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U.S. Energy Information Administration

Electric Power Monthly
with Data for May 2019

Note: May 2019 data for Puerto Rico in tables 8.1 through 8.4 are not yet available.

July 2019

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Preface

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

Background

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

Data sources

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

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Executive Summary

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

Net Generation and Consumption of Fuels for May														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	71,988	85,311	-15.6%	55,159	64,011	16,288	20,649	18	19	523	632	0	0
Petroleum Liquids	Utility Scale Facilities	922	1,022	-9.8%	658	730	222	244	8	9	35	40	0	0
Petroleum Coke	Utility Scale Facilities	737	415	77.8%	552	336	131	23	0	0	55	55	0	0
Natural Gas	Utility Scale Facilities	115,478	116,107	-0.5%	58,283	58,571	48,821	49,389	665	644	7,709	7,503	0	0
Other Gas	Utility Scale Facilities	994	1,000	-0.6%	0	11	338	349	0	0	656	640	0	0
Nuclear	Utility Scale Facilities	67,124	67,320	-0.3%	35,416	34,479	31,708	32,841	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	30,058	30,434	-1.2%	27,576	28,051	2,363	2,232	NM	NM	92	125	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	40,139	37,401	7.3%	4,812	3,840	32,797	30,765	266	281	2,263	2,516	0	0
... Wind	Utility Scale Facilities	26,474	23,603	12.2%	3,678	2,873	22,767	20,704	18	16	11	9	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	7,292	7,070	3.1%	658	490	6,568	6,506	56	65	9	9	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,309	3,550	-6.8%	303	264	833	861	2	4	2,171	2,420	0	0
... Other Biomass	Utility Scale Facilities	1,682	1,744	-3.6%	102	119	1,356	1,352	153	195	71	78	0	0
... Geothermal	Utility Scale Facilities	1,382	1,434	-3.6%	71	93	1,273	1,341	37	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-368	-390	-5.6%	-305	-309	-63	-81	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,053	1,074	-2.0%	41	47	575	532	81	91	356	405	0	0
All Energy Sources	Utility Scale Facilities	328,124	339,694	-3.4%	182,191	189,767	133,179	136,942	1,065	1,070	11,689	11,915	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	3,582	3,010	19.0%	0	0	0	0	1,139	986	309	266	2,134	1,758
Estimated Total Solar Photovoltaic	All Facilities	10,538	9,650	9.2%	655	487	6,235	6,079	1,195	1,052	319	275	2,134	1,758
Estimated Total Solar	All Facilities	10,874	10,080	7.9%	658	490	6,568	6,506	1,195	1,052	319	275	2,134	1,758
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	40,051	47,470	-15.6%	30,247	35,222	9,609	12,012	5	6	190	230	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,609	1,780	-9.6%	1,200	1,297	353	421	18	20	37	42	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	276	161	71.1%	219	140	41	8	0	0	15	13	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	844,004	872,155	-3.2%	441,667	456,439	351,997	367,191	4,163	4,104	46,177	44,420	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	972	1,097	-11.4%	144	171	65	80	35	35	728	811	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	274	164	67.1%	5	3	16	17	121	17	132	126	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	71	64	11.4%	1	1	9	6	0	0	62	57	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	99,181	97,070	2.2%	3,377	3,150	25,052	26,420	7,838	7,928	62,915	59,572	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	41,023	48,567	-15.5%	30,391	35,393	9,675	12,092	40	41	918	1,041	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,883	1,944	-3.1%	1,205	1,300	370	438	139	37	169	169	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	347	225	54.2%	220	141	50	14	0	0	77	70	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	943,185	969,225	-2.7%	445,043	459,589	377,049	393,611	12,000	12,032	109,092	103,992	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	115,532	129,097	-10.5%	92,516	107,594	22,432	20,859	45	69	539	574	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,835	28,893	-7.1%	17,070	18,978	8,125	8,075	354	379	1,287	1,461	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	568	817	-30.5%	436	649	10	66	1	2	121	101	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for May									
	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	May 2019	May 2018	Percentage Change	May 2019	May 2018	Percentage Change	May 2019	May 2018	Percentage Change
Residential	99,820	103,395	-3.5%	13,300	13,600	-2.2%	13.32	13.15	1.3%
Commercial	110,823	112,597	-1.6%	11,666	11,821	-1.3%	10.53	10.50	0.3%
Industrial	80,706	81,461	-0.9%	5,415	5,553	-2.5%	6.71	6.82	-1.6%
Transportation	610	591	3.2%	58	56	3.7%	9.51	9.46	0.5%
All Sectors	291,959	298,044	-2.0%	30,439	31,029	-1.9%	10.43	10.41	0.2%

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 May														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	391,567	440,167	-11.0%	290,405	327,558	98,280	109,159	138	142	2,746	3,307	0	0
Petroleum Liquids	Utility Scale Facilities	4,602	8,759	-47.5%	3,152	4,903	1,201	3,538	47	78	201	240	0	0
Petroleum Coke	Utility Scale Facilities	3,366	3,444	-2.3%	2,490	2,649	623	499	4	4	250	292	0	0
Natural Gas	Utility Scale Facilities	560,350	526,534	6.4%	272,467	259,520	245,469	226,294	3,364	3,238	39,051	37,481	0	0
Other Gas	Utility Scale Facilities	5,092	4,989	2.1%	65	97	1,737	1,597	0	0	3,291	3,295	0	0
Nuclear	Utility Scale Facilities	331,200	332,925	-0.5%	175,741	173,629	155,459	159,296	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	127,454	135,005	-5.6%	115,479	124,163	11,424	10,132	106	120	445	590	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	190,277	187,810	1.3%	23,674	21,812	153,771	152,534	1,422	1,308	11,411	12,155	0	0
... Wind	Utility Scale Facilities	130,939	128,626	1.8%	18,737	17,285	112,059	111,205	92	88	52	49	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	27,825	26,042	6.8%	2,677	2,065	24,885	23,712	228	231	37	34	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	16,232	17,319	-6.3%	1,377	1,406	3,902	4,234	34	27	10,920	11,652	0	0
... Other Biomass	Utility Scale Facilities	8,310	8,995	-7.6%	485	633	6,544	6,979	878	963	403	420	0	0
... Geothermal	Utility Scale Facilities	6,971	6,827	2.1%	398	423	6,382	6,404	191	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-1,592	-2,119	-24.9%	-1,197	-1,713	-395	-407	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	5,082	5,342	-4.9%	181	220	2,680	2,766	397	415	1,824	1,940	0	0
All Energy Sources	Utility Scale Facilities	1,617,398	1,642,855	-1.5%	882,455	912,839	670,248	665,410	5,477	5,305	59,217	59,301	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	13,882	11,550	20.2%	0	0	0	0	4,500	3,845	1,189	1,026	8,193	6,678
Estimated Total Solar Photovoltaic	All Facilities	40,536	36,271	11.8%	2,650	2,041	23,739	22,415	4,728	4,076	1,225	1,060	8,193	6,678
Estimated Total Solar	All Facilities	41,707	37,592	10.9%	2,677	2,065	24,885	23,712	4,728	4,076	1,225	1,060	8,193	6,678
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	218,164	242,584	-10.1%	160,958	179,493	56,197	61,850	39	41	970	1,200	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	8,017	15,133	-47.0%	5,766	8,934	1,955	5,826	87	129	209	243	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,263	1,276	-1.0%	1,001	1,061	191	149	1	1	70	65	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	4,038,484	3,891,674	3.8%	2,052,637	1,990,579	1,735,085	1,660,182	21,009	20,243	229,753	220,670	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	5,479	6,118	-10.5%	936	1,009	439	537	206	220	3,898	4,352	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,179	1,341	-12.1%	38	64	111	159	242	192	788	925	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	335	339	-1.0%	7	5	42	42	5	5	282	286	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	520,094	504,911	3.0%	17,182	16,189	136,796	135,551	42,384	42,857	323,732	310,314	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	223,642	248,702	-10.1%	161,893	180,502	56,635	62,387	245	261	4,869	5,552	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	9,196	16,474	-44.2%	5,804	8,999	2,066	5,985	329	322	997	1,169	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,599	1,615	-1.0%	1,007	1,066	233	190	7	6	351	352	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	4,558,578	4,396,585	3.7%	2,069,820	2,006,768	1,871,880	1,795,734	63,393	63,100	553,485	530,984	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through May									
	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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	Percentage Change
Residential	552,325	567,823	-2.7%	71,105	72,354	-1.7%	12.87	12.74	1.0%
Commercial	535,714	540,025	-0.8%	56,018	56,765	-1.3%	10.46	10.51	-0.5%
Industrial	384,548	381,520	0.8%	25,563	25,816	-1.0%	6.65	6.77	-1.8%
Transportation	3,253	3,218	1.1%	314	307	2.3%	9.65	9.53	1.3%
All Sectors	1,475,840	1,492,587	-1.1%	153,000	155,242	-1.4%	10.37	10.40	-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	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal (1000 tons)	45,571	46,150	39.75	39.61	238	258	228,904	232,442	40.09	39.45
Petroleum Liquids (1000 barrels)	1,089	1,441	86.97	86.69	123	137	6,153	10,455	82.98	81.95
Petroleum Coke (1000 tons)	162	152	63.78	68.58	5	4	750	1,190	65.96	69.51
Natural Gas (1000 Mcf)	810,857	789,317	2.86	3.14	566	555	3,884,307	3,620,903	3.47	3.72

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal (1000 tons)	33,745	34,012	41.03	40.57	164	177	167,730	171,468	41.41	40.30
Petroleum Liquids (1000 barrels)	804	1,028	85.48	87.27	86	88	4,598	6,079	82.88	82.09
Petroleum Coke (1000 tons)	162	152	63.78	68.58	5	4	750	1,190	65.96	69.51
Natural Gas (1000 Mcf)	406,239	388,233	3.04	3.35	293	286	1,871,913	1,764,514	3.65	3.93

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal (1000 tons)	11,203	11,454	35.24	36.00	60	62	58,022	57,543	35.52	36.14
Petroleum Liquids (1000 barrels)	270	389	91.40	85.04	28	38	1,421	4,195	83.35	81.85
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	340,361	340,277	2.60	2.86	226	221	1,686,993	1,552,632	3.28	3.56

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal (1000 tons)	0	0	--	--	0	0	5	6	65.74	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)	782	758	3.38	3.55	3	3	3,837	3,723	3.45	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	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal (1000 tons)	623	684	51.21	52.15	14	19	3,147	3,425	53.77	52.22
Petroleum Liquids (1000 barrels)	15	24	86.68	87.27	9	11	134	181	82.49	79.50
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	63,475	60,048	2.83	3.07	44	45	321,563	300,034	3.30	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	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal	883,506	892,834	2.05	2.05	238	258	4,419,422	4,452,333	2.08	2.06
Petroleum Liquids	6,550	8,730	14.46	14.29	123	137	37,245	63,042	13.71	13.55
Petroleum Coke	4,631	4,344	2.24	2.41	5	4	21,449	33,527	2.31	2.47
Natural Gas	835,996	814,786	2.77	3.04	566	555	4,012,591	3,738,688	3.36	3.61
Fossil Fuels	1,730,682	1,720,695	2.43	2.56	707	717	8,490,706	8,287,590	2.71	2.81

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal	654,777	658,792	2.11	2.09	164	177	3,245,850	3,292,231	2.14	2.10
Petroleum Liquids	4,877	6,271	14.09	14.30	86	88	27,991	36,894	13.61	13.52
Petroleum Coke	4,631	4,344	2.24	2.41	5	4	21,449	33,527	2.31	2.47
Natural Gas	418,290	400,819	2.96	3.24	293	286	1,932,868	1,820,937	3.54	3.80
Fossil Fuels	1,082,575	1,070,226	2.49	2.60	390	397	5,228,157	5,183,589	2.72	2.78

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal	216,008	219,931	1.83	1.87	60	62	1,108,233	1,088,635	1.86	1.91
Petroleum Liquids	1,581	2,311	15.62	14.24	28	38	8,431	25,017	14.05	13.65
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	351,590	351,345	2.51	2.77	226	221	1,744,565	1,604,855	3.16	3.44
Fossil Fuels	569,179	573,586	2.26	2.43	268	270	2,861,229	2,718,507	2.64	2.84

