomass Including Wood	Geothermal
Annual Factors								
2013	89.9%	38.9%	32.4%	NA	NA	68.9%	56.7%	73.6%
2014	91.7%	37.3%	34.0%	25.9%	19.8%	68.9%	58.9%	74.0%
2015	92.3%	35.8%	32.2%	25.8%	22.1%	68.7%	55.3%	74.3%
2016	92.3%	38.2%	34.5%	25.1%	22.2%	69.7%	55.6%	73.9%
2017	92.2%	43.1%	34.6%	25.7%	21.8%	68.0%	57.8%	74.0%
2018	92.6%	42.8%	37.4%	26.1%	23.6%	73.3%	49.3%	77.3%
Year 2017								
January	98.7%	45.4%	32.6%	12.7%	7.3%	73.0%	59.7%	75.9%
February	95.0%	44.1%	38.6%	17.2%	11.7%	69.2%	59.9%	75.3%
March	87.8%	49.1%	40.6%	25.1%	22.9%	66.7%	60.7%	74.1%
April	79.1%	51.1%	41.1%	28.4%	24.9%	66.4%	52.3%	75.9%
May	82.7%	54.7%	36.2%	32.5%	31.0%	68.7%	49.9%	70.5%
June	93.4%	52.7%	32.9%	35.9%	37.9%	69.7%	56.7%	68.9%
July	96.2%	45.1%	25.6%	32.7%	25.4%	67.4%	60.4%	74.4%
August	97.7%	37.3%	21.8%	30.4%	27.6%	68.2%	60.8%	73.9%
Sept	94.9%	33.4%	29.5%	29.1%	29.2%	65.7%	55.2%	73.6%
October	89.0%	31.0%	40.2%	26.4%	24.1%	63.8%	54.1%	67.5%
November	92.9%	36.0%	39.1%	19.4%	10.3%	67.8%	59.9%	73.2%
December	99.4%	37.7%	38.0%	17.7%	9.0%	69.6%	63.3%	85.1%
Year 2018								
January	100.7%	45.1%	42.4%	18.7%	10.0%	72.1%	58.7%	76.6%
February	96.7%	49.2%	41.8%	22.9%	16.1%	76.7%	57.4%	80.5%
March	90.4%	45.1%	43.9%	26.3%	19.3%	73.2%	52.2%	78.2%
April	82.4%	49.9%	44.8%	31.2%	24.4%	71.6%	43.9%	70.3%
May	90.8%	54.2%	38.7%	31.9%	33.0%	68.9%	48.7%	78.9%
June	97.1%	51.7%	42.0%	34.5%	41.7%	76.5%	54.6%	76.2%
July	97.7%	43.4%	25.3%	31.6%	30.1%	75.6%	51.1%	78.0%
August	97.5%	37.7%	32.0%	31.0%	32.5%	75.3%	49.6%	78.0%
Sept	90.4%	32.8%	29.8%	27.7%	34.8%	70.2%	43.8%	78.4%
October	80.5%	31.1%	33.5%	23.1%	20.8%	71.9%	44.8%	72.6%
November	89.4%	37.1%	36.9%	18.8%	13.3%	73.7%	44.5%	78.8%
December	96.9%	37.3%	38.3%	15.1%	7.0%	74.3%	42.6%	80.8%
Year 2019								
January	99.7%	38.9%	38.5%	16.7%	8.5%	72.1%	51.6%	77.5%
February	96.8%	40.6%	39.2%	20.0%	11.0%	71.3%	51.0%	85.2%
March	88.0%	43.4%	39.2%	25.0%	19.8%	68.4%	42.3%	84.6%
April	84.5%	45.7%	45.5%	29.4%	25.5%	67.7%	43.1%	76.8%
May	90.8%	53.4%	38.9%	30.2%	25.8%	73.1%	51.6%	78.7%
June	96.6%	49.1%	34.3%	33.4%	35.6%	75.1%	49.7%	82.0%

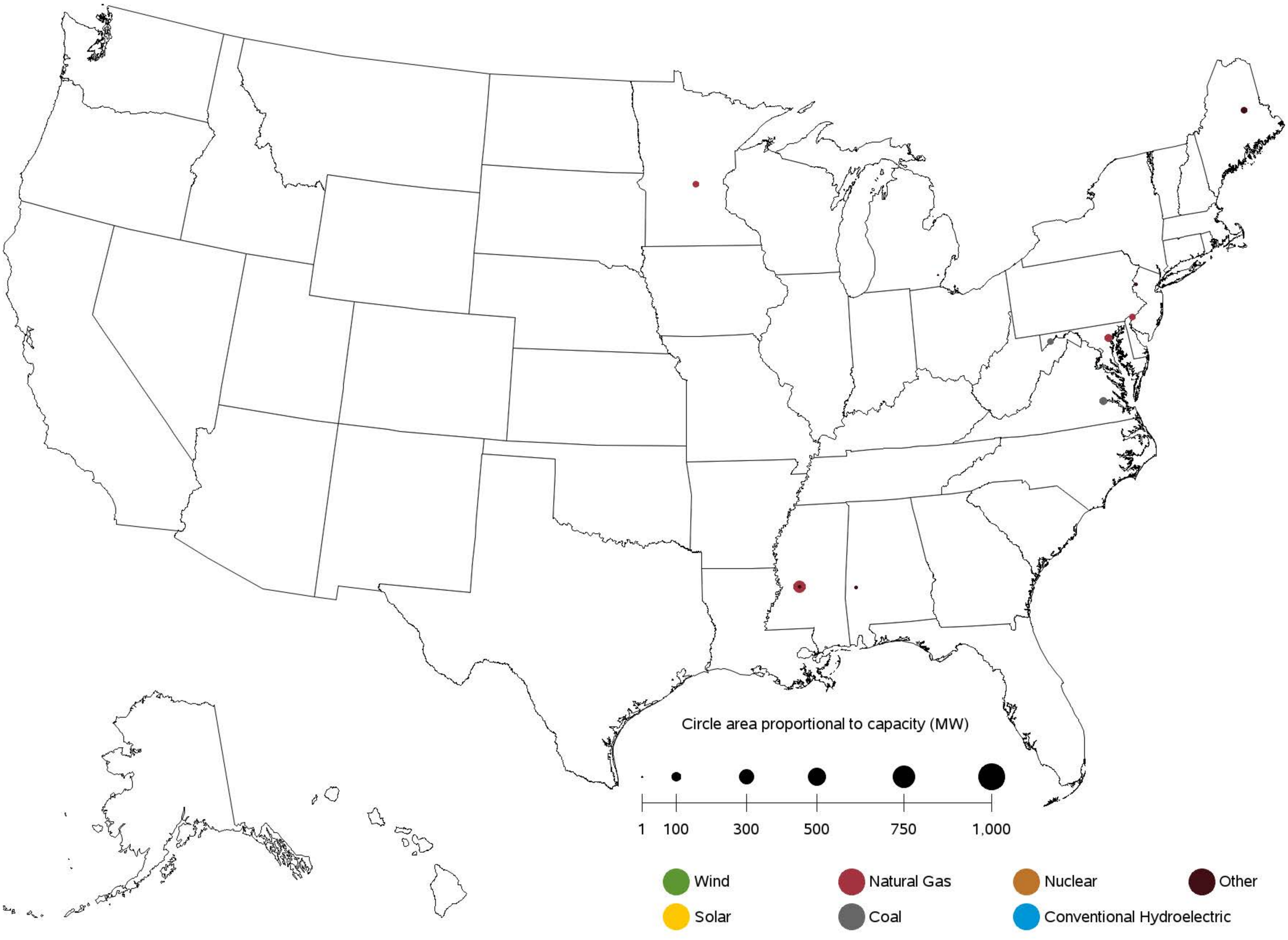
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.A. Utility-Scale Generating Units Added in June 2019



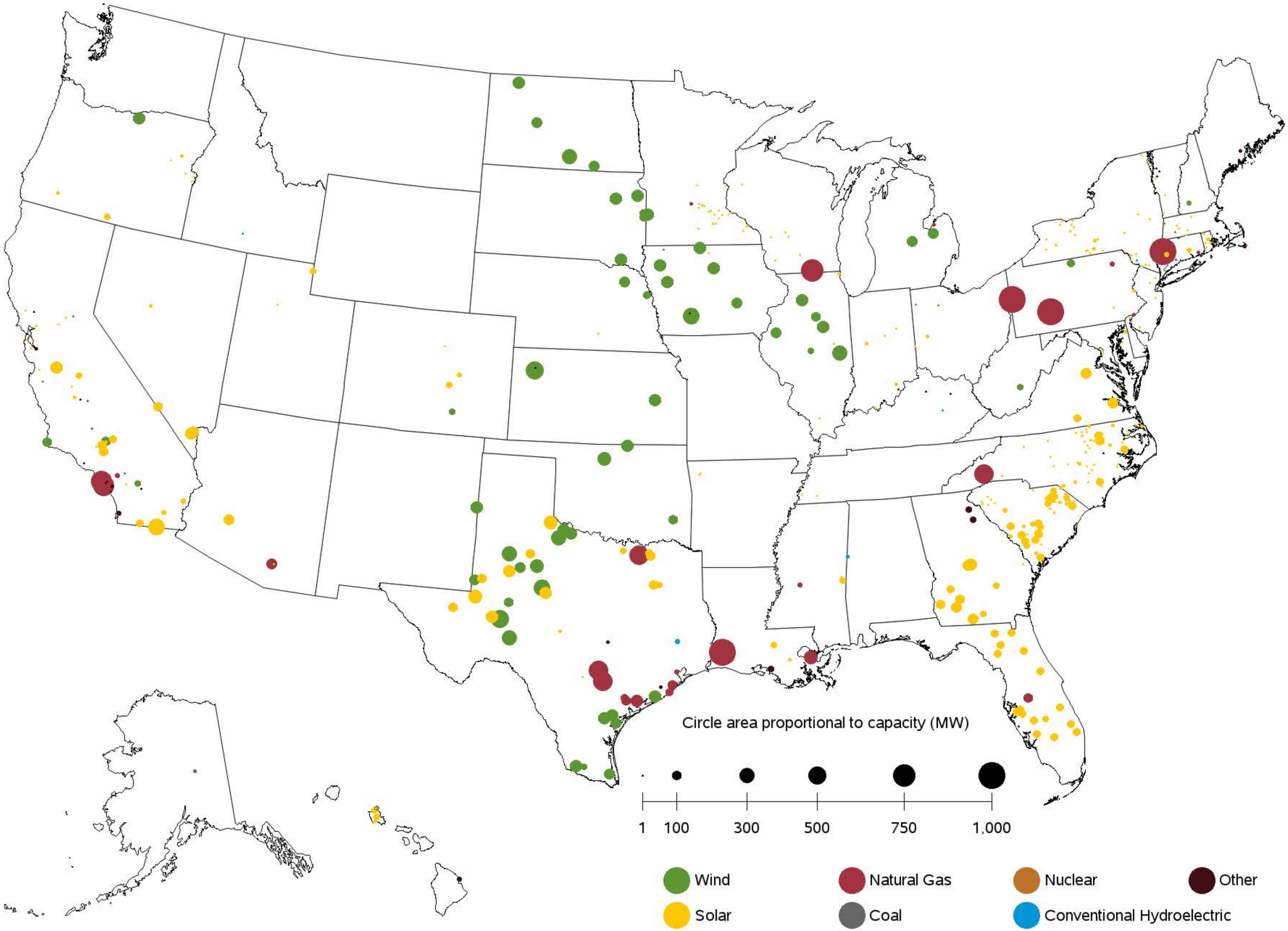
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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



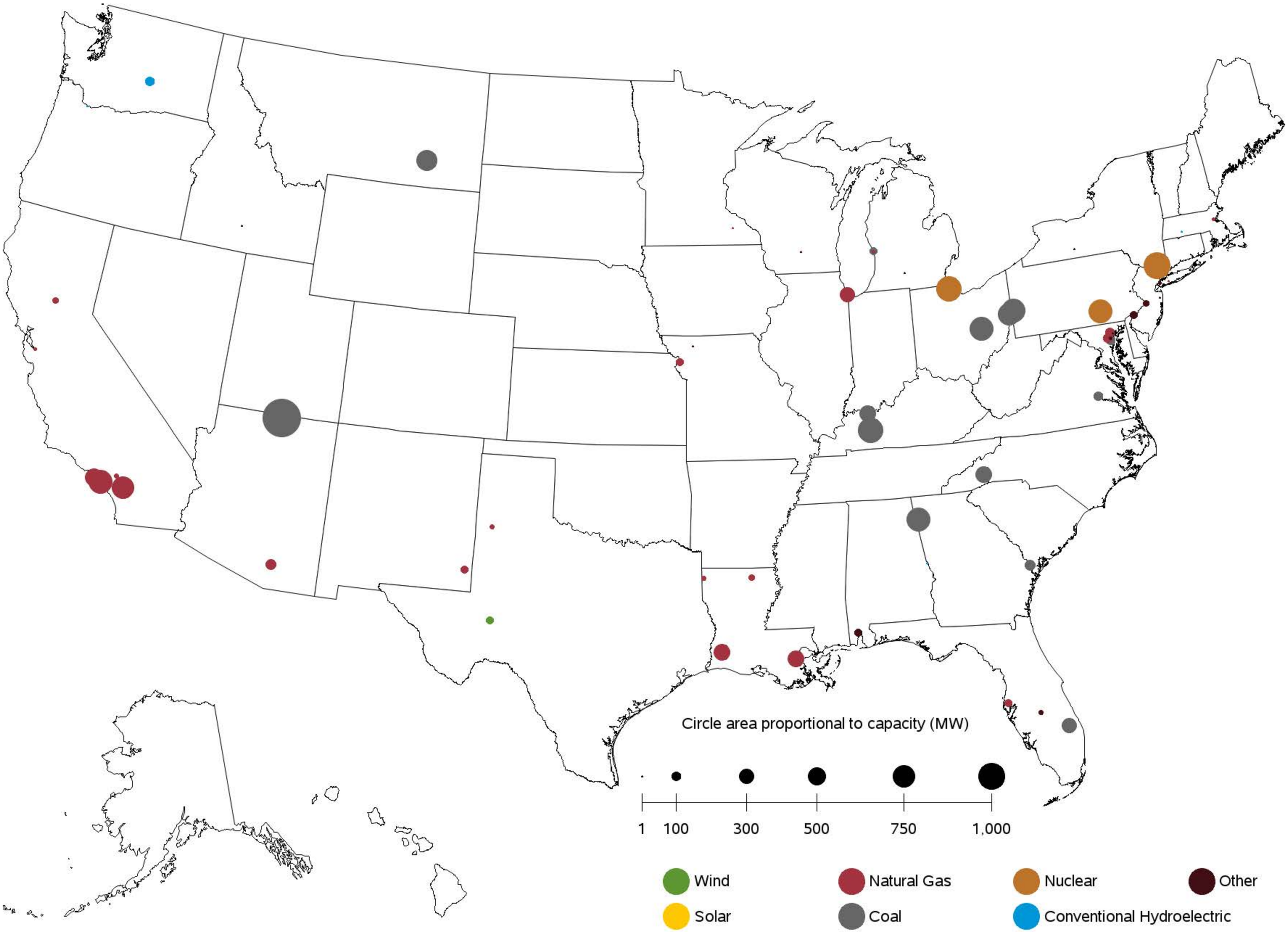
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from July 2019 to June 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 July 2019 to June 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	51,507,677	7,290,070	6,765,975	6,514,422	58,273,652	13,804,492	44,469,160
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	3,105,670	455,738	620,775	428,265	3,726,445	884,003	2,842,442
November	3,165,198	878,523	649,802	406,045	3,815,000	1,284,568	2,530,432
December	3,455,788	516,623	646,476	408,156	4,102,264	924,779	3,177,485
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