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal	0	0	--	--	0	0	115	130	2.90	2.92
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	811	776	3.26	3.47	3	3	3,974	3,829	3.34	3.58
Fossil Fuels	811	776	3.26	3.47	3	3	4,089	3,959	3.32	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	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
Coal	12,720	14,112	2.51	2.53	14	19	65,224	71,338	2.59	2.51
Petroleum Liquids	92	149	14.12	14.33	9	11	824	1,131	13.42	12.73
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	65,305	61,846	2.75	2.98	44	45	331,183	309,067	3.20	3.16
Fossil Fuels	78,118	76,106	2.73	2.92	46	47	397,231	381,536	3.13	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-May 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
Year to Date															
2017	465,631	4,762	3,644	459,675	5,138	319,830	141,477	19,189	145,317	-2,326	5,283	1,567,620	9,221	27,175	28,410
2018	440,167	8,759	3,444	526,534	4,989	332,925	135,005	26,042	161,768	-2,119	5,342	1,642,855	11,550	36,271	37,592
2019	391,567	4,602	3,366	560,350	5,092	331,200	127,454	27,825	162,452	-1,592	5,082	1,617,398	13,882	40,536	41,707
Rolling 12 Months Ending in May															
2018	1,180,370	16,411	8,776	1,363,273	12,320	818,044	293,862	60,139	349,442	-6,288	13,155	4,109,505	26,319	83,103	86,458
2019	1,097,793	11,585	8,752	1,501,829	12,294	805,353	284,172	68,387	355,129	-5,377	12,435	4,152,353	31,875	96,820	100,262

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-May 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
Year to Date													
2017	113,094	17,954	1,235	16,487	4,912	2,850	1,347	6,626	141,477	305,983	9,221	27,175	28,410
2018	128,626	24,721	1,321	17,319	4,801	2,894	1,300	6,827	135,005	322,815	11,550	36,271	37,592
2019	130,939	26,654	1,172	16,232	4,406	2,818	1,086	6,971	127,454	317,731	13,882	40,536	41,707
Rolling 12 Months Ending in May													
2018	269,834	56,784	3,355	41,983	11,432	6,995	3,069	16,128	293,862	703,443	26,319	83,103	86,458
2019	277,264	64,945	3,443	40,324	10,941	7,088	2,640	16,872	284,172	707,689	31,875	96,820	100,262

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-May 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
Year to Date												
2017	344,833	3,539	2,732	223,601	70	168,974	129,365	1,190	18,431	-1,936	210	891,008
2018	327,558	4,903	2,649	259,520	97	173,629	124,163	2,065	19,747	-1,713	220	912,839
2019	290,405	3,152	2,490	272,467	65	175,741	115,479	2,677	20,997	-1,197	181	882,455
Rolling 12 Months Ending in May												
2018	876,365	9,931	6,628	659,754	176	429,140	270,475	4,223	44,080	-5,225	563	2,296,110
2019	823,171	8,054	6,657	727,250	118	426,363	256,796	5,864	44,276	-4,270	548	2,294,828

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-May 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
Year to Date												
2017	117,469	993	592	195,783	1,596	150,856	11,336	17,800	114,234	-390	2,674	612,942
2018	109,159	3,538	499	226,294	1,597	159,296	10,132	23,712	128,823	-407	2,766	665,410
2019	98,280	1,201	623	245,469	1,737	155,459	11,424	24,885	128,886	-395	2,680	670,248
Rolling 12 Months Ending in May												
2018	295,889	5,826	1,388	603,431	3,978	388,905	21,831	55,287	273,551	-1,063	6,619	1,655,641
2019	267,331	2,927	NM	670,529	3,987	378,990	25,891	61,803	279,824	-1,108	6,321	1,697,879

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-May 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
Year to Date															
2017	144	41	3	3,123	0	0	104	185	1,138	0	436	5,176	2,976	3,161	3,161
2018	142	78	4	3,238	0	0	120	231	1,077	0	415	5,305	3,845	4,076	4,076
2019	138	47	4	3,364	0	0	106	228	1,194	0	397	5,477	4,500	4,728	4,728
Rolling 12 Months Ending in May															
2018	327	NM	9	8,156	0	0	NM	567	2,668	0	1,067	13,189	8,554	9,121	9,121
2019	322	116	8	8,469	0	0	NM	626	2,722	0	1,002	13,490	10,411	11,037	11,037

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-May 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
Year to Date															
2017	3,186	189	317	37,168	3,472	0	672	14	11,514	0	1,963	58,494	908	922	922
2018	3,307	240	292	37,481	3,295	0	590	34	12,121	0	1,940	59,301	1,026	1,060	1,060
2019	2,746	201	250	39,051	3,291	0	445	37	11,374	0	1,824	59,217	1,189	1,225	1,225
Rolling 12 Months Ending in May															
2018	7,790	514	751	91,933	8,165	0	1,301	62	29,143	0	4,906	144,565	2,482	2,544	2,544
2019	6,970	488	700	95,581	8,189	0	1,258	95	28,308	0	4,565	146,155	2,803	2,898	2,898

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

Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-May 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
Year to Date	
2017	5,337
2018	6,678
2019	8,193
Rolling 12 Months Ending in May	
2018	15,283
2019	18,661

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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	7,292	7,878	-7.4%	183	156	6,808	7,400	84	80	218	241
Connecticut	2,750	2,934	-6.3%	9	7	2,665	2,857	23	21	53	49
Maine	850	915	-7.1%	0	0	708	746	10	11	132	158
Massachusetts	1,565	1,972	-20.7%	41	NM	1,461	1,863	42	40	20	21
New Hampshire	1,289	1,337	-3.6%	58	39	1,224	1,291	4	4	3	3
Rhode Island	638	537	18.7%	0	0	623	523	5	5	NM	NM
Vermont	201	182	10.4%	74	62	126	120	0	0	0	0
Middle Atlantic	32,354	32,654	-0.9%	2,799	2,981	29,065	29,164	179	193	310	317
New Jersey	4,916	5,747	-14.5%	9	12	4,805	5,631	48	61	55	42
New York	10,162	10,566	-3.8%	2,777	2,953	7,228	7,433	105	102	52	78
Pennsylvania	17,275	16,341	5.7%	13	15	17,033	16,100	25	30	204	196
East North Central	45,571	47,198	-3.4%	16,268	18,783	28,373	27,410	149	160	781	846
Illinois	14,190	15,162	-6.4%	382	565	13,583	14,335	34	31	191	232
Indiana	7,791	8,588	-9.3%	5,412	6,601	2,043	1,663	25	25	310	298
Michigan	9,089	9,558	-4.9%	5,883	6,219	3,041	3,144	59	67	106	128
Ohio	9,510	8,910	6.7%	820	1,637	8,619	7,191	18	26	53	57
Wisconsin	4,991	4,980	0.2%	3,771	3,761	1,088	1,077	12	12	121	131
West North Central	25,078	28,504	-12.0%	19,139	23,232	5,561	4,864	44	49	335	360
Iowa	4,734	5,296	-10.6%	3,386	4,088	1,169	1,006	15	17	165	186
Kansas	4,120	4,203	-2.0%	2,570	2,758	1,538	1,439	NM	NM	11	4
Minnesota	4,674	4,977	-6.1%	3,481	3,841	1,074	1,002	13	15	106	118
Missouri	5,582	6,969	-19.9%	5,058	6,474	508	478	13	14	2	3
Nebraska	2,313	2,937	-21.2%	1,725	2,557	549	346	1	2	37	33
North Dakota	2,690	2,974	-9.6%	2,118	2,502	558	456	NM	0	14	15
South Dakota	965	1,148	-16.0%	801	1,012	164	136	NM	NM	0	0
South Atlantic	69,897	67,554	3.5%	58,474	54,135	9,633	11,693	168	156	1,622	1,571
Delaware	375	468	-19.9%	1	1	261	403	0	NM	112	63
District of Columbia	6	4	54.8%	0	0	NM	0	4	4	0	0
Florida	22,200	20,500	8.3%	20,724	18,982	1,040	1,081	5	6	431	431
Georgia	11,533	10,725	7.5%	9,640	8,651	1,472	1,648	1	NM	421	426
Maryland	3,378	4,142	-18.4%	216	313	3,039	3,722	102	84	21	23
North Carolina	11,097	11,079	0.2%	9,240	9,442	1,678	1,447	22	23	157	167
South Carolina	8,927	8,071	10.6%	8,611	7,615	163	282	0	0	154	174
Virginia	6,875	7,215	-4.7%	5,379	5,393	1,254	1,563	34	38	209	221
West Virginia	5,505	5,349	2.9%	4,663	3,737	725	1,547	0	0	117	65
East South Central	29,808	30,375	-1.9%	25,360	25,346	3,695	4,233	11	15	742	781
Alabama	12,068	12,272	-1.7%	8,765	8,593	2,931	3,291	0	0	371	388
Kentucky	5,574	6,447	-13.5%	5,522	6,368	NM	40	0	0	49	39
Mississippi	5,387	5,248	2.7%	4,525	4,201	716	874	0	0	146	173
Tennessee	6,779	6,408	5.8%	6,548	6,184	44	28	11	15	175	181
West South Central	58,792	63,874	-8.0%	18,474	21,623	34,103	35,991	80	68	6,134	6,192
Arkansas	4,748	5,165	-8.1%	4,216	4,438	385	572	NM	NM	143	152
Louisiana	8,178	8,706	-6.1%	4,940	5,273	739	995	11	11	2,488	2,427
Oklahoma	5,913	8,179	-27.7%	2,427	3,884	3,425	4,220	0	0	62	74
Texas	39,953	41,824	-4.5%	6,891	8,028	29,554	30,204	66	54	3,442	3,539
Mountain	26,665	28,099	-5.1%	20,255	21,429	6,104	6,395	86	47	219	228
Arizona	8,483	8,739	-2.9%	7,080	7,316	1,391	1,409	13	14	0	0
Colorado	4,281	4,303	-0.5%	3,200	3,213	1,071	1,079	NM	NM	6	7
Idaho	1,521	1,639	-7.2%	1,016	1,128	449	458	4	4	53	50
Montana	1,863	2,058	-9.5%	1,133	1,243	729	813	0	0	1	1
Nevada	2,895	3,095	-6.5%	1,807	1,979	1,026	1,087	49	13	13	15
New Mexico	2,320	2,566	-9.6%	1,513	1,638	798	921	9	NM	1	0
Utah	2,844	2,742	3.7%	2,420	2,308	371	381	6	5	47	49
Wyoming	2,456	2,958	-17.0%	2,086	2,605	270	247	0	0	100	107
Pacific Contiguous	31,341	32,217	-2.7%	20,415	21,181	9,434	9,451	198	240	1,294	1,346
California	16,753	15,592	7.4%	7,436	6,126	7,980	8,056	191	230	1,146	1,179
Oregon	4,731	5,320	-11.1%	3,808	4,381	876	884	6	7	41	48
Washington	9,858	11,305	-12.8%	9,171	10,674	578	511	NM	2	108	118
Pacific Noncontiguous	1,326	1,341	-1.1%	823	902	404	343	66	62	32	34
Alaska	469	506	-7.3%	409	442	20	23	NM	33	9	7
Hawaii	857	835	2.7%	414	460	384	320	37	28	23	27
U.S. Total	328,124	339,694	-3.4%	182,191	189,767	133,179	136,942	1,065	1,070	11,689	11,915

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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 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Year-to-Date through May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	40,600	41,588	-2.4%	1,118	1,485	37,891	38,351	486	508	1,106	1,244
Connecticut	15,035	15,473	-2.8%	43	38	14,604	15,049	149	149	239	236
Maine	4,518	4,769	-5.3%	0	0	3,768	3,876	59	71	692	822
Massachusetts	10,375	10,823	-4.1%	234	270	9,807	10,201	224	234	109	119
New Hampshire	7,102	7,027	1.1%	432	765	6,626	6,219	31	30	12	13
Rhode Island	2,531	2,512	0.7%	0	0	2,455	2,436	21	23	54	54
Vermont	1,040	984	5.7%	408	412	630	571	2	1	0	0
Middle Atlantic	170,133	166,029	2.5%	13,967	14,310	153,526	148,978	905	960	1,734	1,781
New Jersey	27,665	29,680	-6.8%	48	48	27,098	29,070	226	285	293	277
New York	51,035	51,636	-1.2%	13,851	14,200	36,308	36,544	515	512	361	380
Pennsylvania	91,432	84,713	7.9%	68	62	90,120	83,364	164	163	1,080	1,124
East North Central	241,062	245,704	-1.9%	89,065	97,326	146,826	143,130	775	801	4,396	4,448
Illinois	75,404	76,494	-1.4%	2,031	2,022	72,028	73,060	196	192	1,150	1,220
Indiana	43,098	44,483	-3.1%	30,304	33,608	11,093	9,226	106	107	1,595	1,542
Michigan	47,073	47,877	-1.7%	31,422	31,756	14,676	15,122	323	344	652	655
Ohio	49,776	50,017	-0.5%	5,321	9,303	44,063	40,333	86	95	307	287
Wisconsin	25,711	26,834	-4.2%	19,987	20,637	4,967	5,390	65	63	693	744
West North Central	137,975	146,124	-5.6%	107,509	116,214	28,577	27,829	256	254	1,634	1,827
Iowa	26,397	26,065	1.3%	19,394	19,301	6,076	5,809	88	94	839	861
Kansas	20,942	21,121	-0.8%	12,830	13,068	8,060	8,008	NM	7	47	37
Minnesota	23,887	26,126	-8.6%	17,987	19,829	5,274	5,548	82	79	543	670
Missouri	31,282	34,392	-9.0%	28,979	32,050	2,216	2,255	72	66	15	22
Nebraska	14,354	15,090	-4.9%	11,317	12,651	2,910	2,268	7	8	120	163
North Dakota	16,303	17,978	-9.3%	13,127	14,869	3,107	3,034	NM	0	69	74
South Dakota	4,809	5,352	-10.2%	3,874	4,446	935	907	NM	NM	0	0
South Atlantic	311,147	317,259	-1.9%	257,166	258,109	45,436	50,741	777	627	7,768	7,782
Delaware	1,752	2,436	-28.1%	3	9	1,234	2,083	3	3	512	340
District of Columbia	40	37	7.1%	0	0	5	0	34	37	0	0
Florida	91,870	92,402	-0.6%	85,790	85,649	3,970	4,571	28	30	2,082	2,152
Georgia	47,676	49,135	-3.0%	39,784	40,956	5,827	5,993	2	4	2,063	2,181
Maryland	15,943	17,867	-10.8%	1,795	1,285	13,592	16,183	438	277	118	122
North Carolina	49,160	52,699	-6.7%	41,214	46,127	7,074	5,637	118	111	754	823
South Carolina	41,217	38,633	6.7%	39,203	36,364	1,249	1,444	2	1	764	824
Virginia	37,677	37,139	1.4%	29,260	28,146	7,282	7,844	152	163	983	986
West Virginia	25,813	26,912	-4.1%	20,117	19,572	5,204	6,987	0	0	492	353
East South Central	142,317	144,920	-1.8%	121,419	123,113	17,122	17,994	73	89	3,703	3,724
Alabama	56,154	56,769	-1.1%	40,981	40,755	13,333	14,180	0	0	1,840	1,834
Kentucky	28,483	29,681	-4.0%	28,107	29,118	128	329	0	0	247	234
Mississippi	24,831	25,650	-3.2%	20,591	21,500	3,499	3,366	0	6	741	778
Tennessee	32,849	32,820	0.1%	31,740	31,739	161	119	73	84	875	879
West South Central	273,020	280,904	-2.8%	86,965	91,957	154,407	158,093	423	340	31,225	30,514
Arkansas	24,301	25,461	-4.6%	21,560	22,054	1,976	2,637	NM	17	747	752
Louisiana	37,273	38,910	-4.2%	20,891	23,222	3,251	3,550	65	60	13,067	12,077
Oklahoma	31,629	34,106	-7.3%	14,359	14,715	16,942	19,012	0	0	328	379
Texas	179,817	182,427	-1.4%	30,155	31,965	132,238	132,894	341	263	17,083	17,306
Mountain	143,715	138,428	3.8%	108,999	105,589	33,111	31,297	424	227	1,181	1,315
Arizona	42,346	39,491	7.2%	36,256	35,473	6,029	3,955	61	63	0	0
Colorado	22,823	21,730	5.0%	17,364	16,001	5,413	5,686	14	12	32	32
Idaho	6,899	7,912	-12.8%	4,290	5,158	2,334	2,474	19	20	255	260
Montana	11,216	12,290	-8.7%	4,445	5,691	6,760	6,588	0	0	11	11
Nevada	14,737	14,189	3.9%	9,640	9,335	4,749	4,685	245	53	104	116
New Mexico	12,960	11,254	15.2%	8,032	6,279	4,883	4,929	45	43	1	4
Utah	15,703	13,568	15.7%	13,895	11,733	1,535	1,552	40	36	233	247
Wyoming	17,030	17,994	-5.4%	15,076	15,920	1,408	1,428	0	0	545	646
Pacific Contiguous	150,875	155,226	-2.8%	91,891	100,183	51,616	47,360	1,053	1,181	6,315	6,501
California	80,219	72,402	10.8%	34,159	28,423	39,545	37,239	1,011	1,133	5,504	5,607
Oregon	26,451	29,079	-9.0%	19,676	22,896	6,485	5,877	31	33	259	274
Washington	44,205	53,745	-17.7%	38,056	48,865	5,586	4,244	11	15	551	620
Pacific Noncontiguous	6,554	6,673	-1.8%	4,357	4,554	1,736	1,637	306	318	156	165
Alaska	2,692	2,737	-1.6%	2,411	2,419	97	107	136	168	49	44
Hawaii	3,862	3,936	-1.9%	1,946	2,135	1,639	1,530	170	150	107	121
U.S. Total	1,617,398	1,642,855	-1.5%	882,455	912,839	670,248	665,410	5,477	5,305	59,217	59,301

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	3	4	-23.0%	0	2	1	1	0	0	NM	NM
Connecticut	-2	-2	-21.7%	0	0	-2	-2	0	0	0	0
Maine	4	4	-4.9%	0	0	3	4	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	2	-69.3%	0	2	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	2,160	3,259	-33.7%	0	0	2,146	3,246	0	0	14	13
New Jersey	78	54	42.5%	0	0	78	54	0	0	0	0
New York	0	2	-100.0%	0	0	0	2	0	0	0	0
Pennsylvania	2,083	3,203	-35.0%	0	0	2,069	3,190	0	0	14	13
East North Central	17,176	19,420	-11.6%	10,180	11,770	6,853	7,458	5	4	138	187
Illinois	3,402	4,578	-25.7%	303	311	2,988	4,119	NM	1	111	147
Indiana	4,812	5,500	-12.5%	4,595	5,202	213	294	4	4	0	0
Michigan	2,855	3,126	-8.7%	2,816	3,070	36	40	0	0	NM	16
Ohio	3,948	3,916	0.8%	332	909	3,616	3,006	0	0	0	1
Wisconsin	2,158	2,300	-6.2%	2,135	2,277	0	0	0	0	23	23
West North Central	10,719	14,395	-25.5%	10,488	14,168	0	0	4	5	227	222
Iowa	1,419	2,326	-39.0%	1,269	2,180	0	0	4	5	146	141
Kansas	1,108	1,687	-34.3%	1,108	1,687	0	0	0	0	0	0
Minnesota	1,478	1,604	-7.8%	1,443	1,565	0	0	0	0	35	38
Missouri	4,235	4,984	-15.0%	4,235	4,984	0	0	0	0	0	0
Nebraska	872	1,686	-48.3%	835	1,654	0	0	0	0	37	33
North Dakota	1,470	1,866	-21.3%	1,461	1,856	0	0	0	0	NM	NM
South Dakota	136	241	-43.5%	136	241	0	0	0	0	0	0
South Atlantic	14,660	15,992	-8.3%	13,708	13,399	905	2,537	1	1	47	55
Delaware	-2	6	-138.9%	0	0	-2	6	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,024	2,567	-21.1%	2,020	2,554	0	7	0	0	NM	6
Georgia	2,961	2,288	29.4%	2,952	2,275	0	0	0	0	NM	14
Maryland	430	1,147	-62.5%	0	0	424	1,141	0	0	6	6
North Carolina	2,643	2,652	-0.3%	2,620	2,628	9	11	1	1	12	12
South Carolina	1,371	1,625	-15.6%	1,370	1,624	0	0	0	0	1	1
Virginia	180	783	-77.0%	163	680	3	86	0	0	14	16
West Virginia	5,054	4,923	2.7%	4,583	3,638	471	1,285	0	0	0	0
East South Central	8,045	9,493	-15.3%	7,725	9,138	281	290	0	0	39	66
Alabama	1,907	2,489	-23.4%	1,906	2,485	0	0	0	0	1	4
Kentucky	4,038	4,705	-14.2%	4,038	4,705	0	0	0	0	0	0
Mississippi	514	564	-8.9%	233	274	281	290	0	0	0	0
Tennessee	1,586	1,736	-8.6%	1,548	1,674	0	0	0	0	38	62
West South Central	10,752	13,019	-17.4%	5,351	6,739	5,396	6,255	0	0	6	25
Arkansas	1,638	2,075	-21.1%	1,364	1,619	271	452	0	0	3	4
Louisiana	767	884	-13.2%	543	547	224	336	0	0	0	0
Oklahoma	487	1,032	-52.8%	484	899	0	112	0	0	3	21
Texas	7,860	9,028	-12.9%	2,960	3,674	4,900	5,355	0	0	0	0
Mountain	8,304	9,572	-13.2%	7,689	8,772	586	761	0	0	29	39
Arizona	1,601	2,141	-25.2%	1,601	2,141	0	0	0	0	0	0
Colorado	1,761	1,765	-0.2%	1,761	1,763	0	0	0	0	0	1
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	486	605	-19.7%	12	5	474	601	0	0	0	0
Nevada	97	100	-2.7%	76	42	21	58	0	0	0	0
New Mexico	876	872	0.4%	876	872	0	0	0	0	0	0
Utah	1,607	1,673	-4.0%	1,568	1,634	39	39	0	0	0	0
Wyoming	1,874	2,413	-22.3%	1,795	2,315	53	63	0	0	27	35
Pacific Contiguous	24	25	-6.1%	0	0	0	0	0	0	24	25
California	22	24	-11.4%	0	0	0	0	0	0	22	24
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	1	175.8%	0	0	0	0	0	0	2	1
Pacific Noncontiguous	145	133	9.3%	NM	NM	119	101	7	9	0	0
Alaska	42	51	-17.2%	NM	NM	16	19	7	9	0	0
Hawaii	103	82	25.8%	0	0	103	82	0	0	0	0
U.S. Total	71,988	85,311	-15.6%	55,159	64,011	16,288	20,649	18	19	523	632