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 - June 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
Year 2017					
January	508	650	159	0	1,317
February	395	575	154	0	1,125
March	490	698	191	0	1,380
April	494	628	184	0	1,306
May	525	675	182	0	1,382
June	595	692	184	0	1,472
July	590	710	200	0	1,501
August	632	719	187	0	1,537
Sept	520	372	127	0	1,020
October	16	224	11	0	252
November	42	569	28	0	639
December	237	306	138	0	682
Year 2018					
January	389	558	142	0	1,089
February	393	760	175	0	1,328
March	450	531	98	0	1,080
April	466	784	273	0	1,524
May	566	802	165	0	1,533
June	507	592	208	0	1,308
July	578	680	145	0	1,404
August	577	688	209	0	1,475
Sept	527	722	186	0	1,436
October	698	847	191	0	1,736
November	457	593	172	0	1,222
December	494	642	162	0	1,298
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	1,356
June	568	692	171	0	1,431
Year to Date					
2017	3,008	3,919	1,055	0	7,981
2018	2,772	4,027	1,062	0	7,861
2019	2,807	3,738	1,004	0	7,548
Rolling 12 Months Ending in June					
2018	4,809	6,928	1,754	0	13,491
2019	6,138	7,910	2,070	0	16,119

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 - June 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
Year 2017					
January	112	142	30	0	284
February	99	143	32	0	274
March	105	151	34	0	291
April	109	144	34	0	287
May	119	157	35	0	311
June	129	152	34	0	314
July	130	161	37	0	327
August	143	166	35	0	345
Sept	101	74	21	0	196
October	6	46	4	0	56
November	19	115	15	0	150
December	50	98	34	0	182
Year 2018					
January	86	159	32	0	277
February	76	171	32	0	279
March	110	149	22	0	280
April	84	161	54	0	300
May	104	165	23	0	292
June	108	133	40	0	281
July	122	166	29	0	317
August	114	149	39	0	302
Sept	109	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
Year to Date					
2017	674	889	197	0	1,761
2018	568	938	203	0	1,709
2019	612	864	209	0	1,686
Rolling 12 Months Ending in June					
2018	1,017	1,598	350	0	2,965
2019	1,309	1,819	412	0	3,539

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 - June 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
Year 2017					
January	1,336,481	127,251	627	0	1,464,359
February	1,337,101	127,229	626	0	1,464,956
March	1,335,413	127,147	620	0	1,463,180
April	1,337,164	127,086	620	0	1,464,870
May	1,337,956	127,048	618	0	1,465,622
June	1,339,373	127,119	616	0	1,467,108
July	1,338,891	127,049	614	0	1,466,554
August	1,337,758	127,026	615	0	1,465,399
Sept	1,338,973	127,056	615	0	1,466,644
October	1,337,261	126,948	615	0	1,464,824
November	1,338,117	126,941	613	0	1,465,671
December	1,338,583	126,877	612	0	1,466,072
Year 2018					
January	1,338,417	126,681	611	0	1,465,709
February	1,337,561	126,422	612	0	1,464,595
March	1,338,960	126,367	613	0	1,465,940
April	1,339,727	126,216	612	0	1,466,555
May	1,340,002	126,123	610	0	1,466,735
June	1,339,841	126,006	610	0	1,466,457
July	1,340,490	125,949	607	0	1,467,046
August	1,341,417	126,011	604	0	1,468,032
Sept	1,342,332	126,102	605	0	1,469,039
October	1,343,883	126,219	603	0	1,470,705
November	1,344,948	126,429	601	0	1,471,978
December	1,346,102	126,526	602	0	1,473,230
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
Rolling 12 Months Ending in June					
2018	1,338,674	126,643	613	0	1,465,930
2019	1,345,234	126,087	601	0	1,471,923

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 - June 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
Year 2017					
January	22.10	21.89	18.77	--	21.60
February	25.09	24.84	20.48	--	24.33
March	21.46	21.69	17.76	--	21.06
April	22.16	22.89	18.43	--	21.99
May	22.66	23.27	19.03	--	22.48
June	21.69	21.91	18.18	--	21.35
July	22.01	22.62	18.43	--	21.82
August	22.62	23.17	18.91	--	22.42
Sept	19.36	19.90	16.35	--	19.18
October	37.23	20.39	40.29	--	22.36
November	45.99	20.27	53.04	--	23.39
December	21.07	31.94	24.72	--	26.70
Year 2018					
January	22.11	28.53	22.32	--	25.43
February	19.32	22.48	18.45	--	21.02
March	24.40	27.97	22.42	--	25.97
April	18.09	20.56	19.86	--	19.68
May	18.38	20.61	13.77	--	19.05
June	21.24	22.46	19.23	--	21.47
July	21.17	24.32	19.78	--	22.56
August	19.81	21.63	18.51	--	20.48
Sept	20.75	22.50	18.18	--	21.30
October	19.58	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
Year to Date					
2017	22.41	22.69	18.72	--	22.06
2018	20.49	23.30	19.12	--	21.74
2019	21.80	23.12	20.87	--	22.33
Rolling 12 Months Ending in June					
2018	21.14	23.07	19.94	--	21.97
2019	21.33	22.99	19.88	--	21.96

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-June 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	33	3,604	145	99	5,779
2018	454	98	1,346	33	3,606	145	99	5,780
Year 2019								
January	454	98	1,335	33	3,476	145	99	5,640
February	454	98	1,335	33	3,476	145	99	5,640
March	454	98	1,346	33	3,476	145	99	5,651
April	454	98	1,346	33	3,596	145	99	5,771
May	454	98	1,346	33	3,596	145	99	5,771
June	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, June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**3**	**30**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	51	0	1	0	0	26
Maine	42	38	0	19	0	0	9
Massachusetts	0	59	0	5	0	0	16
New Hampshire	0	43	0	0	0	0	14
Rhode Island	0	90	0	10	0	0	0
Vermont	0	115	0	0	0	0	14
Middle Atlantic	**4**	**20**	**37**	**1**	**16**	**0**	**2**
New Jersey	0	69	0	2	0	0	0
New York	0	35	0	2	0	0	1
Pennsylvania	4	24	62	1	24	0	9
East North Central	**2**	**3**	**10**	**1**	**5**	**0**	**12**
Illinois	0	10	0	6	0	0	34
Indiana	1	2	0	2	10	0	28
Michigan	2	4	0	2	0	0	22
Ohio	6	6	13	1	16	0	41
Wisconsin	14	29	0	3	0	0	17
West North Central	**1**	**4**	**0**	**5**	**0**	**0**	**8**
Iowa	0	7	0	4	0	0	28
Kansas	0	4	0	18	0	0	0
Minnesota	3	27	0	7	0	0	24
Missouri	0	2	0	6	0	0	13
Nebraska	4	41	0	38	0	0	23
North Dakota	0	4	0	38	0	0	17
South Dakota	0	84	0	43	0	0	12
South Atlantic	**1**	**3**	**6**	**1**	**0**	**0**	**5**
Delaware	0	98	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	33
Georgia	0	18	47	3	0	0	10
Maryland	0	11	0	2	0	0	1
North Carolina	0	4	0	2	0	0	8
South Carolina	0	8	0	2	0	0	12
Virginia	0	8	0	2	0	0	14
West Virginia	2	0	0	8	0	0	12
East South Central	**3**	**2**	**0**	**1**	**0**	**0**	**4**
Alabama	0	47	0	2	0	0	5
Kentucky	0	0	0	3	0	0	7
Mississippi	57	5	0	2	0	0	0
Tennessee	0	0	0	2	0	0	6
West South Central	**0**	**6**	**1**	**1**	**12**	**0**	**6**
Arkansas	0	10	0	4	0	0	9
Louisiana	0	30	0	2	27	0	17
Oklahoma	0	2	0	2	0	0	11
Texas	0	6	27	1	7	0	15
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	1	0	1	0	0	4
Colorado	0	29	0	3	0	0	17
Idaho	100	0	0	13	0	0	9
Montana	6	12	0	34	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	11	0	5	0	0	59
Utah	0	1	0	4	0	0	25
Wyoming	4	1	0	9	0	0	25
Pacific Contiguous	**0**	**15**	**0**	**2**	**4**	**0**	**1**
California	0	8	0	2	5	0	3
Oregon	0	1,472	0	4	0	0	4
Washington	0	25	0	6	0	0	1
Pacific Noncontiguous	**15**	**1**	**0**	**18**	**0**	**0**	**21**
Alaska	38	2	0	18	0	0	21
Hawaii	0	1	0	0	0	0	52
U.S. Total	**1**	**1**	**3**	**0**	**5**	**0**	**2**

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

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

Total (All Sectors) by Census Division and State, June 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**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	27	13	0	0	1
Maine	0	0	0	108	8	0	0	6
Massachusetts	0	0	0	8	7	0	2	4
New Hampshire	0	0	0	0	18	0	0	2
Rhode Island	0	0	0	43	11	0	0	9
Vermont	0	0	0	22	19	0	0	11
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	14	5	0	2	1
Pennsylvania	0	0	0	27	6	0	0	1
East North Central	**0**	**0**	**0**	**10**	**3**	**0**	**3**	**1**
Illinois	0	0	0	27	4	0	0	1
Indiana	0	0	0	14	6	0	0	1
Michigan	0	0	0	23	6	0	15	1
Ohio	0	0	0	26	5	0	0	3
Wisconsin	0	0	0	52	9	0	29	5
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**5**	**1**
Iowa	0	0	0	75	4	0	0	2
Kansas	0	0	0	105	3	0	0	2
Minnesota	0	0	0	8	5	0	4	2
Missouri	0	0	0	29	7	0	0	1
Nebraska	0	0	0	55	5	0	0	3
North Dakota	0	0	0	0	6	0	35	2
South Dakota	0	0	0	154	12	0	0	7
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**
Delaware	0	0	0	33	33	0	0	4
District of Columbia	0	0	0	97	23	0	0	12
Florida	0	0	0	2	2	0	1	1
Georgia	0	0	0	4	3	0	0	1
Maryland	0	0	0	10	9	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	12	6	0	0	1
Virginia	0	0	0	9	6	0	0	1
West Virginia	0	0	0	0	11	0	0	1
East South Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**1**
Alabama	0	0	0	11	4	0	0	1
Kentucky	0	0	0	43	15	0	0	1
Mississippi	0	0	0	4	3	0	0	5
Tennessee	0	0	0	14	8	0	0	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**1**
Arkansas	0	0	0	7	5	0	0	2
Louisiana	0	0	0	142	6	0	0	1
Oklahoma	0	0	0	45	3	0	0	2
Texas	0	0	0	2	2	0	9	1
Mountain	**0**	**4**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	1
Idaho	0	17	0	11	8	0	0	6
Montana	0	0	0	62	11	0	0	5
Nevada	0	4	0	2	2	0	0	1
New Mexico	0	0	0	6	3	0	0	2
Utah	0	8	0	5	4	0	9	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**2**	**0**	**1**	**2**	**0**	**2**	**1**
California	0	2	0	1	2	0	2	1
Oregon	0	11	0	11	4	0	0	3
Washington	0	0	0	57	5	0	0	1
Pacific Noncontiguous	**0**	**10**	**0**	**14**	**10**	**0**	**0**	**5**
Alaska	0	0	0	0	39	0	0	11
Hawaii	0	10	0	14	10	0	0	2
U.S. Total	**0**	**2**	**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 June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**3**	**30**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	51	0	1	0	0	26
Maine	42	38	0	19	0	0	9
Massachusetts	0	59	0	5	0	0	16
New Hampshire	0	43	0	0	0	0	14
Rhode Island	0	90	0	10	0	0	0
Vermont	0	115	0	0	0	0	14
Middle Atlantic	**4**	**20**	**37**	**1**	**16**	**0**	**2**
New Jersey	0	69	0	2	0	0	0
New York	0	35	0	2	0	0	1
Pennsylvania	4	24	62	1	24	0	9
East North Central	**2**	**3**	**10**	**1**	**5**	**0**	**12**
Illinois	0	10	0	6	0	0	34
Indiana	1	2	0	2	10	0	28
Michigan	2	4	0	2	0	0	22
Ohio	6	6	13	1	16	0	41
Wisconsin	14	29	0	3	0	0	17
West North Central	**1**	**4**	**0**	**5**	**0**	**0**	**8**
Iowa	0	7	0	4	0	0	28
Kansas	0	4	0	18	0	0	0
Minnesota	3	27	0	7	0	0	24
Missouri	0	2	0	6	0	0	13
Nebraska	4	41	0	38	0	0	23
North Dakota	0	4	0	38	0	0	17
South Dakota	0	84	0	43	0	0	12
South Atlantic	**1**	**3**	**6**	**1**	**0**	**0**	**5**
Delaware	0	98	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	33
Georgia	0	18	47	3	0	0	10
Maryland	0	11	0	2	0	0	1
North Carolina	0	4	0	2	0	0	8
South Carolina	0	8	0	2	0	0	12
Virginia	0	8	0	2	0	0	14
West Virginia	2	0	0	8	0	0	12
East South Central	**3**	**2**	**0**	**1**	**0**	**0**	**4**
Alabama	0	47	0	2	0	0	5
Kentucky	0	0	0	3	0	0	7
Mississippi	57	5	0	2	0	0	0
Tennessee	0	0	0	2	0	0	6
West South Central	**0**	**6**	**1**	**1**	**12**	**0**	**6**
Arkansas	0	10	0	4	0	0	9
Louisiana	0	30	0	2	27	0	17
Oklahoma	0	2	0	2	0	0	11
Texas	0	6	27	1	7	0	15
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	1	0	1	0	0	4
Colorado	0	29	0	3	0	0	17
Idaho	100	0	0	13	0	0	9
Montana	6	12	0	34	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	11	0	5	0	0	59
Utah	0	1	0	4	0	0	25
Wyoming	4	1	0	9	0	0	25
Pacific Contiguous	**0**	**15**	**0**	**2**	**4**	**0**	**1**
California	0	8	0	2	5	0	3
Oregon	0	1,472	0	4	0	0	4
Washington	0	25	0	6	0	0	1
Pacific Noncontiguous	**15**	**1**	**0**	**18**	**0**	**0**	**21**
Alaska	38	2	0	18	0	0	21
Hawaii	0	1	0	0	0	0	52
U.S. Total	**1**	**1**	**3**	**0**	**5**	**0**	**2**