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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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	269	715	-62.4%	171	447	89	256	0	0	NM	11
Connecticut	61	228	-73.1%	0	0	61	228	0	0	0	0
Maine	36	40	-9.0%	0	0	28	28	0	0	NM	11
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	171	447	-61.7%	171	447	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	17,871	19,811	-9.8%	0	0	17,800	19,723	0	0	71	89
New Jersey	446	528	-15.6%	0	0	446	528	0	0	0	0
New York	342	386	-11.3%	0	0	342	375	0	0	0	11
Pennsylvania	17,084	18,898	-9.6%	0	0	17,013	18,820	0	0	71	78
East North Central	97,034	108,805	-10.8%	56,323	65,694	39,782	42,050	33	34	896	1,028
Illinois	21,460	24,085	-10.9%	1,576	1,555	19,183	21,740	15	18	687	771
Indiana	27,099	30,793	-12.0%	25,518	29,227	1,562	1,550	18	16	0	0
Michigan	16,145	16,347	-1.2%	15,998	16,107	122	188	0	0	25	53
Ohio	20,970	24,468	-14.3%	2,054	5,892	18,915	18,572	0	0	2	4
Wisconsin	11,359	13,113	-13.4%	11,177	12,912	0	0	0	0	182	201
West North Central	65,469	73,536	-11.0%	64,489	72,400	0	0	34	37	946	1,099
Iowa	9,216	10,158	-9.3%	8,571	9,497	0	0	28	31	618	630
Kansas	6,600	7,863	-16.1%	6,600	7,863	0	0	0	0	0	0
Minnesota	7,566	8,898	-15.0%	7,400	8,639	0	0	1	1	165	259
Missouri	23,443	25,337	-7.5%	23,437	25,332	0	0	5	5	0	0
Nebraska	7,535	8,834	-14.7%	7,415	8,670	0	0	0	0	120	163
North Dakota	9,944	11,358	-12.4%	9,901	11,311	0	0	0	0	43	47
South Dakota	1,165	1,088	7.1%	1,165	1,088	0	0	0	0	0	0
South Atlantic	58,727	76,455	-23.2%	52,386	64,658	6,057	11,448	27	21	257	328
Delaware	29	89	-67.1%	0	0	29	89	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	7,594	11,149	-31.9%	7,566	11,100	0	7	0	0	28	43
Georgia	9,317	10,753	-13.4%	9,259	10,668	0	0	0	0	58	85
Maryland	1,943	5,306	-63.4%	0	0	1,912	5,272	0	0	32	34
North Carolina	9,365	13,039	-28.2%	9,248	12,913	34	44	23	16	59	66
South Carolina	5,680	7,111	-20.1%	5,674	7,100	0	0	0	0	6	11
Virginia	1,073	4,178	-74.3%	955	3,785	41	297	4	5	74	90
West Virginia	23,725	24,831	-4.5%	19,684	19,092	4,041	5,740	0	0	0	0
East South Central	40,019	45,252	-11.6%	38,663	43,828	1,145	1,111	0	0	210	313
Alabama	10,521	13,115	-19.8%	10,504	13,096	0	0	0	0	18	18
Kentucky	20,999	21,540	-2.5%	20,999	21,540	0	0	0	0	0	0
Mississippi	1,941	1,777	9.2%	795	666	1,145	1,111	0	0	0	0
Tennessee	6,559	8,820	-25.6%	6,366	8,525	0	0	0	0	193	295
West South Central	52,677	59,448	-11.4%	28,203	32,131	24,404	27,195	0	0	70	122
Arkansas	8,700	9,938	-12.5%	7,379	7,964	1,301	1,952	0	0	20	21
Louisiana	3,181	3,823	-16.8%	2,037	2,385	1,145	1,437	0	0	0	0
Oklahoma	3,777	5,734	-34.1%	3,670	5,076	57	557	0	0	50	101
Texas	37,019	39,954	-7.3%	15,118	16,705	21,901	23,249	0	0	0	0
Mountain	55,517	54,517	1.8%	49,193	48,286	6,170	6,044	0	0	154	187
Arizona	9,467	11,480	-17.5%	9,467	11,480	0	0	0	0	0	0
Colorado	10,234	9,775	4.7%	10,230	9,768	0	0	0	0	4	6
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	5,443	5,340	1.9%	116	71	5,326	5,267	0	0	1	2
Nevada	1,087	359	202.5%	693	29	393	330	0	0	0	0
New Mexico	5,313	3,842	38.3%	5,313	3,842	0	0	0	0	0	0
Utah	9,817	8,847	11.0%	9,649	8,679	167	167	0	0	0	0
Wyoming	14,148	14,863	-4.8%	13,724	14,416	283	279	0	0	140	168
Pacific Contiguous	3,181	848	275.1%	805	0	2,244	718	0	0	132	130
California	121	121	0.0%	0	0	0	0	0	0	121	121
Oregon	805	0	--	805	0	0	0	0	0	0	0
Washington	2,256	727	210.2%	0	0	2,244	718	0	0	11	9
Pacific Noncontiguous	803	779	3.1%	171	114	588	615	44	50	0	0
Alaska	290	246	18.1%	171	114	75	82	44	50	0	0
Hawaii	513	533	-3.8%	0	0	513	533	0	0	0	0
U.S. Total	391,567	440,167	-11.0%	290,405	327,558	98,280	109,159	138	142	2,746	3,307

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	10	22	-51.9%	NM	NM	NM	14	2	NM	NM	2
Connecticut	NM	11	NM	NM	1	NM	11	NM	NM	0	0
Maine	NM	3	NM	0	0	NM	NM	0	0	NM	2
Massachusetts	NM	NM	NM	NM	NM	NM	NM	NM	NM	0	0
New Hampshire	NM	2	NM	NM	NM	NM	NM	1	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	28	67	-58.5%	NM	NM	21	55	NM	NM	1	3
New Jersey	NM	19	NM	0	0	NM	18	0	0	0	0
New York	10	41	-74.3%	NM	NM	5	29	NM	NM	1	3
Pennsylvania	16	8	97.6%	0	0	15	7	0	0	NM	NM
East North Central	36	52	-30.2%	25	27	10	23	0	1	NM	2
Illinois	4	5	-20.1%	NM	NM	4	4	NM	0	0	0
Indiana	10	13	-19.1%	10	11	0	0	0	0	0	1
Michigan	6	10	-35.5%	6	9	0	0	NM	1	NM	NM
Ohio	14	22	-36.3%	7	3	7	18	0	0	0	0
Wisconsin	1	2	-35.6%	1	2	0	0	0	0	NM	NM
West North Central	33	28	18.4%	33	27	NM	NM	0	0	0	0
Iowa	9	9	5.6%	9	8	0	0	0	0	0	0
Kansas	8	4	94.6%	8	4	0	0	0	0	0	0
Minnesota	4	4	17.8%	4	3	NM	NM	0	0	0	0
Missouri	8	6	25.7%	8	6	0	0	0	0	0	0
Nebraska	1	NM	NM	1	NM	0	0	0	0	0	0
North Dakota	3	5	-41.2%	3	5	0	0	0	0	0	0
South Dakota	1	1	-12.3%	1	1	0	0	NM	NM	0	0
South Atlantic	99	159	-37.8%	79	130	8	16	4	4	9	9
Delaware	NM	2	NM	0	0	NM	2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	39	42	-8.3%	37	40	0	0	0	0	NM	NM
Georgia	10	13	-23.3%	4	7	NM	NM	0	0	6	6
Maryland	3	6	-46.0%	0	0	3	6	NM	NM	0	0
North Carolina	18	22	-16.8%	17	20	NM	1	NM	NM	NM	NM
South Carolina	8	10	-23.5%	8	10	0	0	NM	NM	0	1
Virginia	10	48	-79.2%	3	38	3	6	3	4	NM	NM
West Virginia	10	15	-35.8%	10	14	0	1	0	0	0	0
East South Central	28	18	56.9%	26	16	NM	0	0	0	1	NM
Alabama	2	1	153.8%	2	0	NM	NM	0	0	NM	NM
Kentucky	8	7	14.1%	8	7	0	0	0	0	0	0
Mississippi	2	1	122.5%	1	1	0	0	0	0	1	0
Tennessee	15	9	76.4%	15	9	0	0	0	0	0	0
West South Central	18	13	35.0%	12	11	5	2	0	0	1	1
Arkansas	6	3	103.8%	4	3	2	0	0	0	0	0
Louisiana	2	2	10.6%	2	2	0	0	0	0	0	0
Oklahoma	3	1	99.0%	2	1	0	0	0	0	0	0
Texas	7	7	1.5%	4	5	3	2	0	0	0	0
Mountain	19	15	30.3%	17	13	2	2	NM	0	0	0
Arizona	5	4	5.2%	5	4	0	0	NM	0	0	0
Colorado	0	1	-41.4%	0	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2	2	-21.6%	NM	NM	2	2	0	0	0	0
Nevada	1	2	-53.2%	0	1	0	0	0	0	0	0
New Mexico	5	1	361.5%	5	1	0	0	0	0	0	0
Utah	4	3	23.9%	4	3	0	0	0	0	0	0
Wyoming	3	2	53.7%	3	2	0	0	0	0	0	0
Pacific Contiguous	4	7	-45.5%	3	3	0	1	NM	NM	NM	4
California	3	6	-52.8%	3	3	0	0	0	0	0	3
Oregon	NM	NM	NM	0	0	0	0	NM	NM	0	0
Washington	NM	NM	NM	NM	NM	NM	NM	0	0	NM	NM
Pacific Noncontiguous	646	641	0.8%	455	491	169	131	1	0	21	19
Alaska	69	56	22.8%	65	54	0	0	0	NM	3	2
Hawaii	578	585	-1.3%	390	437	169	131	0	0	18	17
U.S. Total	922	1,022	-9.8%	658	730	222	244	8	9	35	40

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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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	132	1,093	-88.0%	15	170	88	875	19	28	10	NM
Connecticut	43	283	-84.8%	2	NM	36	277	3	NM	2	1
Maine	13	171	-92.5%	0	0	5	153	1	1	7	NM
Massachusetts	53	422	-87.6%	NM	77	38	330	6	NM	1	1
New Hampshire	14	154	-91.2%	5	86	NM	59	7	9	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	466	1,948	-76.1%	156	525	289	1,382	NM	NM	14	23
New Jersey	42	241	-82.5%	1	1	40	233	1	5	1	1
New York	343	1,309	-73.8%	155	523	172	756	NM	NM	11	20
Pennsylvania	81	398	-79.7%	0	2	77	392	1	2	2	NM
East North Central	200	300	-33.1%	107	144	85	142	1	2	7	11
Illinois	20	33	-40.8%	3	NM	17	27	NM	0	0	0
Indiana	53	54	-1.6%	49	45	0	0	0	0	4	8
Michigan	35	52	-33.2%	33	50	0	0	1	2	1	1
Ohio	76	149	-48.7%	13	33	61	114	0	0	2	2
Wisconsin	16	11	47.0%	9	NM	7	1	0	0	NM	NM
West North Central	153	159	-3.9%	148	147	NM	NM	1	1	1	0
Iowa	43	51	-15.0%	43	50	0	NM	0	0	0	0
Kansas	25	NM	NM	25	NM	0	0	0	0	0	0
Minnesota	18	NM	NM	14	9	NM	NM	1	1	1	0
Missouri	38	41	-7.1%	38	41	0	0	0	0	0	0
Nebraska	6	4	61.7%	6	4	0	0	0	0	0	0
North Dakota	20	15	34.9%	20	15	0	0	0	0	0	0
South Dakota	3	2	36.7%	3	2	0	0	NM	NM	0	0
South Atlantic	480	1,988	-75.9%	342	1,319	82	584	13	NM	43	62
Delaware	13	138	-90.8%	0	6	13	132	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	107	256	-58.3%	98	233	1	11	0	0	8	NM
Georgia	52	135	-61.2%	25	NM	NM	46	1	3	25	NM
Maryland	33	209	-84.1%	0	2	32	202	NM	NM	1	2
North Carolina	99	380	-74.0%	93	350	2	NM	NM	NM	3	NM
South Carolina	37	221	-83.4%	31	177	2	38	NM	NM	4	6
Virginia	95	572	-83.3%	51	430	31	124	11	16	2	NM
West Virginia	44	78	-43.9%	44	69	0	10	0	0	0	0
East South Central	117	132	-10.8%	110	98	1	25	0	0	7	NM
Alabama	10	42	-76.3%	6	13	1	24	0	0	4	NM
Kentucky	32	36	-12.9%	32	36	0	0	0	0	0	0
Mississippi	8	NM	NM	6	NM	0	0	0	0	1	3
Tennessee	68	44	54.3%	66	43	0	0	0	0	2	1
West South Central	64	NM	NM	44	NM	15	NM	0	0	4	4
Arkansas	23	NM	NM	14	NM	7	3	0	0	1	2
Louisiana	6	NM	NM	6	NM	0	0	0	0	0	0
Oklahoma	9	7	30.5%	8	7	0	0	0	0	1	0
Texas	26	30	-14.4%	16	21	8	NM	0	0	2	1
Mountain	85	72	17.6%	79	66	6	6	NM	0	0	0
Arizona	25	24	1.5%	25	24	0	0	NM	0	0	0
Colorado	4	5	-12.1%	4	5	0	0	0	0	0	0
Idaho	0	0	394.3%	0	0	0	0	0	0	0	0
Montana	6	5	18.0%	NM	NM	4	5	0	0	0	0
Nevada	4	2	92.2%	3	1	1	1	0	0	0	0
New Mexico	16	6	175.1%	16	6	0	0	0	0	0	0
Utah	17	17	0.6%	16	16	0	1	0	0	0	0
Wyoming	13	14	-4.1%	13	14	0	0	0	0	0	0
Pacific Contiguous	31	29	6.8%	16	14	3	2	NM	NM	11	13
California	24	24	-3.6%	14	13	1	1	0	NM	8	10
Oregon	NM	NM	NM	1	0	0	0	NM	NM	0	0
Washington	6	5	40.7%	NM	NM	2	NM	0	0	NM	3
Pacific Noncontiguous	2,874	2,950	-2.6%	2,134	2,346	629	500	6	4	105	99
Alaska	324	349	-7.3%	302	327	0	0	4	3	17	19
Hawaii	2,550	2,601	-1.9%	1,832	2,019	629	500	2	1	88	81
U.S. Total	4,602	8,759	-47.5%	3,152	4,903	1,201	3,538	47	78	201	240

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	16	NM	NM	0	0	0	0	0	0	16	NM
New Jersey	7	2	200.5%	0	0	0	0	0	0	7	2
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	183	81	125.4%	86	75	88	0	0	0	9	6
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	91	71	28.1%	83	67	0	0	0	0	8	4
Ohio	89	2	NM	0	0	88	0	0	0	1	2
Wisconsin	3	8	-56.9%	3	8	0	0	0	0	0	0
West North Central	0	7	-100.0%	0	0	0	0	0	0	0	7
Iowa	0	7	-100.0%	0	0	0	0	0	0	0	7
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	138	88	58.1%	121	77	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	121	77	58.7%	121	77	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	356	210	69.0%	344	184	0	0	0	0	12	26
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	344	202	70.6%	344	184	0	0	0	0	0	17
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	12	9	34.3%	0	0	0	0	0	0	12	9
Mountain	43	23	86.3%	0	0	43	23	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	43	23	86.3%	0	0	43	23	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	737	415	77.8%	552	336	131	23	0	0	55	55

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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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	73	57	29.8%	0	0	0	0	0	0	73	57
New Jersey	28	16	75.0%	0	0	0	0	0	0	28	16
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	45	41	11.9%	0	0	0	0	0	0	45	41
East North Central	834	806	3.5%	374	463	411	320	0	0	49	24
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	391	447	-12.4%	343	426	0	0	0	0	48	20
Ohio	412	323	27.8%	0	0	411	320	0	0	1	3
Wisconsin	31	36	-15.5%	31	36	0	0	0	0	0	0
West North Central	4	39	-89.6%	0	0	0	0	4	4	0	36
Iowa	4	39	-89.6%	0	0	0	0	4	4	0	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	646	630	2.4%	566	549	0	0	0	0	80	81
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	566	549	2.9%	566	549	0	0	0	0	0	0
Georgia	80	81	-0.9%	0	0	0	0	0	0	80	81
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	1,597	1,732	-7.8%	1,550	1,637	0	0	0	0	47	95
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,556	1,703	-8.6%	1,550	1,637	0	0	0	0	6	65
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	42	30	40.3%	0	0	0	0	0	0	42	30
Mountain	212	180	17.7%	0	0	212	180	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	212	180	17.7%	0	0	212	180	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	3,366	3,444	-2.3%	2,490	2,649	623	499	4	4	250	292

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	3,171	3,196	-0.8%	NM	NM	2,990	3,008	66	62	111	108
Connecticut	1,537	1,247	23.2%	3	3	1,458	1,173	23	21	53	49
Maine	102	188	-45.5%	0	0	75	159	2	3	25	27
Massachusetts	897	1,140	-21.3%	NM	NM	841	1,072	36	34	20	20
New Hampshire	38	115	-67.4%	0	0	35	112	0	1	3	3
Rhode Island	597	506	18.0%	0	0	582	492	4	4	NM	NM
Vermont	0	0	600.0%	0	0	0	0	0	0	0	0
Middle Atlantic	12,736	11,715	8.7%	627	785	11,849	10,661	82	82	178	187
New Jersey	2,848	2,776	2.6%	NM	NM	2,801	2,722	11	17	30	22
New York	2,917	3,786	-22.9%	620	768	2,201	2,902	63	57	34	59
Pennsylvania	6,970	5,153	35.3%	0	1	6,848	5,037	8	9	115	106
East North Central	10,411	11,052	-5.8%	3,081	4,286	6,914	6,363	119	117	298	285
Illinois	880	1,478	-40.5%	72	244	720	1,152	33	29	56	54
Indiana	2,181	2,361	-7.6%	735	1,317	1,284	903	17	17	145	124
Michigan	2,428	2,953	-17.8%	543	932	1,793	1,931	49	42	43	49
Ohio	3,504	3,060	14.5%	451	695	3,022	2,324	17	25	15	17
Wisconsin	1,418	1,199	18.2%	1,279	1,098	95	54	4	5	39	43
West North Central	2,471	3,276	-24.6%	2,072	2,815	335	382	30	29	35	50
Iowa	539	819	-34.1%	516	775	0	NM	8	9	15	35
Kansas	390	564	-30.9%	379	560	0	0	0	0	10	4
Minnesota	725	814	-10.9%	633	674	77	124	7	8	8	8
Missouri	577	735	-21.5%	305	463	258	258	13	12	2	3
Nebraska	120	176	-32.0%	119	176	0	0	1	0	0	0
North Dakota	49	NM	NM	NM	NM	0	0	0	0	1	1
South Dakota	71	109	-35.3%	71	109	0	0	0	0	0	0
South Atlantic	32,124	29,271	9.7%	26,703	23,390	4,861	5,455	107	89	453	337
Delaware	351	431	-18.6%	1	1	254	385	0	0	97	46
District of Columbia	0	-1	-100.0%	0	0	0	0	0	-1	0	0
Florida	16,954	14,207	19.3%	16,144	13,346	670	726	1	2	139	134
Georgia	4,770	4,763	0.2%	3,523	3,332	1,185	1,378	0	0	63	53
Maryland	1,173	1,253	-6.3%	216	312	852	852	99	81	7	8
North Carolina	3,108	3,300	-5.8%	2,326	2,709	762	574	NM	NM	13	11
South Carolina	2,176	1,415	53.7%	2,121	1,221	47	184	0	0	8	10
Virginia	3,460	3,783	-8.5%	2,370	2,452	1,026	1,268	0	1	64	62
West Virginia	131	119	10.4%	3	17	65	88	0	0	63	14
East South Central	11,515	11,711	-1.7%	8,003	7,680	3,273	3,818	11	15	229	198
Alabama	4,967	5,313	-6.5%	1,989	1,971	2,871	3,233	0	0	106	109
Kentucky	1,090	1,253	-13.0%	1,069	1,207	1	38	0	0	20	7
Mississippi	4,015	4,514	-11.1%	3,576	3,932	399	545	0	0	39	37
Tennessee	1,444	631	128.9%	1,368	569	1	1	11	15	64	46
West South Central	30,393	32,531	-6.6%	10,016	11,537	14,883	15,592	74	59	5,420	5,342
Arkansas	1,442	1,802	-20.0%	1,332	1,691	79	84	NM	NM	28	25
Louisiana	5,851	5,507	6.2%	3,294	2,964	425	569	11	11	2,121	1,963
Oklahoma	2,688	4,472	-39.9%	1,603	2,665	1,055	1,780	0	0	30	27
Texas	20,411	20,750	-1.6%	3,786	4,218	13,324	13,159	60	45	3,241	3,327
Mountain	7,616	7,753	-1.8%	6,122	6,083	1,354	1,534	35	32	104	104
Arizona	3,049	2,656	14.8%	2,212	1,821	826	822	11	13	0	0
Colorado	1,257	1,402	-10.4%	1,092	1,236	163	165	0	0	2	2
Idaho	125	143	-13.0%	32	NM	NM	NM	3	3	NM	NM
Montana	25	38	-32.8%	25	NM	NM	NM	0	0	0	0
Nevada	1,665	1,906	-12.6%	1,454	1,693	193	192	6	6	13	15
New Mexico	680	988	-31.2%	584	713	87	269	9	NM	1	0
Utah	736	553	33.2%	693	505	6	6	6	4	31	37
Wyoming	78	67	16.0%	30	NM	0	0	0	0	48	41
Pacific Contiguous	4,864	5,407	-10.0%	1,486	1,786	2,363	2,575	141	158	874	887
California	3,980	4,540	-12.3%	1,037	1,257	1,946	2,255	137	153	861	876
Oregon	451	429	5.3%	226	227	217	190	4	4	NM	NM
Washington	433	438	-1.2%	224	302	201	130	0	1	8	NM
Pacific Noncontiguous	177	195	-9.5%	170	190	0	0	0	0	6	5
Alaska	177	195	-9.5%	170	190	0	0	0	0	6	5
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	115,478	116,107	-0.5%	58,283	58,571	48,821	49,389	665	644	7,709	7,503