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

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

Total (All Sectors) by Census Division and State, Year-to-Date through June 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**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	27	13	0	0	1
Maine	0	0	0	108	8	0	0	6
Massachusetts	0	0	0	8	7	0	2	4
New Hampshire	0	0	0	0	18	0	0	2
Rhode Island	0	0	0	43	11	0	0	9
Vermont	0	0	0	22	19	0	0	11
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	14	5	0	2	1
Pennsylvania	0	0	0	27	6	0	0	1
East North Central	**0**	**0**	**0**	**10**	**3**	**0**	**3**	**1**
Illinois	0	0	0	27	4	0	0	1
Indiana	0	0	0	14	6	0	0	1
Michigan	0	0	0	23	6	0	15	1
Ohio	0	0	0	26	5	0	0	3
Wisconsin	0	0	0	52	9	0	29	5
West North Central	**0**	**0**	**0**	**7**	**3**	**0**	**5**	**1**
Iowa	0	0	0	75	4	0	0	2
Kansas	0	0	0	105	3	0	0	2
Minnesota	0	0	0	8	5	0	4	2
Missouri	0	0	0	29	7	0	0	1
Nebraska	0	0	0	55	5	0	0	3
North Dakota	0	0	0	0	6	0	35	2
South Dakota	0	0	0	154	12	0	0	7
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**0**
Delaware	0	0	0	33	33	0	0	4
District of Columbia	0	0	0	97	23	0	0	12
Florida	0	0	0	2	2	0	1	1
Georgia	0	0	0	4	3	0	0	1
Maryland	0	0	0	10	9	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	12	6	0	0	1
Virginia	0	0	0	9	6	0	0	1
West Virginia	0	0	0	0	11	0	0	1
East South Central	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**1**
Alabama	0	0	0	11	4	0	0	1
Kentucky	0	0	0	43	15	0	0	1
Mississippi	0	0	0	4	3	0	0	5
Tennessee	0	0	0	14	8	0	0	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**1**
Arkansas	0	0	0	7	5	0	0	2
Louisiana	0	0	0	142	6	0	0	1
Oklahoma	0	0	0	45	3	0	0	2
Texas	0	0	0	2	2	0	9	1
Mountain	**0**	**4**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	3	0	0	1
Idaho	0	17	0	11	8	0	0	6
Montana	0	0	0	62	11	0	0	5
Nevada	0	4	0	2	2	0	0	1
New Mexico	0	0	0	6	3	0	0	2
Utah	0	8	0	5	4	0	9	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**2**	**0**	**1**	**2**	**0**	**2**	**1**
California	0	2	0	1	2	0	2	1
Oregon	0	11	0	11	4	0	0	3
Washington	0	0	0	57	5	0	0	1
Pacific Noncontiguous	**0**	**10**	**0**	**14**	**10**	**0**	**0**	**5**
Alaska	0	0	0	0	39	0	0	11
Hawaii	0	10	0	14	10	0	0	2
U.S. Total	**0**	**2**	**0**	**1**	**1**	**0**	**0**	**0**

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Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, June 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**2**	**2**	**.**	**1**
Connecticut	0	1	0	.	0
Maine	2	3	0	.	1
Massachusetts	1	3	2	.	2
New Hampshire	1	0	0	.	1
Rhode Island	0	0	0	.	0
Vermont	3	11	95	.	5
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	2	.	0
New York	0	0	1	.	0
Pennsylvania	1	2	1	.	1
East North Central	**4**	**3**	**13**	**.**	**2**
Illinois	6	8	0	.	5
Indiana	11	2	0	.	4
Michigan	6	17	175	.	8
Ohio	8	4	14	.	4
Wisconsin	14	9	26	.	9
West North Central	**2**	**2**	**5**	**.**	**1**
Iowa	7	3	32	.	3
Kansas	12	6	0	.	8
Minnesota	6	6	4	.	4
Missouri	3	1	0	.	1
Nebraska	16	37	27	.	13
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	6	4	14	.	4
District of Columbia	0	0	0	.	0
Florida	4	6	3	.	4
Georgia	147	74	0	.	83
Maryland	1	2	2	.	1
North Carolina	8	1	0	.	6
South Carolina	4	4	0	.	4
Virginia	11	6	5	.	7
West Virginia	0	0	0	.	0
East South Central	**4**	**6**	**0**	**.**	**3**
Alabama	0	0	0	.	0
Kentucky	4	7	0	.	4
Mississippi	7	17	0	.	9
Tennessee	0	0	0	.	0
West South Central	**3**	**3**	**0**	**.**	**2**
Arkansas	17	12	0	.	11
Louisiana	3	5	0	.	3
Oklahoma	15	9	0	.	11
Texas	5	4	0	.	4
Mountain	**1**	**1**	**3**	**.**	**0**
Arizona	1	1	13	.	0
Colorado	3	2	50	.	2
Idaho	3	9	0	.	3
Montana	13	12	0	.	10
Nevada	0	0	0	.	0
New Mexico	4	5	0	.	3
Utah	2	4	0	.	2
Wyoming	23	37	0	.	19
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	2	6	9	.	3
Washington	2	20	38	.	3
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	7	8	0	.	5
Hawaii	0	0	0	.	0
U.S. Total	**0**	**1**	**0**	**.**	**0**

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

Table A.2.A. Relative Standard Error (Percent) for Net Generation by Fuel Type: Electric Utilities by Census Division and State, June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**41**	**0**	**83**	**0**	**0**	**15**
Connecticut	0	30	0	0	0	0	42
Maine	0	0	0	0	0	0	0
Massachusetts	0	102	0	110	0	0	32
New Hampshire	0	25	0	0	0	0	27
Rhode Island	0	0	0	0	0	0	0
Vermont	0	116	0	0	0	0	22
Middle Atlantic	**0**	**73**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	90	0	0	0
New York	0	74	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**3**	**2**	**0**	**2**	**0**	**0**	**12**
Illinois	0	42	0	8	0	0	72
Indiana	1	2	0	4	0	0	28
Michigan	2	3	0	6	0	0	23
Ohio	7	6	0	4	0	0	29
Wisconsin	14	25	0	3	0	0	18
West North Central	**1**	**4**	**0**	**5**	**0**	**0**	**8**
Iowa	0	7	0	5	0	0	29
Kansas	0	4	0	18	0	0	0
Minnesota	3	27	0	7	0	0	30
Missouri	0	2	0	11	0	0	13
Nebraska	4	41	0	38	0	0	23
North Dakota	0	4	0	38	0	0	17
South Dakota	0	84	0	43	0	0	12
South Atlantic	**0**	**2**	**0**	**1**	**0**	**0**	**6**
Delaware	0	0	0	0	0	0	0
Florida	0	1	0	1	0	0	33
Georgia	0	8	0	3	0	0	10
Maryland	0	16	0	0	0	0	0
North Carolina	0	3	0	2	0	0	8
South Carolina	0	9	0	2	0	0	12
Virginia	0	14	0	2	0	0	14
West Virginia	0	0	0	0	0	0	18
East South Central	**0**	**0**	**0**	**2**	**0**	**0**	**4**
Alabama	0	7	0	4	0	0	5
Kentucky	0	0	0	3	0	0	7
Mississippi	0	5	0	2	0	0	0
Tennessee	0	0	0	2	0	0	6
West South Central	**0**	**6**	**0**	**2**	**0**	**0**	**7**
Arkansas	0	10	0	4	0	0	9
Louisiana	0	30	0	2	0	0	0
Oklahoma	0	2	0	4	0	0	11
Texas	0	7	0	4	0	0	15
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	1	0	2	0	0	4
Colorado	0	29	0	2	0	0	19
Idaho	0	0	0	12	0	0	9
Montana	0	276	0	36	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	11	0	4	0	0	59
Utah	0	1	0	5	0	0	25
Wyoming	4	1	0	25	0	0	26
Pacific Contiguous	**0**	**9**	**0**	**4**	**0**	**0**	**1**
California	0	9	0	5	0	0	3
Oregon	0	0	0	8	0	0	4
Washington	0	53	0	8	0	0	1
Pacific Noncontiguous	**60**	**1**	**0**	**19**	**0**	**0**	**22**
Alaska	60	2	0	19	0	0	23
Hawaii	0	1	0	0	0	0	0
U.S. Total	**1**	**1**	**0**	**1**	**0**	**0**	**1**

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

Electric Utilities by Census Division and State, June 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**	**18**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	37	35	0	0	30
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	34	32	0	0	18
Middle Atlantic	**0**	**0**	**0**	**24**	**24**	**0**	**0**	**2**
New Jersey	0	0	0	24	24	0	0	25
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**18**	**9**	**0**	**30**	**2**
Illinois	0	0	0	92	45	0	0	3
Indiana	0	0	0	25	21	0	0	1
Michigan	0	0	0	25	11	0	0	1
Ohio	0	0	0	72	70	0	0	4
Wisconsin	0	0	0	0	16	0	31	7
West North Central	**0**	**0**	**0**	**58**	**4**	**0**	**9**	**1**
Iowa	0	0	0	94	4	0	0	2
Kansas	0	0	0	255	10	0	0	3
Minnesota	0	0	0	129	11	0	0	2
Missouri	0	0	0	0	64	0	0	1
Nebraska	0	0	0	168	27	0	0	3
North Dakota	0	0	0	0	9	0	35	2
South Dakota	0	0	0	0	22	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**
Delaware	0	0	0	85	85	0	0	15
Florida	0	0	0	1	1	0	0	0
Georgia	0	0	0	10	10	0	0	1
Maryland	0	0	0	73	73	0	0	0
North Carolina	0	0	0	10	10	0	0	1
South Carolina	0	0	0	155	14	0	0	1
Virginia	0	0	0	21	19	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**35**	**31**	**0**	**0**	**1**
Alabama	0	0	0	60	60	0	0	1
Kentucky	0	0	0	44	37	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	201	201	0	0	1
West South Central	**0**	**0**	**0**	**41**	**11**	**0**	**0**	**1**
Arkansas	0	0	0	166	166	0	0	2
Louisiana	0	0	0	142	142	0	0	1
Oklahoma	0	0	0	45	11	0	0	3
Texas	0	0	0	147	38	0	0	2
Mountain	**0**	**11**	**0**	**7**	**5**	**0**	**21**	**1**
Arizona	0	0	0	9	9	0	0	1
Colorado	0	0	0	152	4	0	0	1
Idaho	0	0	0	0	43	0	0	8
Montana	0	0	0	0	38	0	0	8
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	15	15	0	0	2
Utah	0	11	0	0	11	0	33	2
Wyoming	0	0	0	0	14	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**1**
California	0	0	0	10	5	0	0	2
Oregon	0	0	0	89	5	0	0	3
Washington	0	0	0	0	7	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**31**	**0**	**0**	**6**
Alaska	0	0	0	0	54	0	0	12
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**3**	**0**	**3**	**3**	**0**	**5**	**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 June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**41**	**0**	**83**	**0**	**0**	**15**
Connecticut	0	30	0	0	0	0	42
Maine	0	0	0	0	0	0	0
Massachusetts	0	102	0	110	0	0	32
New Hampshire	0	25	0	0	0	0	27
Rhode Island	0	0	0	0	0	0	0
Vermont	0	116	0	0	0	0	22
Middle Atlantic	**0**	**73**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	90	0	0	0
New York	0	74	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**3**	**2**	**0**	**2**	**0**	**0**	**12**
Illinois	0	42	0	8	0	0	72
Indiana	1	2	0	4	0	0	28
Michigan	2	3	0	6	0	0	23
Ohio	7	6	0	4	0	0	29
Wisconsin	14	25	0	3	0	0	18
West North Central	**1**	**4**	**0**	**5**	**0**	**0**	**8**
Iowa	0	7	0	5	0	0	29
Kansas	0	4	0	18	0	0	0
Minnesota	3	27	0	7	0	0	30
Missouri	0	2	0	11	0	0	13
Nebraska	4	41	0	38	0	0	23
North Dakota	0	4	0	38	0	0	17
South Dakota	0	84	0	43	0	0	12
South Atlantic	**0**	**2**	**0**	**1**	**0**	**0**	**6**
Delaware	0	0	0	0	0	0	0
Florida	0	1	0	1	0	0	33
Georgia	0	8	0	3	0	0	10
Maryland	0	16	0	0	0	0	0
North Carolina	0	3	0	2	0	0	8
South Carolina	0	9	0	2	0	0	12
Virginia	0	14	0	2	0	0	14
West Virginia	0	0	0	0	0	0	18
East South Central	**0**	**0**	**0**	**2**	**0**	**0**	**4**
Alabama	0	7	0	4	0	0	5
Kentucky	0	0	0	3	0	0	7
Mississippi	0	5	0	2	0	0	0
Tennessee	0	0	0	2	0	0	6
West South Central	**0**	**6**	**0**	**2**	**0**	**0**	**7**
Arkansas	0	10	0	4	0	0	9
Louisiana	0	30	0	2	0	0	0
Oklahoma	0	2	0	4	0	0	11
Texas	0	7	0	4	0	0	15
Mountain	**1**	**2**	**0**	**1**	**0**	**0**	**5**
Arizona	0	1	0	2	0	0	4
Colorado	0	29	0	2	0	0	19
Idaho	0	0	0	12	0	0	9
Montana	0	276	0	36	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	11	0	4	0	0	59
Utah	0	1	0	5	0	0	25
Wyoming	4	1	0	25	0	0	26
Pacific Contiguous	**0**	**9**	**0**	**4**	**0**	**0**	**1**
California	0	9	0	5	0	0	3
Oregon	0	0	0	8	0	0	4
Washington	0	53	0	8	0	0	1
Pacific Noncontiguous	**60**	**1**	**0**	**19**	**0**	**0**	**22**
Alaska	60	2	0	19	0	0	23
Hawaii	0	1	0	0	0	0	0
U.S. Total	**1**	**1**	**0**	**1**	**0**	**0**	**1**

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

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

Electric Utilities by Census Division and State, Year-to-Date through June 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**	**18**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	15
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	37	35	0	0	30
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	34	32	0	0	18
Middle Atlantic	**0**	**0**	**0**	**24**	**24**	**0**	**0**	**2**
New Jersey	0	0	0	24	24	0	0	25
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**18**	**9**	**0**	**30**	**2**
Illinois	0	0	0	92	45	0	0	3
Indiana	0	0	0	25	21	0	0	1
Michigan	0	0	0	25	11	0	0	1
Ohio	0	0	0	72	70	0	0	4
Wisconsin	0	0	0	0	16	0	31	7
West North Central	**0**	**0**	**0**	**58**	**4**	**0**	**9**	**1**
Iowa	0	0	0	94	4	0	0	2
Kansas	0	0	0	255	10	0	0	3
Minnesota	0	0	0	129	11	0	0	2
Missouri	0	0	0	0	64	0	0	1
Nebraska	0	0	0	168	27	0	0	3
North Dakota	0	0	0	0	9	0	35	2
South Dakota	0	0	0	0	22	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**4**	**0**	**0**	**0**
Delaware	0	0	0	85	85	0	0	15
Florida	0	0	0	1	1	0	0	0
Georgia	0	0	0	10	10	0	0	1
Maryland	0	0	0	73	73	0	0	0
North Carolina	0	0	0	10	10	0	0	1
South Carolina	0	0	0	155	14	0	0	1
Virginia	0	0	0	21	19	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**35**	**31**	**0**	**0**	**1**
Alabama	0	0	0	60	60	0	0	1
Kentucky	0	0	0	44	37	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	201	201	0	0	1
West South Central	**0**	**0**	**0**	**41**	**11**	**0**	**0**	**1**
Arkansas	0	0	0	166	166	0	0	2
Louisiana	0	0	0	142	142	0	0	1
Oklahoma	0	0	0	45	11	0	0	3
Texas	0	0	0	147	38	0	0	2
Mountain	**0**	**11**	**0**	**7**	**5**	**0**	**21**	**1**
Arizona	0	0	0	9	9	0	0	1
Colorado	0	0	0	152	4	0	0	1
Idaho	0	0	0	0	43	0	0	8
Montana	0	0	0	0	38	0	0	8
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	15	15	0	0	2
Utah	0	11	0	0	11	0	33	2
Wyoming	0	0	0	0	14	0	0	4
Pacific Contiguous	**0**	**0**	**0**	**10**	**4**	**0**	**0**	**1**
California	0	0	0	10	5	0	0	2
Oregon	0	0	0	89	5	0	0	3
Washington	0	0	0	0	7	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**31**	**0**	**0**	**6**
Alaska	0	0	0	0	54	0	0	12
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**3**	**0**	**3**	**3**	**0**	**5**	**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, June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**43**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	54	0	1	0	0	28
Maine	0	78	0	23	0	0	9
Massachusetts	0	88	0	5	0	0	19
New Hampshire	0	1,138	0	0	0	0	16
Rhode Island	0	95	0	10	0	0	0
Vermont	0	0	0	0	0	0	17
Middle Atlantic	**4**	**24**	**0**	**1**	**1,889**	**0**	**7**
New Jersey	0	79	0	2	0	0	0
New York	0	51	0	2	0	0	7
Pennsylvania	4	27	0	1	1,889	0	9
East North Central	**4**	**6**	**13**	**1**	**5**	**0**	**42**
Illinois	0	9	0	7	0	0	39
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	74
Ohio	7	7	13	1	20	0	82
Wisconsin	0	0	0	0	0	0	73
West North Central	**0**	**166**	**0**	**7**	**0**	**0**	**54**
Iowa	0	42	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	342	0	27	0	0	57
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**15**	**0**	**2**	**0**	**0**	**4**
Delaware	0	98	0	6	0	0	0
Florida	0	41	0	6	0	0	0
Georgia	0	393	0	7	0	0	221
Maryland	0	11	0	3	0	0	1
North Carolina	0	68	0	7	0	0	49
South Carolina	0	0	0	27	0	0	57
Virginia	0	11	0	2	0	0	38
West Virginia	12	0	0	14	0	0	25
East South Central	**109**	**59**	**0**	**1**	**0**	**0**	**154**
Alabama	0	114	0	0	0	0	0
Kentucky	0	0	0	0	0	0	154
Mississippi	109	0	0	4	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**18**	**0**	**1**	**0**	**0**	**16**
Arkansas	0	0	0	0	0	0	58
Louisiana	0	0	0	7	0	0	17
Oklahoma	0	0	0	0	0	0	0
Texas	0	18	0	1	0	0	0
Mountain	**5**	**11**	**0**	**3**	**0**	**0**	**22**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	20	0	0	46
Idaho	0	0	0	27	0	0	29
Montana	6	11	0	71	0	0	71
Nevada	0	0	0	0	0	0	72
New Mexico	0	0	0	161	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**3**	**0**	**3**	**0**	**0**	**14**
California	0	0	0	4	0	0	16
Oregon	0	0	0	1	0	0	49
Washington	0	3	0	9	0	0	43
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	33	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**2**	**3**	**9**	**1**	**3**	**0**	**5**

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, June 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**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	27	13	0	0	1
Maine	0	0	0	108	10	0	0	7
Massachusetts	0	0	0	9	7	0	2	4
New Hampshire	0	0	0	0	20	0	0	2
Rhode Island	0	0	0	43	11	0	0	10
Vermont	0	0	0	27	23	0	0	14
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	9	7	0	0	1
New York	0	0	0	14	5	0	0	1
Pennsylvania	0	0	0	31	7	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**21**	**1**
Illinois	0	0	0	27	4	0	0	1
Indiana	0	0	0	16	6	0	0	1
Michigan	0	0	0	43	8	0	26	1
Ohio	0	0	0	28	5	0	0	3
Wisconsin	0	0	0	55	12	0	0	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**2**
Iowa	0	0	0	121	7	0	0	4
Kansas	0	0	0	112	3	0	0	3
Minnesota	0	0	0	8	6	0	0	6
Missouri	0	0	0	30	7	0	0	3
Nebraska	0	0	0	57	5	0	0	5
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	154	14	0	0	14
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	35	39	0	0	6
District of Columbia	0	0	0	97	97	0	0	97
Florida	0	0	0	10	5	0	1	4
Georgia	0	0	0	5	5	0	0	6
Maryland	0	0	0	10	9	0	0	1
North Carolina	0	0	0	3	3	0	0	3
South Carolina	0	0	0	12	14	0	0	12
Virginia	0	0	0	10	9	0	0	2
West Virginia	0	0	0	0	11	0	0	9
East South Central	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**8**
Alabama	0	0	0	11	10	0	0	0
Kentucky	0	0	0	243	87	0	0	10
Mississippi	0	0	0	4	6	0	0	49
Tennessee	0	0	0	14	16	0	0	16
West South Central	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	7	14	0	0	1
Louisiana	0	0	0	0	58	0	0	6
Oklahoma	0	0	0	0	3	0	0	1
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**4**	**0**	**2**	**2**	**0**	**0**	**2**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	4	0	0	5
Idaho	0	17	0	11	9	0	0	10
Montana	0	0	0	62	12	0	0	5
Nevada	0	4	0	2	2	0	0	2
New Mexico	0	0	0	7	3	0	0	5
Utah	0	11	0	5	5	0	0	4
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**2**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	2	0	1	2	0	0	2
Oregon	0	11	0	11	5	0	0	3
Washington	0	0	0	58	9	0	0	5
Pacific Noncontiguous	**0**	**10**	**0**	**17**	**12**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	31
Hawaii	0	10	0	17	13	0	0	4
U.S. Total	**0**	**2**	**0**	**1**	**1**	**0**	**0**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**43**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	54	0	1	0	0	28
Maine	0	78	0	23	0	0	9
Massachusetts	0	88	0	5	0	0	19
New Hampshire	0	1,138	0	0	0	0	16
Rhode Island	0	95	0	10	0	0	0
Vermont	0	0	0	0	0	0	17
Middle Atlantic	**4**	**24**	**0**	**1**	**1,889**	**0**	**7**
New Jersey	0	79	0	2	0	0	0
New York	0	51	0	2	0	0	7
Pennsylvania	4	27	0	1	1,889	0	9
East North Central	**4**	**6**	**13**	**1**	**5**	**0**	**42**
Illinois	0	9	0	7	0	0	39
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	74
Ohio	7	7	13	1	20	0	82
Wisconsin	0	0	0	0	0	0	73
West North Central	**0**	**166**	**0**	**7**	**0**	**0**	**54**
Iowa	0	42	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	342	0	27	0	0	57
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**15**	**0**	**2**	**0**	**0**	**4**
Delaware	0	98	0	6	0	0	0
Florida	0	41	0	6	0	0	0
Georgia	0	393	0	7	0	0	221
Maryland	0	11	0	3	0	0	1
North Carolina	0	68	0	7	0	0	49
South Carolina	0	0	0	27	0	0	57
Virginia	0	11	0	2	0	0	38
West Virginia	12	0	0	14	0	0	25
East South Central	**109**	**59**	**0**	**1**	**0**	**0**	**154**
Alabama	0	114	0	0	0	0	0
Kentucky	0	0	0	0	0	0	154
Mississippi	109	0	0	4	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**18**	**0**	**1**	**0**	**0**	**16**
Arkansas	0	0	0	0	0	0	58
Louisiana	0	0	0	7	0	0	17
Oklahoma	0	0	0	0	0	0	0
Texas	0	18	0	1	0	0	0
Mountain	**5**	**11**	**0**	**3**	**0**	**0**	**22**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	20	0	0	46
Idaho	0	0	0	27	0	0	29
Montana	6	11	0	71	0	0	71
Nevada	0	0	0	0	0	0	72
New Mexico	0	0	0	161	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**3**	**0**	**3**	**0**	**0**	**14**
California	0	0	0	4	0	0	16
Oregon	0	0	0	1	0	0	49
Washington	0	3	0	9	0	0	43
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	33	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**2**	**3**	**9**	**1**	**3**	**0**	**5**

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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 June 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**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	27	13	0	0	1
Maine	0	0	0	108	10	0	0	7
Massachusetts	0	0	0	9	7	0	2	4
New Hampshire	0	0	0	0	20	0	0	2
Rhode Island	0	0	0	43	11	0	0	10
Vermont	0	0	0	27	23	0	0	14
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	9	7	0	0	1
New York	0	0	0	14	5	0	0	1
Pennsylvania	0	0	0	31	7	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**21**	**1**
Illinois	0	0	0	27	4	0	0	1
Indiana	0	0	0	16	6	0	0	1
Michigan	0	0	0	43	8	0	26	1
Ohio	0	0	0	28	5	0	0	3
Wisconsin	0	0	0	55	12	0	0	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**2**
Iowa	0	0	0	121	7	0	0	4
Kansas	0	0	0	112	3	0	0	3
Minnesota	0	0	0	8	6	0	0	6
Missouri	0	0	0	30	7	0	0	3
Nebraska	0	0	0	57	5	0	0	5
North Dakota	0	0	0	0	6	0	0	6
South Dakota	0	0	0	154	14	0	0	14
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	35	39	0	0	6
District of Columbia	0	0	0	97	97	0	0	97
Florida	0	0	0	10	5	0	1	4
Georgia	0	0	0	5	5	0	0	6
Maryland	0	0	0	10	9	0	0	1
North Carolina	0	0	0	3	3	0	0	3
South Carolina	0	0	0	12	14	0	0	12
Virginia	0	0	0	10	9	0	0	2
West Virginia	0	0	0	0	11	0	0	9
East South Central	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**8**
Alabama	0	0	0	11	10	0	0	0
Kentucky	0	0	0	243	87	0	0	10
Mississippi	0	0	0	4	6	0	0	49
Tennessee	0	0	0	14	16	0	0	16
West South Central	**0**	**0**	**0**	**2**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	7	14	0	0	1
Louisiana	0	0	0	0	58	0	0	6
Oklahoma	0	0	0	0	3	0	0	1
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**4**	**0**	**2**	**2**	**0**	**0**	**2**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	7	4	0	0	5
Idaho	0	17	0	11	9	0	0	10
Montana	0	0	0	62	12	0	0	5
Nevada	0	4	0	2	2	0	0	2
New Mexico	0	0	0	7	3	0	0	5
Utah	0	11	0	5	5	0	0	4
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**2**	**0**	**1**	**2**	**0**	**0**	**1**
California	0	2	0	1	2	0	0	2
Oregon	0	11	0	11	5	0	0	3
Washington	0	0	0	58	9	0	0	5
Pacific Noncontiguous	**0**	**10**	**0**	**17**	**12**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	31
Hawaii	0	10	0	17	13	0	0	4
U.S. Total	**0**	**2**	**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, June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**57**	**0**	**16**	**0**	**0**	**0**
Connecticut	0	1,530	0	24	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	121	0	26	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**	**60**	**0**	**16**	**0**	**0**	**0**
New Jersey	0	0	0	27	0	0	0
New York	0	107	0	20	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**62**	**32**	**0**	**8**	**0**	**0**	**0**
Illinois	94	39	0	24	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	155	0	7	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	20	0	0	0
West North Central	**0**	**18**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	20	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	5,112	0	0	0	0	0
South Atlantic	**0**	**4**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	7	0	0	0	0	0
Maryland	0	231	0	4	0	0	0
North Carolina	0	203	0	79	0	0	0
South Carolina	0	55	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**27**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	27	0	0	0
West South Central	**0**	**0**	**0**	**18**	**0**	**0**	**348**
Arkansas	0	0	0	115	0	0	0
Louisiana	0	0	0	56	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	20	0	0	348
Mountain	**0**	**21**	**0**	**11**	**0**	**0**	**0**
Arizona	0	462	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	40	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**115**	**0**	**3**	**0**	**0**	**194**
California	0	35	0	3	0	0	194
Oregon	0	1,472	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**47**	**2**	**0**	**0**	**0**	**0**	**63**
Alaska	47	13	0	0	0	0	63
Hawaii	0	0	0	0	0	0	0
U.S. Total	**25**	**13**	**0**	**4**	**0**	**0**	**48**

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, June 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**	**91**	**7**	**0**	**0**	**13**
Connecticut	0	0	0	226	226	0	0	24
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	99	22	0	0	23
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**18**	**5**	**0**	**4**	**7**
New Jersey	0	0	0	19	10	0	0	7
New York	0	0	0	74	6	0	8	12
Pennsylvania	0	0	0	83	7	0	0	3
East North Central	**0**	**0**	**0**	**88**	**17**	**0**	**0**	**7**
Illinois	0	0	0	180	153	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	255	12	0	0	6
Ohio	0	0	0	124	34	0	0	2
Wisconsin	0	0	0	147	31	0	0	20
West North Central	**0**	**0**	**0**	**0**	**30**	**0**	**48**	**7**
Iowa	0	0	0	0	25	0	0	4
Kansas	0	0	0	0	163	0	0	163
Minnesota	0	0	0	0	70	0	48	23
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	290	0	0	290
South Dakota	0	0	0	0	0	0	0	5,112
South Atlantic	**0**	**0**	**0**	**20**	**8**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	121	34	0	0	25
Georgia	0	0	0	127	127	0	0	44
Maryland	0	0	0	82	38	0	0	4
North Carolina	0	0	0	20	20	0	0	27
South Carolina	0	0	0	0	0	0	0	22
Virginia	0	0	0	223	5	0	0	2
East South Central	**0**	**0**	**0**	**98**	**98**	**0**	**0**	**26**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	98	98	0	0	26
West South Central	**0**	**0**	**0**	**133**	**33**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	99
Louisiana	0	0	0	0	0	0	0	56
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	133	36	0	0	18
Mountain	**0**	**0**	**0**	**24**	**6**	**0**	**0**	**5**
Arizona	0	0	0	79	79	0	0	9
Colorado	0	0	0	64	75	0	0	45
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	27	4	0	0	4
New Mexico	0	0	0	0	290	0	0	40
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**21**	**7**	**0**	**0**	**3**
California	0	0	0	21	7	0	0	3
Oregon	0	0	0	0	33	0	0	15
Washington	0	0	0	0	87	0	0	83
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	42
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**0**	**2**	**3**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**57**	**0**	**16**	**0**	**0**	**0**
Connecticut	0	1,530	0	24	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	121	0	26	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**	**60**	**0**	**16**	**0**	**0**	**0**
New Jersey	0	0	0	27	0	0	0
New York	0	107	0	20	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**62**	**32**	**0**	**8**	**0**	**0**	**0**
Illinois	94	39	0	24	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	155	0	7	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	20	0	0	0
West North Central	**0**	**18**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	20	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	5,112	0	0	0	0	0
South Atlantic	**0**	**4**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	7	0	0	0	0	0
Maryland	0	231	0	4	0	0	0
North Carolina	0	203	0	79	0	0	0
South Carolina	0	55	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**27**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	27	0	0	0
West South Central	**0**	**0**	**0**	**18**	**0**	**0**	**348**
Arkansas	0	0	0	115	0	0	0
Louisiana	0	0	0	56	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	20	0	0	348
Mountain	**0**	**21**	**0**	**11**	**0**	**0**	**0**
Arizona	0	462	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	40	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**115**	**0**	**3**	**0**	**0**	**194**
California	0	35	0	3	0	0	194
Oregon	0	1,472	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**47**	**2**	**0**	**0**	**0**	**0**	**63**
Alaska	47	13	0	0	0	0	63
Hawaii	0	0	0	0	0	0	0
U.S. Total	**25**	**13**	**0**	**4**	**0**	**0**	**48**