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

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

by State, by Sector, Year-to-Date through May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	17,943	17,335	3.5%	42	NM	16,991	16,355	369	372	541	548
Connecticut	7,842	6,723	16.7%	15	16	7,445	6,324	146	147	237	235
Maine	631	729	-13.5%	0	0	488	583	12	12	131	134
Massachusetts	6,393	7,205	-11.3%	NM	NM	6,070	6,858	190	192	107	112
New Hampshire	768	396	93.8%	0	1	751	379	5	3	12	13
Rhode Island	2,308	2,281	1.2%	0	0	2,238	2,210	16	17	54	54
Vermont	1	1	43.8%	0	0	0	0	1	0	0	0
Middle Atlantic	66,538	57,159	16.4%	3,560	3,480	61,550	52,216	431	473	998	990
New Jersey	15,075	13,615	10.7%	NM	NM	14,822	13,311	46	83	157	159
New York	16,868	16,743	0.7%	3,508	3,413	12,783	12,763	328	327	249	239
Pennsylvania	34,595	26,801	29.1%	1	5	33,946	26,142	56	62	592	592
East North Central	57,368	51,136	12.2%	18,400	17,607	36,862	31,450	604	597	1,503	1,481
Illinois	5,517	5,572	-1.0%	410	413	4,671	4,710	176	169	259	280
Indiana	11,536	9,528	21.1%	4,391	4,011	6,437	4,829	71	73	637	614
Michigan	12,360	13,574	-8.9%	3,207	4,097	8,611	8,955	253	243	289	279
Ohio	20,002	16,075	24.4%	3,098	3,240	16,727	12,656	79	89	98	90
Wisconsin	7,954	6,386	24.5%	7,294	5,845	416	300	25	23	219	219
West North Central	10,783	11,327	-4.8%	9,075	9,642	1,252	1,256	137	127	319	302
Iowa	2,669	2,872	-7.1%	2,429	2,646	0	NM	40	42	201	185
Kansas	1,001	1,418	-29.4%	956	1,384	0	0	0	0	45	35
Minnesota	3,791	3,519	7.7%	3,299	2,984	390	435	47	42	56	58
Missouri	2,497	2,525	-1.1%	1,572	1,642	862	821	49	42	14	20
Nebraska	268	402	-33.4%	266	399	0	0	1	2	0	0
North Dakota	255	243	4.9%	251	239	0	0	0	0	4	4
South Dakota	302	348	-13.2%	302	348	0	0	0	0	0	0
South Atlantic	141,993	131,595	7.9%	117,168	107,601	22,289	21,985	488	324	2,047	1,686
Delaware	1,596	2,078	-23.2%	1	1	1,153	1,823	0	0	442	255
District of Columbia	12	12	0.2%	0	0	0	0	12	12	0	0
Florida	66,706	63,266	5.4%	63,845	59,982	2,202	2,658	9	9	651	617
Georgia	20,705	20,315	1.9%	15,717	15,263	4,725	4,797	0	0	263	255
Maryland	5,961	4,542	31.2%	1,792	1,279	3,709	2,962	424	262	37	39
North Carolina	16,261	16,190	0.4%	12,850	14,012	3,304	2,087	38	35	69	56
South Carolina	8,717	6,331	37.7%	7,908	5,308	757	967	0	0	52	55
Virginia	21,562	18,452	16.9%	15,001	11,662	6,249	6,489	7	7	306	294
West Virginia	474	410	15.6%	55	94	191	202	0	0	228	114
East South Central	50,297	53,203	-5.5%	33,652	35,774	15,433	16,357	71	87	1,140	984
Alabama	21,203	22,380	-5.3%	7,590	7,962	13,087	13,918	0	0	525	500
Kentucky	5,382	6,033	-10.8%	5,164	5,636	118	319	0	0	100	78
Mississippi	17,668	20,763	-14.9%	15,247	18,457	2,220	2,113	0	6	201	188
Tennessee	6,044	4,026	50.1%	5,651	3,719	8	7	71	82	315	219
West South Central	133,091	132,901	0.1%	42,676	42,591	62,474	63,510	382	299	27,559	26,501
Arkansas	6,536	8,022	-18.5%	5,846	7,335	533	536	NM	NM	143	136
Louisiana	26,608	24,108	10.4%	13,749	12,472	1,654	1,691	65	60	11,140	9,884
Oklahoma	14,256	14,391	-0.9%	8,921	8,146	5,181	6,107	0	0	154	138
Texas	85,692	86,379	-0.8%	14,161	14,637	55,106	55,176	302	224	16,122	16,344
Mountain	39,956	32,639	22.4%	31,038	26,215	8,129	5,612	181	175	607	638
Arizona	14,765	9,384	57.3%	10,813	7,531	3,896	1,794	57	60	0	0
Colorado	6,600	6,186	6.7%	5,549	5,357	1,042	821	1	0	8	8
Idaho	1,234	820	50.6%	503	232	648	514	16	17	67	57
Montana	180	147	22.5%	108	128	71	18	0	0	1	1
Nevada	8,802	9,376	-6.1%	7,813	8,401	858	834	28	26	103	115
New Mexico	4,150	3,876	7.1%	2,522	2,232	1,584	1,599	43	42	1	4
Utah	3,843	2,496	54.0%	3,606	2,258	30	31	36	31	170	176
Wyoming	382	355	7.5%	124	76	1	1	0	0	256	278
Pacific Contiguous	41,015	38,013	7.9%	15,520	15,350	20,488	17,554	700	783	4,307	4,326
California	29,768	29,243	1.8%	9,795	10,625	15,071	13,626	675	754	4,228	4,238
Oregon	7,377	5,595	31.9%	3,508	3,035	3,812	2,501	18	20	39	38
Washington	3,870	3,176	21.9%	2,217	1,690	1,605	1,426	7	10	41	49
Pacific Noncontiguous	1,367	1,226	11.5%	1,336	1,201	0	0	0	0	31	24
Alaska	1,367	1,226	11.5%	1,336	1,201	0	0	0	0	31	24
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	560,350	526,534	6.4%	272,467	259,520	245,469	226,294	3,364	3,238	39,051	37,481

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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 1.7.C. Utility Scale Facility Net Generation from Natural Gas by Technology: Total (All Sectors), 2009-May 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

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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	40	NM	NM	0	0	0	0	0	0	40	NM
New Jersey	12	16	-27.0%	0	0	0	0	0	0	12	16
New York	2	0	--	0	0	0	0	0	0	2	0
Pennsylvania	27	NM	NM	0	0	0	0	0	0	27	NM
East North Central	331	353	-6.3%	0	11	187	175	0	0	145	168
Illinois	0	6	-93.5%	0	0	0	0	0	0	0	6
Indiana	132	145	-8.8%	0	0	0	0	0	0	132	145
Michigan	149	156	-4.7%	0	11	149	145	0	0	0	0
Ohio	50	NM	NM	0	0	38	NM	0	0	12	17
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	5.5%	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	5.5%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	19	18	5.6%	0	0	0	0	0	0	19	18
Delaware	15	16	-10.6%	0	0	0	0	0	0	15	16
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-98.0%	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	5	1	254.3%	0	0	0	0	0	0	5	1
East South Central	1	1	-24.4%	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	-24.4%	0	0	0	0	0	0	1	1
West South Central	383	377	1.7%	0	0	118	139	0	0	265	238
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	173	144	20.2%	0	0	0	0	0	0	173	144
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	211	233	-9.7%	0	0	118	139	0	0	92	94
Mountain	25	25	0.0%	0	0	0	1	0	0	24	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	0	1	-41.9%	0	0	0	1	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1	1	120.7%	0	0	0	0	0	0	1	1
Wyoming	23	24	-1.3%	0	0	0	0	0	0	23	24
Pacific Contiguous	189	177	6.9%	0	0	33	35	0	0	156	142
California	156	142	10.0%	0	0	0	0	0	0	156	142
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	33	35	-5.9%	0	0	33	35	0	0	0	0
Pacific Noncontiguous	1	6	-86.1%	0	0	0	0	0	0	1	6
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	1	6	-86.1%	0	0	0	0	0	0	1	6
U.S. Total	994	1,000	-0.6%	0	11	338	349	0	0	656	640

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 1.8.B. Utility Scale Facility Net Generation from Other Gases

by State, by Sector, Year-to-Date through May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	261	243	7.3%	0	0	0	NM	0	0	261	243
New Jersey	86	92	-6.4%	0	0	0	0	0	0	86	92
New York	2	0	--	0	0	0	0	0	0	2	0
Pennsylvania	173	151	14.5%	0	0	0	NM	0	0	173	151
East North Central	1,952	1,832	6.6%	65	97	895	830	0	0	993	905
Illinois	116	58	99.6%	0	0	0	0	0	0	116	58
Indiana	802	791	1.4%	0	0	0	0	0	0	802	791
Michigan	726	728	-0.3%	65	97	661	631	0	0	0	0
Ohio	309	255	21.1%	0	0	234	199	0	0	75	56
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	21	21	1.0%	0	0	0	0	0	0	21	21
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	21	21	1.0%	0	0	0	0	0	0	21	21
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	83	90	-8.1%	0	0	0	0	0	0	83	90
Delaware	65	80	-18.7%	0	0	0	0	0	0	65	80
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	2	-96.7%	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	18	8	114.5%	0	0	0	0	0	0	18	8
East South Central	4	4	10.1%	0	0	0	0	0	0	4	4
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	4	3	26.4%	0	0	0	0	0	0	4	3
West South Central	1,943	1,795	8.2%	0	0	741	592	0	0	1,202	1,203
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	813	776	4.8%	0	0	0	0	0	0	813	776
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	1,130	1,019	10.8%	0	0	741	592	0	0	389	427
Mountain	128	170	-25.0%	0	0	3	5	0	0	125	165
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	-48.7%	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	5	1	629.2%	0	0	0	0	0	0	5	1
Wyoming	120	164	-27.1%	0	0	0	0	0	0	120	164
Pacific Contiguous	698	813	-14.1%	0	0	99	170	0	0	599	642
California	599	642	-6.8%	0	0	0	0	0	0	599	642
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	99	170	-42.0%	0	0	99	170	0	0	0	0
Pacific Noncontiguous	3	22	-86.0%	0	0	0	0	0	0	3	22
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	3	22	-86.0%	0	0	0	0	0	0	3	22
U.S. Total	5,092	4,989	2.1%	65	97	1,737	1,597	0	0	3,291	3,295