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 June 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**	**91**	**7**	**0**	**0**	**13**
Connecticut	0	0	0	226	226	0	0	24
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	99	22	0	0	23
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**18**	**5**	**0**	**4**	**7**
New Jersey	0	0	0	19	10	0	0	7
New York	0	0	0	74	6	0	8	12
Pennsylvania	0	0	0	83	7	0	0	3
East North Central	**0**	**0**	**0**	**88**	**17**	**0**	**0**	**7**
Illinois	0	0	0	180	153	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	255	12	0	0	6
Ohio	0	0	0	124	34	0	0	2
Wisconsin	0	0	0	147	31	0	0	20
West North Central	**0**	**0**	**0**	**0**	**30**	**0**	**48**	**7**
Iowa	0	0	0	0	25	0	0	4
Kansas	0	0	0	0	163	0	0	163
Minnesota	0	0	0	0	70	0	48	23
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	290	0	0	290
South Dakota	0	0	0	0	0	0	0	5,112
South Atlantic	**0**	**0**	**0**	**20**	**8**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	121	34	0	0	25
Georgia	0	0	0	127	127	0	0	44
Maryland	0	0	0	82	38	0	0	4
North Carolina	0	0	0	20	20	0	0	27
South Carolina	0	0	0	0	0	0	0	22
Virginia	0	0	0	223	5	0	0	2
East South Central	**0**	**0**	**0**	**98**	**98**	**0**	**0**	**26**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	98	98	0	0	26
West South Central	**0**	**0**	**0**	**133**	**33**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	99
Louisiana	0	0	0	0	0	0	0	56
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	133	36	0	0	18
Mountain	**0**	**0**	**0**	**24**	**6**	**0**	**0**	**5**
Arizona	0	0	0	79	79	0	0	9
Colorado	0	0	0	64	75	0	0	45
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	27	4	0	0	4
New Mexico	0	0	0	0	290	0	0	40
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**21**	**7**	**0**	**0**	**3**
California	0	0	0	21	7	0	0	3
Oregon	0	0	0	0	33	0	0	15
Washington	0	0	0	0	87	0	0	83
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	42
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**0**	**2**	**3**

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

Table A.5.A. Relative Standard Error for Net Generation by Fuel Type: Industrial Sector by Census Division and State, June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**176**	**50**	**0**	**11**	**0**	**0**	**48**
Connecticut	0	0	0	15	0	0	0
Maine	176	50	0	29	0	0	48
Massachusetts	0	0	0	12	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	48	0	0	0
Middle Atlantic	**28**	**19**	**37**	**9**	**15**	**0**	**22**
New Jersey	0	0	0	10	0	0	0
New York	0	2	0	8	0	0	22
Pennsylvania	28	53	62	15	24	0	0
East North Central	**6**	**25**	**0**	**6**	**9**	**0**	**49**
Illinois	5	0	0	18	0	0	0
Indiana	0	3	0	7	10	0	0
Michigan	71	57	0	15	0	0	178
Ohio	0	0	0	14	0	0	0
Wisconsin	21	400	0	15	0	0	51
West North Central	**3**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	1	0	0	8	0	0	0
Kansas	0	0	0	46	0	0	0
Minnesota	13	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	46	0	0	0	0	0	0
South Atlantic	**24**	**29**	**47**	**4**	**0**	**0**	**22**
Delaware	0	0	0	0	0	0	0
Florida	102	73	0	12	0	0	0
Georgia	85	35	47	15	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	78	0	23	0	0	448
South Carolina	0	0	0	0	0	0	0
Virginia	0	242	0	7	0	0	0
West Virginia	0	0	0	0	0	0	22
East South Central	**14**	**82**	**0**	**8**	**0**	**0**	**0**
Alabama	140	104	0	15	0	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	27	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**4**	**27**	**1**	**19**	**0**	**0**
Arkansas	0	0	0	17	0	0	0
Louisiana	0	0	0	2	27	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	8	27	2	16	0	0
Mountain	**17**	**0**	**0**	**4**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	100	0	0	27	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	17	0	0	7	0	0	0
Pacific Contiguous	**0**	**97**	**0**	**1**	**5**	**0**	**0**
California	0	0	0	1	5	0	0
Oregon	0	0	0	33	0	0	0
Washington	0	108	0	35	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**87**
Alaska	0	9	0	0	0	0	0
Hawaii	0	0	0	0	0	0	87
U.S. Total	**3**	**8**	**18**	**1**	**8**	**0**	**15**

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, June 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**	**25**	**8**	**0**	**0**	**7**
Connecticut	0	0	0	614	614	0	0	15
Maine	0	0	0	0	8	0	0	8
Massachusetts	0	0	0	0	155	0	0	13
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	48
Middle Atlantic	**0**	**0**	**0**	**55**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	81	81	0	0	5
New York	0	0	0	0	14	0	0	7
Pennsylvania	0	0	0	75	9	0	0	10
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**3**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	31	0	0	6
Michigan	0	0	0	0	9	0	0	8
Ohio	0	0	0	0	16	0	0	8
Wisconsin	0	0	0	0	9	0	0	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	42
Minnesota	0	0	0	0	0	0	0	4
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	0	0	0	28
South Atlantic	**0**	**0**	**0**	**129**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	73	0	0	1
Florida	0	0	0	185	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	180	3	0	0	2
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	9
East South Central	**0**	**0**	**0**	**147**	**3**	**0**	**0**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	15	0	0	11
Mississippi	0	0	0	0	4	0	0	6
Tennessee	0	0	0	147	7	0	0	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**4**	**1**
Arkansas	0	0	0	0	5	0	0	5
Louisiana	0	0	0	0	5	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	10	0	14	2
Mountain	**0**	**0**	**0**	**115**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	180	4	0	0	8
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**45**	**6**	**0**	**3**	**1**
California	0	0	0	45	10	0	3	1
Oregon	0	0	0	0	12	0	0	11
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
Alaska	0	0	0	0	0	0	0	4
Hawaii	0	0	0	0	0	0	0	13
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 June 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**176**	**50**	**0**	**11**	**0**	**0**	**48**
Connecticut	0	0	0	15	0	0	0
Maine	176	50	0	29	0	0	48
Massachusetts	0	0	0	12	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	48	0	0	0
Middle Atlantic	**28**	**19**	**37**	**9**	**15**	**0**	**22**
New Jersey	0	0	0	10	0	0	0
New York	0	2	0	8	0	0	22
Pennsylvania	28	53	62	15	24	0	0
East North Central	**6**	**25**	**0**	**6**	**9**	**0**	**49**
Illinois	5	0	0	18	0	0	0
Indiana	0	3	0	7	10	0	0
Michigan	71	57	0	15	0	0	178
Ohio	0	0	0	14	0	0	0
Wisconsin	21	400	0	15	0	0	51
West North Central	**3**	**0**	**0**	**7**	**0**	**0**	**0**
Iowa	1	0	0	8	0	0	0
Kansas	0	0	0	46	0	0	0
Minnesota	13	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	46	0	0	0	0	0	0
South Atlantic	**24**	**29**	**47**	**4**	**0**	**0**	**22**
Delaware	0	0	0	0	0	0	0
Florida	102	73	0	12	0	0	0
Georgia	85	35	47	15	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	78	0	23	0	0	448
South Carolina	0	0	0	0	0	0	0
Virginia	0	242	0	7	0	0	0
West Virginia	0	0	0	0	0	0	22
East South Central	**14**	**82**	**0**	**8**	**0**	**0**	**0**
Alabama	140	104	0	15	0	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	27	0	0	0
Tennessee	0	0	0	4	0	0	0
West South Central	**0**	**4**	**27**	**1**	**19**	**0**	**0**
Arkansas	0	0	0	17	0	0	0
Louisiana	0	0	0	2	27	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	8	27	2	16	0	0
Mountain	**17**	**0**	**0**	**4**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	100	0	0	27	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	17	0	0	7	0	0	0
Pacific Contiguous	**0**	**97**	**0**	**1**	**5**	**0**	**0**
California	0	0	0	1	5	0	0
Oregon	0	0	0	33	0	0	0
Washington	0	108	0	35	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**87**
Alaska	0	9	0	0	0	0	0
Hawaii	0	0	0	0	0	0	87
U.S. Total	**3**	**8**	**18**	**1**	**8**	**0**	**15**

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 June 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**	**25**	**8**	**0**	**0**	**7**
Connecticut	0	0	0	614	614	0	0	15
Maine	0	0	0	0	8	0	0	8
Massachusetts	0	0	0	0	155	0	0	13
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	48
Middle Atlantic	**0**	**0**	**0**	**55**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	81	81	0	0	5
New York	0	0	0	0	14	0	0	7
Pennsylvania	0	0	0	75	9	0	0	10
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**0**	**3**
Illinois	0	0	0	0	0	0	0	5
Indiana	0	0	0	0	31	0	0	6
Michigan	0	0	0	0	9	0	0	8
Ohio	0	0	0	0	16	0	0	8
Wisconsin	0	0	0	0	9	0	0	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	42
Minnesota	0	0	0	0	0	0	0	4
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	0	0	0	28
South Atlantic	**0**	**0**	**0**	**129**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	73	0	0	1
Florida	0	0	0	185	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	180	3	0	0	2
Virginia	0	0	0	0	0	0	0	2
West Virginia	0	0	0	0	0	0	0	9
East South Central	**0**	**0**	**0**	**147**	**3**	**0**	**0**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	15	0	0	11
Mississippi	0	0	0	0	4	0	0	6
Tennessee	0	0	0	147	7	0	0	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**4**	**1**
Arkansas	0	0	0	0	5	0	0	5
Louisiana	0	0	0	0	5	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	10	0	14	2
Mountain	**0**	**0**	**0**	**115**	**3**	**0**	**0**	**3**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	180	4	0	0	8
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	6
Pacific Contiguous	**0**	**0**	**0**	**45**	**6**	**0**	**3**	**1**
California	0	0	0	45	10	0	3	1
Oregon	0	0	0	0	12	0	0	11
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**
Alaska	0	0	0	0	0	0	0	4
Hawaii	0	0	0	0	0	0	0	13
U.S. Total	**0**	**0**	**0**	**32**	**2**	**0**	**1**	**1**

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**3**	**7**	**1**
Connecticut	0	1	3	17	1
Maine	1	1	3	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	3	8	8	0	4
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**1**
Illinois	0	1	1	0	1
Indiana	1	3	2	0	1
Michigan	1	2	3	0	1
Ohio	0	1	3	0	1
Wisconsin	1	4	6	0	3
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	9	6	0	4
Kansas	2	2	8	0	2
Minnesota	1	5	8	0	3
Missouri	1	3	7	0	2
Nebraska	2	8	10	0	4
North Dakota	2	5	9	0	5
South Dakota	2	11	13	0	6
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	1	2	6	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	1	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	3	0	1
Kentucky	1	4	3	0	2
Mississippi	2	2	5	0	2
Tennessee	1	3	5	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	2	4	0	2
Louisiana	1	1	1	0	1
Oklahoma	2	1	4	0	2
Texas	2	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	3	4	0	1
Colorado	2	6	7	0	3
Idaho	1	5	3	0	2
Montana	2	9	5	0	3
Nevada	1	2	1	0	1
New Mexico	3	8	8	0	4
Utah	2	6	3	0	3
Wyoming	2	9	4	0	3
Pacific Contiguous	**0**	**1**	**3**	**0**	**1**
California	1	1	2	0	1
Oregon	1	5	9	0	3
Washington	1	5	7	0	3
Pacific Noncontiguous	**1**	**5**	**5**	**0**	**3**
Alaska	3	12	19	0	7
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**1**	**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 June 2019

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

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Table A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, June 2019

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through June 2019

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

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

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through June 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**1**	**1**
Connecticut	4	1	3	2	2
Maine	0	1	2	0	1
Massachusetts	0	1	5	0	1
New Hampshire	0	1	3	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	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	1
Indiana	1	3	2	0	1
Michigan	0	2	4	0	1
Ohio	0	1	1	0	1
Wisconsin	1	3	6	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	1	7	6	0	3
Kansas	1	2	6	0	2
Minnesota	1	4	8	0	3
Missouri	1	3	6	0	2
Nebraska	2	7	11	0	4
North Dakota	1	4	8	0	4
South Dakota	2	8	14	0	4
South Atlantic	**0**	**0**	**2**	**0**	**0**
Delaware	1	3	7	0	2
District of Columbia	0	0	0	0	0
Florida	0	1	5	0	0
Georgia	1	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	1	1	3	0	1
Virginia	0	1	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	1	2	3	0	1
Kentucky	2	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	2	2	0	1
Oklahoma	1	2	5	0	1
Texas	1	1	2	0	1
Mountain	**0**	**2**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	2	5	7	0	2
Idaho	1	4	5	0	2
Montana	2	6	7	0	3
Nevada	1	2	1	0	1
New Mexico	2	7	10	0	4
Utah	2	5	3	0	2
Wyoming	2	7	5	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	2	0	1
Oregon	1	4	10	0	2
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**

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

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

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 EI 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.'

Appendix C

Technical notes

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

Data quality

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

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

Reliability of data

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

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

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

Relative Standard Error: The relative standard error (RSE) statistic, usually given as a percentage, describes the magnitude of sampling error that might reasonably be incurred. The RSE is the square root of the estimated variance, divided by the variable of interest. The variable of interest may be the ratio of two variables, or a single variable.

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

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

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

Relative Standard Error With Respect to a Superpopulation: The RSESP statistic is similar to the RSE (described above). Like the RSE, it is a statistic designed to estimate the variability of data and is usually given as a percentage. However, where the RSE is only designed to estimate the magnitude of sampling error, the RSESP more fully reflects the impact of variability from sampling and non-sampling errors. This is a more complete measure than RSE in that it can measure statistical variability in a complete census in addition to a sample21,24. In addition to being a measure of data variability, the RSESP can also be useful in comparing different models that are applied to the same set of data22. This capability is used to test different regression models for imputation and prediction. This testing may include considerations such as comparing different regressors, the comparative reliability of different monthly samples, or the use of different geographical strata or groupings for a given model. For testing purposes, ERUS typically uses recent historical data that have been finalized. Typically, time-series graphics showing two or more models or samples are generated showing the RSESP values over time. In selecting models, consideration is given to total survey error as well as any apparent differences in robustness.

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

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

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

Data revision procedure

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

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

Data sources for Electric Power Monthly

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

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

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

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

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

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

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

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

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

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

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

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

P Indicates a preliminary value.

NM Data value is not meaningful, either (1) when compared to the same value for the previous time period, or (2) when a data value is not meaningful due to having a high Relative Standard Error (RSE).

Form EIA-826

The Form EIA 826, "Monthly Electric Utility Sales and Revenues with State Distributions Report," is a monthly collection of data from a sample of approximately 500 of the largest electric utilities (primarily investor owned and publicly owned) as well as a census of energy service providers with sales to ultimate consumers in deregulated States. Form EIA-861, with approximately 3,300 respondents, serves as a frame from which the Form 826 sample is drawn. Based on this sample, a model is used to estimate for the entire universe of U.S. electric utilities.

Instrument and design history: The collection of electric power sales data and related information began in the early 1940's and was established as FPC Form 5 by FPC Order 141 in 1947. In 1980, the report was revised with only selected income items remaining and became the FERC Form 5. The Form EIA 826, "Electric Utility Company Monthly Statement," replaced the FERC Form 5 in January 1983. In January 1987, the "Electric Utility Company Monthly Statement" was changed to the "Monthly Electric Utility Sales and Revenue Report with State Distributions." The title was changed again in January 2002 to "Monthly Electric Utility Sales and Revenues with State Distributions Report" to become consistent with other EIA report titles. The Form EIA 826 was revised in January 1990, and some data elements were eliminated.

In 1993, EIA for the first time used a model sample for the Form EIA 826. A stratified random sample, employing auxiliary data, was used for each of the four previous years. The sample for the Form EIA 826 was designed to obtain estimates of electricity sales and average price of electricity to ultimate consumers at the State level by end use sector.

Starting with data for January 2001, the restructuring of the electric power industry was taken into account by forming three schedules on the Form EIA-826. Schedule 1, Part A is for full service utilities that operate as in the past. Schedule 1, Part B is for electric service providers only, and Schedule 1, Part C is for those utilities providing distribution service for those on Schedule 1, Part B. In addition, Schedule 1 Part D is for those energy providers to ultimate consumers or power marketers that provide bundled service. Also, the Form EIA-826 frame was modified to include all investor-owned electric utilities and a sample of companies from other ownership classes. A new method of estimation was implemented at this same time. (See EPM April 2001, p.1.)

With the October 2004 issue of the EPM, EIA published for the first time preliminary electricity sales data for the Transportation Sector. These data are for electricity delivered to and consumed by local, regional, and metropolitan transportation systems. The data being published for the first time in the October EPM included July 2004 data as well as year-to-date. EIA's efforts to develop these new data have identified anomalies in several States and the District of Columbia. Some of these anomalies are caused by issues such as: 1) Some respondents have classified themselves as outside the realm of the survey. The Form EIA-826 collects data from those respondents providing electricity and other services to the ultimate end users. EIA has experienced specific situations where, although the respondents' customers are the ultimate end users, particular end users qualify under wholesale rate schedules. 2) The Form EIA-826 is a cutoff sample and not intended to be a census.

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

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

Data processing and data system editing: Monthly Form EIA-826 submission is available via an Internet Data Collection (IDC) system. The completed data are due to EIA by the last calendar day of the month following the reporting month. Nonrespondents are contacted to obtain the data. The data are edited and additional checks are completed. Following verification, imputation is run, and tables and text of the aggregated data are produced for inclusion in the EPM.

Imputation: Regression prediction, or imputation, is done for entities not in the monthly sample and for any nonrespondents. Regressor data for Schedule 1, Part A is the average monthly sales or revenue from the most recent finalized data from survey Form EIA-861. Beginning with January 2008 data and the finalized 2007 data, the regressor data for Schedule 1 Parts B and C is the prior month's data.

Formulas and methodologies: The Form EIA 826 data are collected by end-use sector (residential, commercial, industrial, and transportation) and State. Form EIA 861 data are used as the frame from which the sample is selected and in some instances also as regressor data. Updates are made to the frame to reflect mergers that affect data processing.

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

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

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

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

Data from the Form EIA-826 are used to determine estimates by sector at the State, Census division, and national level. State level sales and revenues estimates are first calculated. Then the ratio of revenue divided by sales is calculated to estimate the price of electricity to ultimate consumers at the State level. The estimates are accumulated separately to produce the Census division and U.S. level estimates[1].

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

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

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

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

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

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

Form EIA-860

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860M

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

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

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

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

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

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

Form EIA-861

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

Instrument and design history: The Form EIA 861 was implemented in January 1985 for collection of data as of year end 1984. The Federal Energy Administration Act of 1974 (Public Law 93 275) defines the legislative authority to collect these data.

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

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

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

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

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

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

Form EIA-923

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

generating capacity that receive shipments of fossil fuels for eventual use in electric power generation. The monthly data are due by the last day of the month following the reporting period.

Receipts of fossil fuels, fuel cost and quality information, and fuel stocks at the end of the reporting period are all reported at the plant level. Plants that burn organic fuels and have a steam turbine capacity of at least 10 megawatts report consumption at the boiler level and generation at the generator level. For all other plants, consumption is reported at the prime-mover level. For these plants, generation is reported either at the prime-mover level or, for noncombustible sources (e.g. wind, nuclear), at the prime-mover and energy source level. The source and disposition of electricity is reported annually for nonutilities at the plant level as is revenue from sales for resale. Environmental data are collected annually from facilities that have a steam turbine capacity of at least 10 megawatts.

Instrument and design history:

Receipts and cost and quality of fossil fuels
On July 7, 1972, the Federal Power Commission (FPC) issued Order Number 453 enacting the New Code of Federal Regulations, Section 141.61, legally creating the FPC Form 423. Originally, the form was used to collect data only on fossil steam plants, but was amended in 1974 to include data on internal-combustion and combustion-turbine units. The FERC Form 423 replaced the FPC Form 423 in January 1983. The FERC Form 423 eliminated peaking units, for which data were previously collected on the FPC Form 423. In addition, the generator nameplate capacity threshold was changed from 25 megawatts to 50 megawatts. This reduction in coverage eliminated approximately 50 utilities and 250 plants. All historical FPC Form 423 data in this publication were revised to reflect the new generator-nameplate- capacity threshold of 50 or more megawatts reported on the FERC Form 423. In January 1991, the collection of data on the FERC Form 423 was extended to include combined cycle units. Historical data have not been revised to include these units. Starting with the January 1993 data, the FERC began to collect the data directly from the respondents.

The Form EIA-423 was originally implemented in January 2002 to collect monthly cost and quality data for fossil fuel receipts from owners or operators of nonutility electricity generating plants. Due to the restructuring of the electric power industry, many plants which had historically submitted this information for utility plants on the FERC Form 423 (see above) were being transferred to the nonutility sector. As a result, a large percentage of fossil fuel receipts were no longer being reported. The Form EIA-423 was implemented to fill this void and to capture the data associated with existing non-regulated power producers. Its design closely followed that of the FERC Form 423.

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

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

Generation, consumption, and stocks

The Bureau of Census and the U.S. Geological Survey collected, compiled, and published data on the electric power industry prior to 1936. After 1936, the Federal Power Commission (FPC) assumed all data collection and publication responsibilities for the electric power industry and implemented the Form FPC-4. The Federal Power Act, Section 311 and 312, and FPC Order 141 defined the legislative authority to collect power production data. The Form EIA-759 replaced the Form FPC-4 in January 1982.

In 1996, the Form EIA-900 was initiated to collect sales for resale data from unregulated entities14. In 1998, the form was modified to collect sales for resale, gross generation, and sales to end user data. In 1999, the form was modified to collect net generation, consumption, and ending stock data15. In 2000, the form was modified to include the production of useful thermal output data.

In January 2001, Form EIA-906 superseded Forms EIA-759 and EIA-900. In January 2004, Form EIA-920 superseded Form EIA-906 for those plants defined as combined heat and power plants; all other plants that generate electricity continue to report on Form EIA-906. The Federal Energy Administration Act of 1974 (Public Law 93-275) defines the legislative authority to collect these data.

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

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

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

Imputation: For select survey data elements collected monthly, regression prediction, or imputation, is done for missing data, including non-sampled units and any non-respondents. For data collected annually, imputation is performed for non-respondents. For gross generation and total fuel

consumption, multiple regression is used for imputation (see discussion, above). Only approximately 0.02 percent of the national total generation for 2010 is imputed, although this will vary by State and energy source.

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

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

For stocks, a linear combination of the prior month's ending stocks value and the current month's consumption and receipts values are used.

Receipts of fossil fuels: Receipts data, including cost and quality of fuels, are collected at the plant level from selected electric generating plants and fossil-fuel storage terminals in the United States. These plants include independent power producers, electric utilities, and commercial and industrial combined heat and power producers. All plants with a total fossil-fueled nameplate capacity of 50 megawatts or more (excluding storage terminals, which do not produce electricity) were required to report receipts of fossil fuels. In January 2013, the threshold was changed to 200 megawatts for plants primarily fueled by natural gas, petroleum coke, distillate fuel oil, and residual fuel oil. The requirement to report self-produced and minor fuels, i.e., blast furnace gas, other manufactured gases, kerosene, jet fuel, propane, and waste oils was eliminated. The threshold for coal plants remained at 50 megawatts. The data on cost and quality of fuel shipments are used to produce aggregates and weighted averages for each fuel type at the state, Census division, and U.S. levels.

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

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

Power production, fuel stocks, and fuel consumption data: The Bureau of Census and the U.S. Geological Survey collected, compiled, and published data on the electric power industry prior to 1936. After 1936, the Federal Power Commission (FPC) assumed all data collection and publication responsibilities for the electric power industry and implemented the Form FPC-4. The Federal Power Act, Section 311 and 312, and FPC Order 141 defined the legislative authority to collect power production data. The Form EIA-759 replaced the Form FPC-4 in January 1982.

In 1996, the Form EIA-900 was initiated to collect sales for resale data from unregulated entities. In 1998, the form was modified to collect sales for resale, gross generation, and sales to end user data. In 1999, the form was modified to collect net generation, consumption, and ending stock data. In 2000, the form was modified to include the production of useful thermal output data.

In January 2001, Form EIA-906 superseded Forms EIA-759 and EIA-900. In January 2004, Form EIA-920 superseded Form EIA-906 for those plants defined as combined heat and power plants; all other plants that generate electricity continue to report on Form EIA-906. The Federal Energy Administration Act of 1974 (Public Law 93 275) defines the legislative authority to collect these data.

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

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

Methodology to estimate biogenic and non-biogenic municipal solid waste[2]: Municipal solid waste (MSW) consumption for generation of electric power is split into its biogenic and non-biogenic components beginning with 2001 data by the following methodology:

The tonnage of MSW consumed is reported on the Form EIA-923. The composition of MSW and categorization of the components were obtained from the Environmental Protection Agency publication, *Municipal Solid Waste in the United States: 2005 Facts and Figures*. The Btu contents of the components of MSW were obtained from various sources.

The potential quantities of combustible MSW discards (which include all MSW material available for combustion with energy recovery, discards to landfill, and other disposal) were multiplied by their respective Btu contents. The EPA-based categories of MSW were then classified into renewable and non-renewable groupings. From this, EIA calculated how much of the energy potentially consumed from MSW was attributed to biogenic components and how much to non-biogenic components (see Tables 1 and 2, below). [3]

These values are used to allocate net generation published in the Electric Power Monthly generation tables. The tons of biogenic and non-biogenic components were estimated with the assumption that glass and metals were removed prior to combustion. The average Btu/ton for the biogenic and non-

biogenic components is estimated by dividing the total Btu consumption by the total tons. Published net generation attributed to biogenic MSW and non-biogenic MSW is classified under Other Renewables and Other, respectively.

Table 1. Btu consumption for biogenic and non-biogenic municipal solid waste (percent)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Biogenic	57	56	55	55	56	57	55	54	51	50
Non-biogenic	43	44	45	45	44	43	46	46	49	50

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

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

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

First, an efficiency factor is determined for each plant and prime mover type. Based on data for electric power generation and useful thermal output collected in 2003 (on Form EIA-906, "Power Plant Report") efficiency was calculated for each prime mover type at a plant. The efficiency factor is the total output in Btu, including electric power and useful thermal output (UTO), divided by the total input in Btu. Electric power is converted to Btu at 3,412 Btu per kilowatthour.