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	2,267	2,925	-22.5%	0	0	2,267	2,925	0	0	0	0
Connecticut	1,035	1,551	-33.2%	0	0	1,035	1,551	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	302	443	-31.8%	0	0	302	443	0	0	0	0
New Hampshire	929	931	-0.2%	0	0	929	931	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	12,993	13,193	-1.5%	0	0	12,993	13,193	0	0	0	0
New Jersey	1,739	2,631	-33.9%	0	0	1,739	2,631	0	0	0	0
New York	3,920	3,418	14.7%	0	0	3,920	3,418	0	0	0	0
Pennsylvania	7,333	7,145	2.6%	0	0	7,333	7,145	0	0	0	0
East North Central	13,879	13,055	6.3%	2,148	1,860	11,731	11,194	0	0	0	0
Illinois	8,649	8,083	7.0%	0	0	8,649	8,083	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,752	2,463	11.7%	2,148	1,860	604	602	0	0	0	0
Ohio	1,620	1,611	0.5%	0	0	1,620	1,611	0	0	0	0
Wisconsin	859	898	-4.3%	0	0	859	898	0	0	0	0
West North Central	3,326	3,495	-4.8%	2,875	3,058	451	437	0	0	0	0
Iowa	451	437	3.0%	0	0	451	437	0	0	0	0
Kansas	906	351	158.0%	906	351	0	0	0	0	0	0
Minnesota	1,060	1,269	-16.5%	1,060	1,269	0	0	0	0	0	0
Missouri	320	894	-64.2%	320	894	0	0	0	0	0	0
Nebraska	589	544	8.2%	589	544	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	17,721	17,141	3.4%	16,386	15,807	1,334	1,334	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	1,967	2,734	-28.1%	1,967	2,734	0	0	0	0	0	0
Georgia	2,921	2,812	3.9%	2,921	2,812	0	0	0	0	0	0
Maryland	1,334	1,334	0.0%	0	0	1,334	1,334	0	0	0	0
North Carolina	3,820	3,630	5.2%	3,820	3,630	0	0	0	0	0	0
South Carolina	4,973	4,547	9.4%	4,973	4,547	0	0	0	0	0	0
Virginia	2,706	2,084	29.8%	2,706	2,084	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	7,468	6,421	16.3%	7,468	6,421	0	0	0	0	0	0
Alabama	3,912	3,260	20.0%	3,912	3,260	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	715	-6	NM	715	-6	0	0	0	0	0	0
Tennessee	2,841	3,166	-10.3%	2,841	3,166	0	0	0	0	0	0
West South Central	4,890	6,174	-20.8%	1,957	2,417	2,933	3,757	0	0	0	0
Arkansas	1,200	842	42.6%	1,200	842	0	0	0	0	0	0
Louisiana	757	1,575	-52.0%	757	1,575	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	2,933	3,757	-21.9%	0	0	2,933	3,757	0	0	0	0
Mountain	2,644	2,630	0.5%	2,644	2,630	0	0	0	0	0	0
Arizona	2,644	2,630	0.5%	2,644	2,630	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	1,937	2,286	-15.3%	1,937	2,286	0	0	0	0	0	0
California	1,693	1,683	0.6%	1,693	1,683	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	244	603	-59.5%	244	603	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	67,124	67,320	-0.3%	35,416	34,479	31,708	32,841	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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	13,002	13,604	-4.4%	0	0	13,002	13,604	0	0	0	0
Connecticut	6,304	7,582	-16.9%	0	0	6,304	7,582	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	2,177	1,489	46.2%	0	0	2,177	1,489	0	0	0	0
New Hampshire	4,521	4,532	-0.3%	0	0	4,521	4,532	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	63,571	65,519	-3.0%	0	0	63,571	65,519	0	0	0	0
New Jersey	10,939	14,117	-22.5%	0	0	10,939	14,117	0	0	0	0
New York	17,462	17,202	1.5%	0	0	17,462	17,202	0	0	0	0
Pennsylvania	35,170	34,200	2.8%	0	0	35,170	34,200	0	0	0	0
East North Central	64,740	64,281	0.7%	10,486	9,523	54,254	54,758	0	0	0	0
Illinois	41,135	40,203	2.3%	0	0	41,135	40,203	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	13,325	12,387	7.6%	10,486	9,523	2,839	2,863	0	0	0	0
Ohio	6,405	7,319	-12.5%	0	0	6,405	7,319	0	0	0	0
Wisconsin	3,874	4,373	-11.4%	0	0	3,874	4,373	0	0	0	0
West North Central	18,033	18,614	-3.1%	15,892	16,426	2,140	2,187	0	0	0	0
Iowa	2,140	2,187	-2.2%	0	0	2,140	2,187	0	0	0	0
Kansas	4,435	2,954	50.1%	4,435	2,954	0	0	0	0	0	0
Minnesota	5,616	6,330	-11.3%	5,616	6,330	0	0	0	0	0	0
Missouri	2,951	4,431	-33.4%	2,951	4,431	0	0	0	0	0	0
Nebraska	2,890	2,711	6.6%	2,890	2,711	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	83,870	83,848	0.0%	77,942	77,948	5,928	5,900	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	11,891	12,614	-5.7%	11,891	12,614	0	0	0	0	0	0
Georgia	12,983	13,997	-7.2%	12,983	13,997	0	0	0	0	0	0
Maryland	5,928	5,900	0.5%	0	0	5,928	5,900	0	0	0	0
North Carolina	16,361	16,915	-3.3%	16,361	16,915	0	0	0	0	0	0
South Carolina	24,361	22,793	6.9%	24,361	22,793	0	0	0	0	0	0
Virginia	12,345	11,629	6.2%	12,345	11,629	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	37,405	33,653	11.1%	37,405	33,653	0	0	0	0	0	0
Alabama	17,324	15,423	12.3%	17,324	15,423	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	4,543	2,371	91.6%	4,543	2,371	0	0	0	0	0	0
Tennessee	15,538	15,859	-2.0%	15,538	15,859	0	0	0	0	0	0
West South Central	26,643	29,428	-9.5%	10,079	12,101	16,564	17,327	0	0	0	0
Arkansas	6,531	5,404	20.9%	6,531	5,404	0	0	0	0	0	0
Louisiana	3,548	6,697	-47.0%	3,548	6,697	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	16,564	17,327	-4.4%	0	0	16,564	17,327	0	0	0	0
Mountain	13,338	13,110	1.7%	13,338	13,110	0	0	0	0	0	0
Arizona	13,338	13,110	1.7%	13,338	13,110	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	10,597	10,867	-2.5%	10,597	10,867	0	0	0	0	0	0
California	7,046	6,925	1.7%	7,046	6,925	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	3,551	3,942	-9.9%	3,551	3,942	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	331,200	332,925	-0.5%	175,741	173,629	155,459	159,296	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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	711	697	2.1%	106	101	595	561	1	0	NM	35
Connecticut	36	32	11.6%	6	3	30	29	0	0	0	0
Maine	313	311	0.6%	0	0	303	277	0	0	NM	34
Massachusetts	99	97	3.0%	25	25	74	71	1	0	0	1
New Hampshire	140	136	2.6%	31	31	109	105	0	0	0	0
Rhode Island	0	0	0.5%	0	0	0	0	0	0	0	0
Vermont	122	120	1.8%	44	42	79	78	0	0	0	0
Middle Atlantic	2,964	2,994	-1.0%	2,182	2,221	775	766	1	1	6	6
New Jersey	5	4	36.3%	0	0	5	4	0	0	0	0
New York	2,654	2,690	-1.3%	2,169	2,207	478	476	1	1	6	6
Pennsylvania	305	300	1.6%	13	14	292	286	0	0	0	0
East North Central	512	549	-6.7%	445	475	56	56	0	0	NM	18
Illinois	9	14	-35.2%	NM	5	7	9	0	0	0	0
Indiana	29	29	2.2%	29	29	0	0	0	0	0	0
Michigan	166	180	-7.8%	153	165	NM	NM	0	0	NM	NM
Ohio	49	48	0.7%	27	26	NM	NM	0	0	0	0
Wisconsin	260	279	-6.8%	235	250	NM	NM	0	0	NM	NM
West North Central	1,289	1,394	-7.5%	1,254	1,359	NM	NM	0	0	10	NM
Iowa	101	103	-1.5%	101	102	1	1	0	0	0	0
Kansas	1	3	-65.0%	0	0	1	3	0	0	0	0
Minnesota	123	125	-1.7%	89	93	NM	NM	0	0	10	NM
Missouri	130	114	13.9%	130	114	0	0	0	0	0	0
Nebraska	151	164	-7.9%	151	164	0	0	0	0	0	0
North Dakota	257	282	-9.0%	257	282	0	0	0	0	0	0
South Dakota	527	603	-12.7%	527	603	0	0	0	0	0	0
South Atlantic	1,429	1,388	2.9%	1,057	1,037	319	299	2	1	51	51
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	21	20	1.3%	21	20	0	0	0	0	0	0
Georgia	234	223	4.8%	231	221	NM	NM	0	0	1	1
Maryland	264	245	7.8%	0	0	264	245	0	0	0	0
North Carolina	423	414	2.3%	416	408	NM	5	1	1	NM	NM
South Carolina	211	208	1.7%	207	203	NM	NM	0	0	0	0
Virginia	121	124	-2.9%	115	118	6	6	0	0	0	0
West Virginia	154	153	0.6%	68	68	37	36	0	0	49	49
East South Central	2,167	2,126	2.0%	2,166	2,125	NM	NM	0	0	0	0
Alabama	952	873	9.1%	952	873	0	0	0	0	0	0
Kentucky	388	435	-10.7%	387	434	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	827	818	1.1%	827	818	0	0	0	0	0	0
West South Central	722	680	6.2%	630	589	92	91	NM	NM	0	0
Arkansas	311	287	8.5%	306	282	NM	NM	0	0	0	0
Louisiana	83	82	0.4%	0	0	83	82	0	0	0	0
Oklahoma	206	197	4.3%	206	197	0	0	0	0	0	0
Texas	122	113	8.1%	118	110	4	3	NM	NM	0	0
Mountain	3,446	3,777	-8.8%	3,297	3,609	147	167	2	2	0	0
Arizona	551	636	-13.4%	551	636	0	0	0	0	0	0
Colorado	198	232	-15.0%	171	202	NM	NM	2	2	0	0
Idaho	1,066	1,172	-9.0%	969	1,061	98	112	0	0	0	0
Montana	1,092	1,203	-9.2%	1,077	1,186	NM	NM	0	0	0	0
Nevada	275	244	12.9%	270	236	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	NM	NM	0	0	0	0	0	0
Utah	130	138	-5.8%	129	138	2	0	0	0	0	0
Wyoming	114	127	-10.4%	112	125	2	2	0	0	0	0
Pacific Contiguous	16,645	16,630	0.1%	16,291	16,367	351	261	NM	NM	0	0
California	4,767	3,105	53.5%	4,486	2,922	279	182	NM	NM	0	0
Oregon	3,484	4,028	-13.5%	3,453	3,994	NM	NM	0	0	0	0
Washington	8,393	9,497	-11.6%	8,352	9,451	NM	45	0	0	0	0
Pacific Noncontiguous	172	199	-13.7%	148	170	1	4	NM	NM	NM	NM
Alaska	166	188	-11.7%	147	167	0	0	NM	NM	0	0
Hawaii	NM	NM	NM	1	2	1	4	0	0	NM	NM
U.S. Total	30,058	30,434	-1.2%	27,576	28,051	2,363	2,232	NM	NM	92	125

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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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	3,692	3,257	13.4%	544	472	3,093	2,618	3	2	52	165
Connecticut	193	154	24.9%	26	18	167	136	0	0	0	0
Maine	1,570	1,457	7.7%	0	0	1,517	1,297	0	0	52	161
Massachusetts	517	452	14.3%	137	114	377	332	3	2	0	4
New Hampshire	779	633	23.1%	154	146	625	487	0	0	0	0
Rhode Island	2	2	26.0%	0	0	2	2	0	0	0	0
Vermont	631	559	13.0%	226	194	405	365	0	0	0	0
Middle Atlantic	14,399	14,096	2.1%	10,384	10,481	3,982	3,580	4	3	30	33
New Jersey	19	18	9.3%	0	0	19	18	0	0	0	0
New York	12,757	12,691	0.5%	10,317	10,425	2,407	2,231	4	3	30	33
Pennsylvania	1,622	1,387	17.0%	67	56	1,555	1,331	0	0	0	0
East North Central	2,105	2,556	-17.7%	1,803	2,214	248	256	1	1	54	85
Illinois	53	57	-6.6%	18	22	34	34	1	1	0	0
Indiana	158	134	17.4%	158	134	0	0	0	0	0	0
Michigan	635	834	-23.8%	583	767	47	55	0	0	NM	12
Ohio	251	225	11.6%	142	122	109	103	0	0	0	0
Wisconsin	1,008	1,306	-22.8%	902	1,170	57	63	0	0	49	73
West North Central	5,159	6,317	-18.3%	5,014	6,155	106	112	0	0	38	50
Iowa	388	514	-24.5%	384	512	4	2	0	0	0	0
Kansas	10	9	13.7%	0	0	10	9	0	0	0	0
Minnesota	470	602	-21.8%	340	450	92	101	0	0	38	50
Missouri	715	533	34.1%	715	533	0	0	0	0	0	0
Nebraska	576	757	-23.9%	576	757	0	0	0	0	0	0
North Dakota	982	1,286	-23.7%	982	1,286	0	0	0	0	0	0
South Dakota	2,017	2,616	-22.9%	2,017	2,616	0	0	0	0	0	0
South Atlantic	8,490	6,287	35.0%	6,561	4,649	1,665	1,392	9	6	255	240
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	107	95	12.6%	107	95	0	0	0	0	0	0
Georgia	1,598	1,052	51.9%	1,584	1,039	NM	NM	0	0	4	5
Maryland	1,365	1,139	19.9%	0	0	1,365	1,139	0	0	0	0
North Carolina	2,535	1,789	41.7%	2,495	1,760	28	20	8	5	NM	NM
South Carolina	1,372	953	44.0%	1,340	924	30	28	1	1	0	0
Virginia	729	541	34.8%	700	512	29	29	0	0	0	0
West Virginia	783	718	9.1%	334	317	202	169	0	0	247	231
East South Central	11,723	9,887	18.6%	11,718	9,882	NM	NM	0	0	0	0
Alabama	5,541	4,244	30.6%	5,541	4,244	0	0	0	0	0	0
Kentucky	1,841	1,828	0.7%	1,837	1,824	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	4,340	3,814	13.8%	4,340	3,814	0	0	0	0	0	0
West South Central	4,136	3,142	31.6%	3,677	2,721	457	421	NM	NM	0	0
Arkansas	1,772	1,327	33.6%	1,753	1,306	20	21	0	0	0	0
Louisiana	417	386	8.2%	0	0	417	386	0	0	0	0
Oklahoma	1,166	914	27.6%	1,166	914	0	0	0	0	0	0
Texas	780	516	51.2%	759	501	20	14	NM	NM	0	0
Mountain	13,564	17,097	-20.7%	13,000	16,346	561	748	4	3	0	0
Arizona	2,406	3,088	-22.1%	2,406	3,088	0	0	0	0	0	0
Colorado	763	974	-21.7%	666	850	93	121	4	3	0	0
Idaho	4,083	5,347	-23.6%	3,706	4,840	377	507	0	0	0	0
Montana	4,178	5,468	-23.6%	4,119	5,391	59	77	0	0	0	0
Nevada	1,130	911	24.1%	1,107	875	NM	36	0	0	0	0
New Mexico	76	97	-21.6%	76	97	0	0	0	0	0	0
Utah	499	652	-23.5%	491	647	7	5	0	0	0	0
Wyoming	431	561	-23.2%	429	559	2	2	0	0	0	0
Pacific Contiguous	63,523	71,492	-11.1%	62,211	70,501	1,300	983	NM	NM	0	0
California	17,655	10,767	64.0%	16,622	10,140	1,022	618	NM	NM	0	0
Oregon	15,099	19,438	-22.3%	14,980	19,281	120	157	0	0	0	0
Washington	30,768	41,287	-25.5%	30,610	41,080	158	207	0	0	0	0
Pacific Noncontiguous	664	874	-24.0%	568	741	7	19	73	96	NM	NM
Alaska	636	827	-23.1%	563	731	0	0	73	96	0	0
Hawaii	28	47	-40.0%	4	10	7	19	0	0	NM	NM
U.S. Total	127,454	135,005	-5.6%	115,479	124,163	11,424	10,132	106	120	445	590