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

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

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

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

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

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

Issues within historical data series:

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

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

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

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

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

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

Average Capacity Factors

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

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

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

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

NERC classification

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

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

The new NERC Regional Council names are as follows:

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

Business classification

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

Agriculture, Forestry, and Fishing

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

Mining

211 Oil and gas extraction
2121 Coal mining
2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

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

Transportation and Public Utilities

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

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

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

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

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

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

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

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

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

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

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

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

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

e_i is the error term

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

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

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

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

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

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

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

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

Appendix 1- MSAs

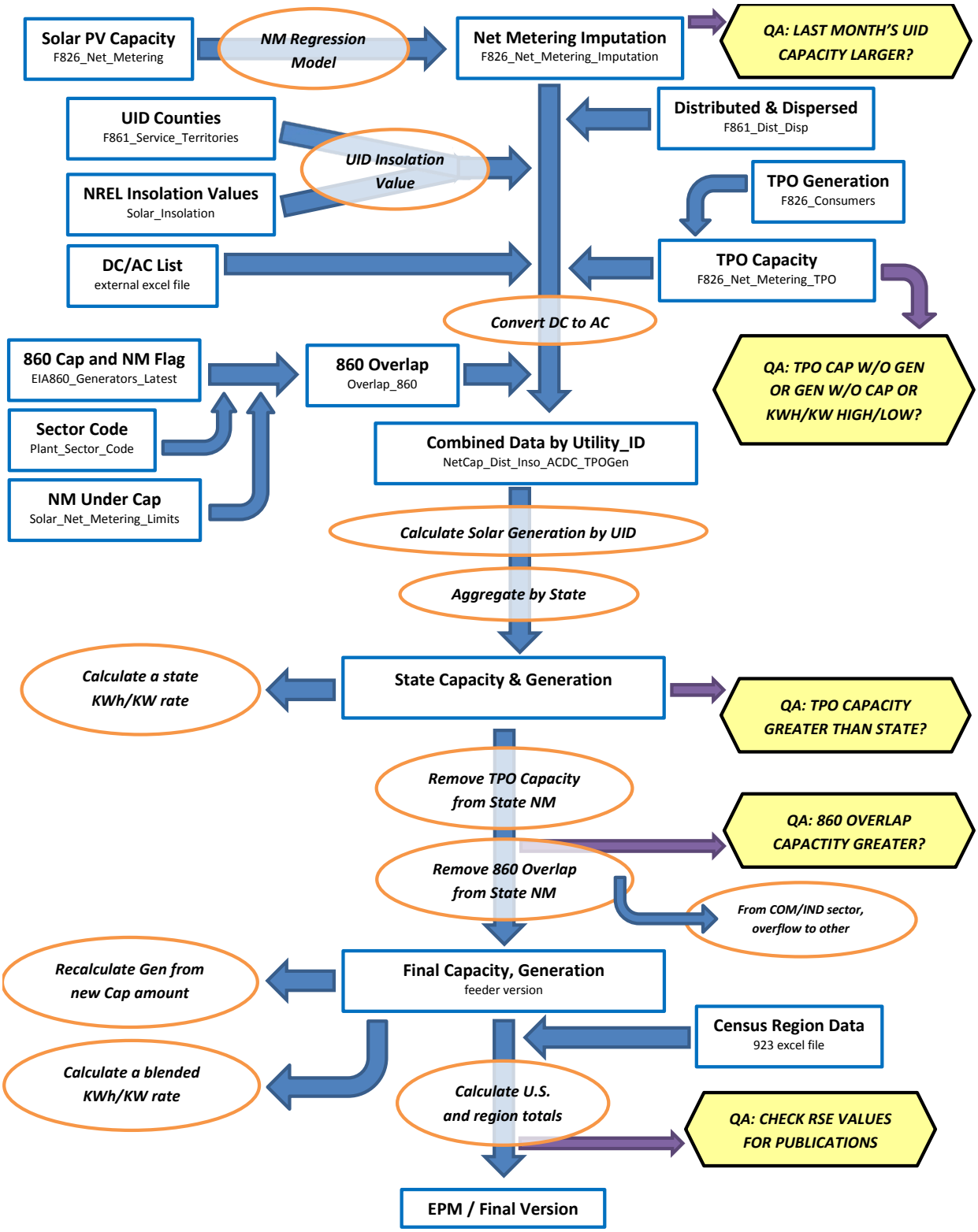
TMY3 (1991-2005) Weather Stations by MSA

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

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

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

Appendix 2 – Flow diagram of data sources and analysis



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

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

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

Table C.1 Average Heat Content of Fossil-Fuel Receipts, June 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	5.99	--	1.03
Connecticut	--	--	--	1.03
Maine	24.70	6.25	--	1.04
Massachusetts	--	--	--	1.03
New Hampshire	--	5.76	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.09	5.95	--	1.03
New Jersey	26.10	5.78	--	1.03
New York	--	6.23	--	1.03
Pennsylvania	21.93	5.91	--	1.04
East North Central	20.34	5.80	27.79	1.05
Illinois	17.67	5.79	--	1.02
Indiana	22.01	5.76	--	1.05
Michigan	18.63	5.89	27.88	1.05
Ohio	24.89	5.78	--	1.05
Wisconsin	17.59	5.86	26.41	1.02
West North Central	16.55	5.78	--	1.07
Iowa	17.57	5.77	--	1.09
Kansas	17.05	5.79	--	1.01
Minnesota	17.57	5.80	--	1.09
Missouri	17.60	5.76	--	1.04
Nebraska	16.98	5.75	--	1.07
North Dakota	13.09	5.81	--	1.00
South Dakota	16.43	--	--	--
South Atlantic	23.86	5.83	28.48	1.03
Delaware	--	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.88	5.80	28.48	1.02
Georgia	19.81	5.97	--	1.02
Maryland	25.11	5.82	--	1.04
North Carolina	24.90	5.80	--	1.03
South Carolina	24.70	5.83	--	1.03
Virginia	22.79	5.89	--	1.05
West Virginia	25.04	5.78	--	1.07
East South Central	21.41	5.76	--	1.02
Alabama	19.23	5.50	--	1.03
Kentucky	22.34	5.79	--	1.03
Mississippi	18.41	5.80	--	1.03
Tennessee	22.49	5.76	--	1.00
West South Central	16.03	5.86	29.48	1.03
Arkansas	17.40	5.90	--	1.02
Louisiana	16.27	5.90	29.48	1.03
Oklahoma	17.32	5.80	--	1.03
Texas	15.64	5.84	--	1.02
Mountain	18.77	5.75	--	1.05
Arizona	19.44	5.71	--	1.03
Colorado	18.67	--	--	1.13
Idaho	--	--	--	1.00
Montana	16.68	5.92	--	1.04
Nevada	19.41	5.82	--	1.04
New Mexico	18.25	5.66	--	1.03
Utah	21.65	5.71	--	1.04
Wyoming	17.38	5.85	--	1.05
Pacific Contiguous	17.39	6.00	--	1.04
California	22.80	--	--	1.03
Oregon	17.13	--	--	1.05
Washington	16.85	6.00	--	1.10
Pacific Noncontiguous	17.87	6.12	--	1.00
Alaska	14.10	5.60	--	1.00
Hawaii	19.58	6.13	--	--
U.S. Total	19.35	6.02	28.74	1.03

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

Table C.2. Comparison of Preliminary Monthly Data Versus Final Monthly Data at the U.S. Level, 2015 through 2017

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

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and synthetic coal. Coal stocks exclude waste coal.
Petroleum Liquids include distillate fuel oil, residual fuel oil, jet fuel, kerosene, and waste oil.
Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately. Excludes blast furnace gas and other gases.
Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.
Other generation includes geothermal, wood, waste, wind, and solar, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
Fuel Stocks are end-of-month values.
See technical notes (http://www.eia.gov/cneaf/electricity/epm/appenc.pdf) for additional information on the Commercial, Industrial and Transportation sectors.
Cost of Fossil Fuels represent weighted values.
Notes: Mean absolute value of percent change is the unweighted average of the absolute percent cahnges.
Sources: U.S. Energy Information Administration, Form EIA-923 'Power Plant Operations Report'; Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report'; Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report'; Form EIA-906, 'Power Plant Report;' Form EIA-920 'Combined Heat and Power Plant Report'; and Federal Energy Regulatory Commission, FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants.'

Table C.3. Comparison of Preliminary Annual Data Versus Final Annual Data at the U.S. Level, 2015 through 2017

	2015			2016			2017		
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	1,356,057	1,352,398	-0.27%	1,240,108	1,239,149	-0.08%	1,207,901	1,205,835	-0.17%
Petroleum Liquids	17,456	17,372	-0.48%	12,675	13,008	2.63%	12,583	12,414	-1.34%
Petroleum Coke	10,987	10,877	-1.00%	11,232	11,197	-0.31%	8,508	8,976	5.50%
Natural Gas	1,335,068	1,333,482	-0.12%	1,380,295	1,378,307	-0.14%	1,272,864	1,296,415	1.85%
Other Gases	12,963	13,117	1.18%	13,000	12,807	-1.48%	14,159	12,469	-11.94%
Hydroelectric	246,075	243,989	-0.85%	259,143	261,126	0.77%	293,550	293,839	0.10%
Nuclear	797,178	797,178	0.00%	805,327	805,694	0.05%	804,950	804,950	0.00%
Other	311,597	309,189	-0.77%	357,299	355,387	-0.54%	400,289	399,373	-0.23%
Total	**4,087,381**	**4,077,601**	**-0.24%**	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,271**	**0.48%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	740,855	739,594	-0.17%	678,005	677,371	-0.09%	663,479	663,911	0.07%
Petroleum Liquids (1,000 barrels)	29,545	28,925	-2.10%	21,225	22,405	5.56%	21,935	21,696	-1.09%
Petroleum Coke (1,000 tons)	4,088	4,044	-1.07%	4,275	4,253	-0.52%	3,349	3,490	4.21%
Natural Gas (1,000 Mcf)	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%	9,440,777	9,507,760	0.71%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	197,128	195,548	-0.80%	163,946	162,009	-1.18%	137,155	137,687	0.39%
Petroleum Liquids (1,000 barrels)	32,223	32,884	2.05%	30,880	31,839	3.11%	28,723	29,294	1.99%
Petroleum Coke (1,000 tons)	1,342	1,340	-0.15%	872	845	-3.10%	1,113	864	-22.42%
Retail Sales (Million kWh)									
Residential	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%	1,378,819	1,378,648	-0.01%
Commercial	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%	1,349,208	1,352,888	0.27%
Industrial	958,563	986,508	2.92%	936,269	976,715	4.32%	946,443	984,298	4.00%
Transportation	7,659	7,637	-0.29%	7,499	7,497	-0.03%	7,524	7,523	-0.02%
Total	**3,724,525**	**3,758,992**	**0.93%**	**3,710,779**	**3,762,462**	**1.39%**	**3,681,995**	**3,723,356**	**1.12%**
Revenue (Million Dollars)									
Residential	177,367	177,624	0.14%	176,585	177,077	0.28%	177,860	177,661	-0.11%
Commercial	143,893	144,781	0.62%	140,937	142,643	1.21%	144,108	144,242	0.09%
Industrial	66,088	68,166	3.14%	63,201	66,068	4.54%	65,394	67,691	3.51%
Transportation	779	771	-1.12%	711	722	1.53%	727	728	0.15%
Total	**388,127**	**391,341**	**0.83%**	**381,435**	**386,509**	**1.33%**	**388,089**	**390,322**	**0.58%**
Average Retail Price (Cents/kWh)									
Residential	12.67	12.65	-0.16%	12.55	12.55	0.02%	12.90	12.89	-0.10%
Commercial	10.59	10.64	0.44%	10.37	10.43	0.65%	10.68	10.66	-0.18%
Industrial	6.89	6.91	0.22%	6.75	6.76	0.21%	6.91	6.88	-0.47%
Transportation	10.17	10.09	-0.83%	9.48	9.63	1.55%	9.67	9.68	0.17%
Total	**10.42**	**10.41**	**-0.10%**	**10.28**	**10.27**	**-0.06%**	**10.54**	**10.48**	**-0.54%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	769,866	782,929	1.70%	638,564	650,770	1.91%	634,118	642,364	1.30%
Petroleum Liquids (1,000 barrels)	24,512	24,320	-0.78%	16,610	16,807	1.18%	15,619	16,127	3.25%
Petroleum Coke (1,000 tons)	4,779	4,897	2.46%	4,166	4,166	0.01%	3,309	3,309	0.00%
Natural Gas (1,000 Mcf)	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%	8,050,520	9,628,733	19.60%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.22	2.22	-0.03%	2.12	2.11	-0.15%	2.08	2.06	-0.87%
Petroleum Liquids (1,000 barrels)	11.48	11.49	0.10%	9.36	9.39	0.28%	11.82	11.86	0.36%
Petroleum Coke (1,000 tons)	1.87	1.84	-1.37%	1.65	1.65	0.15%	2.13	2.13	0.00%
Natural Gas (1,000 Mcf)	3.22	3.23	0.18%	2.88	2.87	-0.06%	3.39	3.37	-0.55%

Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, and synthetic coal. Coal stocks exclude waste coal.
Petroleum Liquids include distillate fuel oil, residual fuel oil, jet fuel, kerosene, and waste oil.
Natural gas includes a small amount of supplemental gaseous fuels that cannot be identified separately. Excludes blast furnace gas and other gases.
Hydroelectric includes conventional hydroelectric and hydroelectric pumped storage facilities.
Other generation includes geothermal, wood, waste, wind, and solar, batteries, chemicals, hydrogen, pitch, purchased steam, sulfur, and miscellaneous technologies.
Fuel Stocks are end-of-year values.
See technical notes (http://www.eia.gov/cneaf/electricity/epm/appenc.pdf) for additional information on the Commercial, Industrial and Transportation sectors.
Cost of Fossil Fuels represent weighted values.
Notes: The average revenue per kilowatthour is calculated by dividing revenue by sales. Totals may not equal sum of components because of independent rounding.
Percent changes refer to the difference between the preliminary data published in the Electric Power Monthly (EPM) and the final data published in the EPM. Values for 2017 are Final.
Sources: U.S. Energy Information Administration, Form EIA-923 'Power Plant Operations Report'; Form EIA-423, 'Monthly Cost and Quality of Fuels for Electric Plants Report'; Form EIA-826, 'Monthly Electric Sales and Revenue With State Distributions Report'; Form EIA-906, 'Power Plant Report;' Form EIA-920 'Combined Heat and Power Plant Report'; and Federal Energy Regulatory Commission, FERC Form 423, 'Monthly Report of Cost and Quality of Fuels for Electric Plants.'

Table C.4. Unit of Measure Equivalents for Electricity

Unit	Equivalent
Kilowatt (kW)	1,000 (One Thousand) Watts
Megawatt (MW)	1,000,000 (One Million) Watts
Gigawatt (GW)	1,000,000,000 (One Billion) Watts
Terawatt (TW)	1,000,000,000,000 (One Trillion) Watts
Gigawatt	1,000,000 (One Million) Kilowatts
Thousand Gigawatts	1,000,000,000 (One Billion) Kilowatts
Kilowatthours (kWh)	1,000 (One Thousand) Watthours
Megawatthours (MWh)	1,000,000 (One Million) Watthours
Gigawatthours (GWh)	1,000,000,000 (One Billion) Watthours
Terawatthours (TWh)	1,000,000,000,000 (One Trillion) Watthours
Gigawatthours	1,000,000 (One Million) Kilowatthours
Thousand Gigawatthours	1,000,000,000(One Billion Kilowatthours

Source: U.S. Energy Information Administration

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Generating unit: Any combination of physically connected generators, reactors, boilers, combustion turbines, or other prime movers operated together to produce electric power.

Generator: A machine that converts mechanical energy into electrical energy.

Generator capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, adjusted for ambient conditions.

Generator nameplate capacity (installed): The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

Geothermal: Pertaining to heat within the Earth.

Geothermal energy: Hot water or steam extracted from geothermal reservoirs in the earth's crust. Water or steam extracted from geothermal reservoirs can be used for geothermal heat pumps, water heating, or electricity generation.

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

Gross generation: The total amount of electric energy produced by generating units and measured at the generating terminal in kilowatthours (kWh) or megawatthours (MWh).

Heat content: The amount or number of British thermal units (Btu) produced by the combustion of fuel, measured in Btu/unit of measure.

Hydroelectric power: The production of electricity from the kinetic energy of falling water.

Hydroelectric power generation: Electricity generated by an electric power plant whose turbines are driven by falling water. It includes electric utility and industrial generation of hydroelectricity, unless otherwise specified. Generation is reported on a net basis, i.e., on the amount of electric energy generated after the electric energy consumed by station auxiliaries and the losses in the transformers that are considered integral parts of the station are deducted.

Hydroelectric pumped storage: Hydroelectricity that is generated during peak loads by using water previously pumped into an elevated storage reservoir during off-peak periods when excess generating capacity is available to do so. When additional generating capacity is needed, the water can be released from the reservoir through a conduit to turbine generators located in a power plant at a lower level.

Hydrogen: A colorless, odorless, highly flammable gaseous element. It is the lightest of all gases and the most abundant element in the universe, occurring chiefly in combination with oxygen in water and also in acids, bases, alcohols, petroleum, and other hydrocarbons.

Independent power producer: A corporation, person, agency, authority, or other legal entity or instrumentality that owns or operates facilities for the generation of electricity for use primarily by the public, and that is not an electric utility.

Industrial sector: An energy-consuming sector that consists of all facilities and equipment used for producing, processing, or assembling goods. The industrial sector encompasses the following types of activity: manufacturing (NAICS codes 31-33); agriculture, forestry, and hunting (NAICS code 11); mining, including oil and gas extraction (NAICS code 21); natural gas distribution (NAICS code 2212); and construction (NAICS code 23). Overall energy use in this sector is largely for process heat and cooling and powering machinery, with lesser amounts used for facility heating, air conditioning, and lighting. Fossil fuels are also used as raw material inputs to manufactured products. Note: This sector includes generators that produce electricity and/or useful thermal output primarily to support the above-mentioned industrial activities.

Interdepartmental service (electric): Interdepartmental service includes amounts charged by the electric department at tariff or other specified rates for electricity supplied by it to other utility departments.

Internal combustion plant: A plant in which the prime mover is an internal combustion engine. An internal combustion engine has one or more cylinders in which the process of combustion takes place, converting energy released from the rapid burning of a fuel-air mixture into mechanical energy. Diesel or gas-fired engines are the principal types used in electric plants. The plant is usually operated during periods of high demand for electricity.

Investor-owned utility (IOU): A privately-owned electric utility whose stock is publicly traded. It is rate regulated and authorized to achieve an allowed rate of return.

Jet fuel: A refined petroleum product used in jet aircraft engines. It includes kerosene-type jet fuel and naphtha-type jet fuel.

Kerosene: A light petroleum distillate that is used in space heaters, cook stoves, and water heaters and is suitable for use as a light source when burned in wick-fed lamps. Kerosene has a maximum distillation temperature of 400 degrees Fahrenheit at the 10-percent recovery point, a final boiling point of 572 degrees Fahrenheit, and a minimum flash point of 100 degrees Fahrenheit. Included are No. 1-K and No. 2-K, the two grades recognized by ASTM Specification D 3699 as well as all other grades of kerosene called range or stove oil, which have properties similar to those of No. 1 fuel oil.

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

Light oil: Lighter fuel oils distilled off during the refining process. Virtually all petroleum used in internal combustion and gas-turbine engines is light oil.

Lignite: The lowest rank of coal, often referred to as brown coal, used almost exclusively as fuel for steam-electric power generation. It is brownish-black and has a high inherent moisture content, sometimes as high as 45 percent. The heat content of lignite ranges from 9 to 17 million Btu per ton on a moist, mineral-matter-free basis. The heat content of lignite consumed in the United States averages 13 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Manufactured gas: A gas obtained by destructive distillation of coal, or by thermal decomposition of oil, or by the reaction of steam passing through a bed of heated coal or coke. Examples are coal gases, coke oven gases, producer gas, blast furnace gas, blue (water) gas, and carbureted water gas

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One million watthours.

Municipal utility: A nonprofit utility, owned by a local municipality and operated as a department thereof, governed by a city council or an independently elected or appointed board; primarily involved in the distribution and/or sale of electric power to ultimate consumers.

Natural gas: A gaseous mixture of hydrocarbon compounds, the primary one being methane. Note: The Energy Information Administration measures wet natural gas and its two sources of production, associated/dissolved natural gas and nonassociated natural gas, and dry natural gas, which is produced from wet natural gas.

1) *Wet natural gas:* A mixture of hydrocarbon compounds and small quantities of various nonhydrocarbons existing in the gaseous phase or in solution with crude oil in porous rock formations at reservoir conditions. The principal hydrocarbons normally contained in the mixture are methane, ethane, propane, butane, and pentane. Typical nonhydrocarbon gases that may be present in reservoir natural gas are water vapor, carbon dioxide, hydrogen sulfide, nitrogen and trace amounts of helium. Under reservoir conditions, natural gas and its associated liquefiable portions occur either in a single gaseous phase in the reservoir or in solution with crude oil and are not distinguishable at the time as separate substances. Note: The Securities and Exchange Commission and the Financial Accounting Standards Board refer to this product as natural gas.

- Associated-dissolved natural gas: Natural gas that occurs in crude oil reservoirs either as free gas (associated) or as gas in solution with crude oil (dissolved gas).
- Nonassociated natural gas: Natural gas that is not in contact with significant quantities of crude oil in the reservoir.

2) *Dry natural gas:* Natural gas which remains after: 1) the liquefiable hydrocarbon portion has been removed from the gas stream (i.e., gas after lease, field, and/or plant separation); and 2) any volumes of nonhydrocarbon gases have been removed where they occur in sufficient quantity to render the gas unmarketable. Note: Dry natural gas is also known as consumer-grade natural gas. The parameters for measurement are cubic feet at 60 degrees Fahrenheit and 14.73 pounds per square inch absolute.

Net generation: The amount of gross generation less the electrical energy consumed at the generating station(s) for station service or auxiliaries. Note: Electricity required for pumping at pumped-storage plants is regarded as electricity for station service and is deducted from gross generation.

Net summer capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of summer peak demand (period of May 1 through October 31). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

Net winter capacity: The maximum output, commonly expressed in megawatts (MW), that generating equipment can supply to system load, as demonstrated by a multi-hour test, at the time of peak winter demand (period of November 1 though April 30). This output reflects a reduction in capacity due to electricity use for station service or auxiliaries.

North American Electric Reliability Council (NERC): A council formed in 1968 by the electric utility industry to promote the reliability and adequacy of bulk power supply in the electric utility systems of North America. The NERC Regions are:

1) Texas Regional Entity (TRE),
2) Florida Reliability Coordinating Council (FRCC),
3) Midwest Reliability Organization (MRO),
4) Northeast Power Coordinating Council (NPCC),
5) ReliabilityFirst Corporation (RFC),
6) Southeastern Electric Reliability Council (SERC),
7) Southwest Power Pool (SPP), and the
8) Western Energy Coordinating Council (WECC).

North American Industry Classification System (NAICS): A set of codes that describes the possible purposes of a facility.

Nuclear electric power: Electricity generated by an electric power plant whose turbines are driven by steam produced by the heat from the fission of nuclear fuel in a reactor.

Other customers: Includes public street and highway lighting, other sales to public authorities, sales to railroads and railways, sales for irrigation, and interdepartmental sales.

Other generation: Electricity originating from these sources: manufactured, supplemental gaseous fuel, propane, and waste gasses, excluding natural gas; biomass; geothermal; wind; solar thermal; photovoltaic; synthetic fuel; purchased steam; and waste oil energy sources.

Percent change: The relative change in a quantity over a specified time period. It is calculated as follows: the current value has the previous value subtracted from it; this new number is divided by the absolute value of the previous value; then this new number is multiplied by 100.

Petroleum: A broadly defined class of liquid hydrocarbon mixtures. Included are crude oil, lease condensate, unfinished oils, refined products obtained from the processing of crude oil, and natural gas plant liquids. Note: Volumes of finished petroleum products include nonhydrocarbon compounds, such as additives and detergents, after they have been blended into the products.

Petroleum coke: See Coke (petroleum).

Photovoltaic energy: Direct-current electricity generated from sunlight through solid-state semiconductor devices that have no moving parts.

Plant: A term commonly used either as a synonym for an industrial establishment or a generation facility or to refer to a particular process within an establishment.

Power: The rate at which energy is transferred. Electrical energy is usually measured in watts. Also used for a measurement of capacity.

Power production plant: All the land and land rights, structures and improvements, boiler or reactor vessel equipment, engines and engine-driven generator, turbo generator units, accessory electric equipment, and miscellaneous power plant equipment are grouped together for each individual facility.

Production (electric): Act or process of producing electric energy from other forms of energy; also, the amount of electric energy expressed in watthours (Wh).

Propane: A normally gaseous straight-chain hydrocarbon, (C3H8). It is a colorless paraffinic gas that boils at a temperature of -43.67 degrees Fahrenheit. It is extracted from natural gas or refinery gas streams. It includes all products covered by Gas Processors Association Specifications for commercial propane and HD-5 propane and ASTM Specification D 1835.

Public street and highway lighting service: Includes electricity supplied and services rendered for the purpose of lighting streets, highways, parks and other public places; or for traffic or other signal system service, for municipalities, or other divisions or agencies of State or Federal governments.

Railroad and railway electric service: Electricity supplied to railroads and interurban and street railways, for general railroad use, including the propulsion of cars or locomotives, where such electricity is supplied under separate and distinct rate schedules.

Receipts: Purchases of fuel.

Relative standard error: The standard deviation of a distribution divided by the arithmetic mean, sometimes multiplied by 100. It is used for the purpose of comparing the variabilities of frequency distributions but is sensitive to errors in the means.

Residential: An energy-consuming sector that consists of living quarters for private households. Common uses of energy associated with this sector include space heating, water heating, air conditioning, lighting, refrigeration, cooking, and running a variety of other appliances. The residential sector excludes institutional living quarters.

Residual fuel oil: A general classification for the heavier oils, known as No. 5 and No. 6 fuel oils, that remain after the distillate fuel oils and lighter hydrocarbons are distilled away in refinery operations. It conforms to ASTM Specifications D 396 and D 975 and Federal Specification VV-F-815C. No. 5, a residual fuel oil of medium viscosity, is also known as Navy Special and is defined in Military Specification MIL-F-859E, including Amendment 2 (NATO Symbol F-770). It is used in steam-powered vessels in government

service and inshore power plants. No. 6 fuel oil includes Bunker C fuel oil and is used for the production of electric power, space heating, vessel bunkering, and various industrial purposes.

Retail: Sales covering electrical energy supplied for residential, commercial, and industrial end-use purposes. Other small classes, such as agriculture and street lighting, also are included in this category.

Revenues: The total amount of money received by a firm from sales of its products and/or services, gains from the sales or exchange of assets, interest and dividends earned on investments, and other increases in the owner's equity except those arising from capital adjustments.

Sales: The transfer of title to an energy commodity from a seller to a buyer for a price or the quantity transferred during a specified period.

Service classifications (sectors): Consumers grouped by similar characteristics in order to be identified for the purpose of setting a common rate for electric service. Usually classified into groups identified as residential, commercial, industrial and other.

Service to public authorities: Public authority service includes electricity supplied and services rendered to municipalities or divisions or agencies of State and Federal governments, under special contracts or agreements or service classifications applicable only to public authorities.

Solar energy: The radiant energy of the sun that can be converted into other forms of energy, such as heat or electricity. Electricity produced from solar energy heats a medium that powers an electricity-generating device.

State power authority: A nonprofit utility owned and operated by a state government agency, primarily involved in the generation, marketing, and/or transmission of wholesale electric power.

Steam-electric power plant (conventional): A plant in which the prime mover is a steam turbine. The steam used to drive the turbine is produced in a boiler where fossil fuels are burned.

Stocks of fuel: A supply of fuel accumulated for future use. This includes coal and fuel oil stocks at the plant site, in coal cars, tanks, or barges at the plant site, or in separate storage sites.

Subbituminous coal: A coal whose properties range from those of lignite to those of bituminous coal and used primarily as fuel for steam-electric power generation. It may be dull, dark brown to black, soft and crumbly, at the lower end of the range, to bright, jet black, hard, and relatively strong, at the upper end. Subbituminous coal contains 20 to 30 percent inherent moisture by weight. The heat content of subbituminous coal ranges from 17 to 24 million Btu per ton on a moist, mineral-matter-free basis. The heat content of subbituminous coal consumed in the United States averages 17 to 18 million Btu per ton, on the as-received basis (i.e., containing both inherent moisture and mineral matter).

Sulfur: A yellowish nonmetallic element, sometimes known as "brimstone." It is present at various levels of concentration in many fossil fuels whose combustion releases sulfur compounds that are considered harmful to the environment. Some of the most commonly used fossil fuels are categorized according to their sulfur content, with lower sulfur fuels usually selling at a higher price. Note: No. 2 Distillate fuel is

currently reported as having either a 0.05 percent or lower sulfur level for on-highway vehicle use or a greater than 0.05 percent sulfur level for off-highway use, home heating oil, and commercial and industrial uses. Residual fuel, regardless of use, is classified as having either no more than 1 percent sulfur or greater than 1 percent sulfur. Coal is also classified as being low-sulfur at concentrations of 1 percent or less or high-sulfur at concentrations greater than 1 percent.

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

Supplemental gaseous fuel supplies: Synthetic natural gas, propane-air, coke oven gas, refinery gas, biomass gas, air injected for Btu stabilization, and manufactured gas commingled and distributed with natural gas.

Synthetic fuel: A gaseous, liquid, or solid fuel that does not occur naturally. Synfuels can be made from coal (coal gasification or coal liquefaction), petroleum products, oil shale, tar sands, or plant products. Among the synfuels are various fuel gases, including but not restricted to substitute natural gas, liquid fuels for engines (e.g., gasoline, diesel fuel, and alcohol fuels) and burner fuels (e.g., fuel heating oils).

Terrawatt: One trillion watts.

Terrawatthour: One trillion kilowatthours.

Ton: A unit of weight equal to 2,000 pounds.

Turbine: A machine for generating rotary mechanical power from the energy of a stream of fluid (such as water, steam, or hot gas). Turbines convert the kinetic energy of fluids to mechanical energy through the principles of impulse and reaction, or a mixture of the two.

Ultimate consumer: A consumer that purchases electricity for its own use and not for resale.

Useful thermal output: The thermal energy made available in a combined heat or power system for use in any industrial or commercial process, heating or cooling application, or delivered to other end users, i.e., total thermal energy made available for processes and applications other than electrical generation.

Waste coal: As a fuel for electric power generation, waste coal includes anthracite refuse or mine waste, waste from anthracite preparation plants, and coal recovered from previously mined sites.

Waste gases: As a fuel for electric power generation, waste gasses are those gasses that are produced from gasses recovered from a solid-waste or wastewater treatment facility, or the gaseous by-products of oil-refining processes.

Waste oil: As a fuel for electric power generation, waste oil includes recycled motor oil, and waste oil from transformers.

Watt (W): The unit of electrical power equal to one ampere under a pressure of one volt. A Watt is equal to 1/746 horsepower.

Watthour (Wh): The electrical energy unit of measure equal to one watt of power supplied to, or taken from, an electric circuit steadily for one hour.

Wind energy: The kinetic energy of wind converted into mechanical energy by wind turbines (i.e., blades rotating from the hub) that drive generators to produce electricity.

Year-to -date: The cumulative sum of each month's value starting with January and ending with the current month of the data.