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	1,015	941	8.0%	71	32	847	807	12	12	86	90
Connecticut	89	64	38.3%	0	0	88	64	NM	NM	NM	NM
Maine	400	386	3.8%	0	0	311	292	4	4	86	89
Massachusetts	230	252	-9.0%	14	6	211	240	4	5	NM	1
New Hampshire	179	147	21.9%	26	5	150	139	3	2	0	0
Rhode Island	39	30	31.2%	0	0	39	29	1	0	0	0
Vermont	78	61	27.9%	31	19	48	42	0	0	0	0
Middle Atlantic	1,289	1,286	0.2%	7	10	1,175	1,145	58	67	48	64
New Jersey	186	212	-12.5%	7	10	152	169	26	32	NM	NM
New York	604	586	3.0%	0	0	573	553	21	23	9	11
Pennsylvania	499	488	2.3%	0	0	450	423	10	13	39	52
East North Central	3,024	2,618	15.5%	359	331	2,524	2,132	18	24	124	131
Illinois	1,222	974	25.5%	5	4	1,217	969	NM	NM	0	0
Indiana	595	517	15.1%	42	41	546	467	2	2	5	7
Michigan	682	632	8.0%	194	159	435	403	5	12	49	57
Ohio	235	204	15.4%	NM	NM	208	180	1	1	23	19
Wisconsin	289	291	-0.7%	115	123	119	112	8	8	48	48
West North Central	7,145	5,854	22.1%	2,347	1,775	4,736	4,006	8	13	54	60
Iowa	2,214	1,595	38.9%	1,491	1,021	717	568	2	3	4	3
Kansas	1,707	1,594	7.1%	168	156	1,537	1,437	NM	NM	0	0
Minnesota	1,254	1,124	11.6%	241	219	960	844	3	4	50	57
Missouri	256	227	12.8%	NM	NM	251	220	0	2	0	0
Nebraska	581	367	58.3%	31	19	549	346	1	2	0	0
North Dakota	903	754	19.8%	345	298	558	456	NM	0	NM	0
South Dakota	230	193	19.1%	66	57	164	136	0	0	0	0
South Atlantic	3,542	3,299	7.4%	649	458	1,980	1,862	40	44	873	935
Delaware	11	12	-8.6%	NM	NM	9	9	0	NM	NM	1
District of Columbia	6	5	25.2%	0	0	NM	0	4	5	0	0
Florida	816	623	30.9%	414	210	234	237	4	5	164	171
Georgia	637	633	0.6%	33	31	285	268	NM	NM	319	334
Maryland	143	132	8.1%	NM	NM	131	119	3	3	9	10
North Carolina	1,031	1,006	2.5%	41	47	870	828	12	14	109	117
South Carolina	289	289	0.1%	37	38	111	93	0	0	141	159
Virginia	457	461	-1.0%	123	129	186	171	16	17	131	144
West Virginia	152	138	10.2%	0	0	152	138	0	0	0	0
East South Central	629	657	-4.2%	18	18	140	124	NM	NM	471	514
Alabama	327	337	-2.9%	NM	NM	60	58	0	0	263	275
Kentucky	44	47	-6.8%	14	14	NM	NM	0	0	29	32
Mississippi	142	174	-18.3%	0	0	36	39	0	0	107	136
Tennessee	116	99	17.1%	NM	0	43	26	NM	NM	72	72
West South Central	11,204	10,774	4.0%	162	158	10,668	10,143	6	9	369	464
Arkansas	140	154	-8.8%	NM	NM	28	30	0	0	112	123
Louisiana	164	244	-32.5%	NM	NM	NM	NM	0	0	157	236
Oklahoma	2,536	2,487	2.0%	138	136	2,370	2,324	0	0	28	27
Texas	8,364	7,889	6.0%	24	22	8,263	7,781	6	8	72	78
Mountain	4,523	4,251	6.4%	492	323	3,945	3,881	49	13	37	34
Arizona	630	661	-4.6%	64	73	565	587	NM	NM	0	0
Colorado	1,076	916	17.5%	192	29	881	883	NM	NM	0	0
Idaho	324	315	2.8%	15	14	272	268	1	0	35	32
Montana	191	161	18.4%	20	16	170	144	0	0	1	1
Nevada	854	841	1.6%	4	5	806	828	44	8	0	0
New Mexico	740	680	8.7%	28	28	711	652	NM	NM	0	0
Utah	347	359	-3.4%	22	23	325	335	0	1	0	0
Wyoming	362	319	13.6%	147	136	216	183	0	0	0	0
Pacific Contiguous	7,611	7,582	0.4%	690	722	6,667	6,557	54	80	200	223
California	6,071	5,995	1.3%	209	244	5,743	5,605	51	76	68	69
Oregon	791	859	-8.0%	129	159	624	655	2	3	36	42
Washington	749	727	2.9%	351	318	300	296	NM	1	97	112
Pacific Noncontiguous	154	138	11.7%	17	12	115	108	22	18	NM	NM
Alaska	16	16	-2.9%	8	8	4	NM	3	4	NM	NM
Hawaii	139	122	13.6%	9	4	111	104	18	14	0	0
U.S. Total	40,139	37,401	7.3%	4,812	3,840	32,797	30,765	266	281	2,263	2,516

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values 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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	5,035	5,057	-0.4%	346	335	4,175	4,197	73	78	441	447
Connecticut	382	329	16.1%	1	1	380	327	NM	NM	NM	NM
Maine	2,127	2,218	-4.1%	0	0	1,664	1,744	23	30	439	444
Massachusetts	1,078	1,073	0.5%	63	35	988	1,009	25	26	NM	3
New Hampshire	830	845	-1.8%	102	85	709	742	19	18	0	0
Rhode Island	212	172	23.6%	0	0	208	168	4	4	0	0
Vermont	407	420	-3.3%	180	214	225	206	1	1	0	0
Middle Atlantic	6,449	6,744	-4.4%	32	35	5,867	6,081	282	286	268	342
New Jersey	847	874	-3.0%	32	35	691	701	122	134	2	4
New York	3,071	3,116	-1.4%	0	0	2,907	2,948	94	90	70	78
Pennsylvania	2,531	2,754	-8.1%	0	0	2,269	2,432	66	62	196	261
East North Central	16,739	15,892	5.3%	1,737	1,819	14,246	13,277	94	109	663	687
Illinois	7,020	6,382	10.0%	24	25	6,993	6,353	NM	NM	0	0
Indiana	3,317	3,078	7.8%	188	190	3,094	2,846	9	9	27	32
Michigan	3,603	3,641	-1.1%	946	932	2,346	2,375	35	51	275	283
Ohio	1,345	1,199	12.1%	15	17	1,200	1,050	6	6	123	126
Wisconsin	1,455	1,592	-8.6%	565	654	612	652	40	40	238	245
West North Central	37,961	35,882	5.8%	12,578	11,312	25,026	24,207	72	72	285	291
Iowa	11,937	10,243	16.5%	7,968	6,596	3,932	3,619	17	17	20	11
Kansas	8,868	8,847	0.2%	813	841	8,049	7,999	NM	7	0	0
Minnesota	6,296	6,593	-4.5%	1,269	1,347	4,739	4,946	26	23	262	277
Missouri	1,395	1,479	-5.7%	23	25	1,355	1,434	17	19	1	1
Nebraska	3,079	2,383	29.2%	164	110	2,910	2,268	6	5	0	0
North Dakota	5,064	5,038	0.5%	1,955	2,001	3,107	3,034	NM	0	2	2
South Dakota	1,322	1,299	1.8%	387	392	935	907	0	0	0	0
South Atlantic	15,593	15,265	2.1%	2,757	2,165	8,404	8,404	178	188	4,254	4,508
Delaware	49	51	-3.5%	NM	3	39	40	3	3	5	5
District of Columbia	28	25	10.4%	0	0	5	0	23	25	0	0
Florida	3,656	3,213	13.8%	1,718	1,077	1,117	1,256	19	21	801	859
Georgia	2,814	2,955	-4.8%	127	120	1,091	1,142	NM	NM	1,595	1,692
Maryland	621	641	-3.1%	3	4	554	578	14	13	49	46
North Carolina	4,304	4,130	4.2%	166	176	3,574	3,334	49	54	515	566
South Carolina	1,342	1,347	-0.4%	196	199	458	408	0	0	689	740
Virginia	2,007	2,032	-1.2%	544	587	792	774	69	71	601	600
West Virginia	772	872	-11.5%	0	0	772	872	0	0	0	0
East South Central	2,955	2,989	-1.1%	77	80	537	497	NM	NM	2,339	2,410
Alabama	1,554	1,564	-0.6%	15	16	245	237	0	0	1,294	1,310
Kentucky	213	225	-5.1%	61	64	5	5	0	0	147	156
Mississippi	673	730	-7.9%	0	0	133	143	0	0	539	587
Tennessee	515	471	9.5%	NM	0	154	112	NM	NM	358	357
West South Central	52,458	51,934	1.0%	734	724	49,714	48,986	40	40	1,970	2,184
Arkansas	699	719	-2.7%	NM	NM	115	126	2	2	581	590
Louisiana	947	1,118	-15.3%	NM	NM	35	36	0	0	911	1,081
Oklahoma	12,456	13,088	-4.8%	631	620	11,703	12,329	0	0	121	139
Texas	38,356	37,009	3.6%	101	102	37,861	36,496	38	38	357	374
Mountain	20,739	20,472	1.3%	2,439	1,686	17,902	18,566	239	49	160	171
Arizona	2,389	2,435	-1.9%	250	270	2,135	2,161	4	3	0	0
Colorado	5,274	4,890	7.9%	992	146	4,272	4,735	10	8	1	1
Idaho	1,543	1,703	-9.4%	81	86	1,310	1,453	3	4	150	160
Montana	1,071	1,018	5.1%	102	102	961	909	0	0	8	8
Nevada	3,706	3,529	5.0%	15	17	3,473	3,484	217	28	1	1
New Mexico	3,406	3,434	-0.8%	105	102	3,299	3,330	NM	NM	0	0
Utah	1,442	1,461	-1.3%	108	108	1,330	1,348	4	5	0	0
Wyoming	1,908	2,002	-4.7%	786	855	1,122	1,147	0	0	0	0
Pacific Contiguous	31,647	32,896	-3.8%	2,887	3,575	27,388	27,818	341	389	1,031	1,115
California	24,857	24,477	1.6%	828	867	23,390	22,918	324	371	314	321
Oregon	3,161	4,029	-21.5%	383	579	2,545	3,202	13	13	220	235
Washington	3,629	4,390	-17.3%	1,676	2,129	1,453	1,698	4	5	496	558
Pacific Noncontiguous	700	679	3.1%	86	81	512	502	101	95	NM	NM
Alaska	77	91	-15.5%	39	47	22	24	15	19	NM	NM
Hawaii	623	588	6.0%	47	34	490	478	86	76	0	0
U.S. Total	190,277	187,810	1.3%	23,674	21,812	153,771	152,534	1,422	1,308	11,411	12,155

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	-26	-40	-35.3%	0	0	-26	-40	0	0	0	0
Connecticut	2	1	74.2%	0	0	2	1	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-28	-41	-32.3%	0	0	-28	-41	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	-58	-84	-30.7%	-21	-43	-37	-42	0	0	0	0
New Jersey	-6	-13	-57.8%	-6	-13	0	0	0	0	0	0
New York	-15	-30	-47.5%	-15	-30	0	0	0	0	0	0
Pennsylvania	-37	-42	-10.2%	0	0	-37	-42	0	0	0	0
East North Central	-59	-55	7.2%	-59	-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	-59	-55	7.2%	-59	-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	56	8	565.4%	56	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	56	8	565.4%	56	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	-229	-163	40.7%	-229	-163	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	-24	-27	-13.5%	-24	-27	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	-104	-27	280.8%	-104	-27	0	0	0	0	0	0
Virginia	-102	-108	-6.0%	-102	-108	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-53	-53	-0.1%	-53	-53	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	-53	-53	-0.1%	-53	-53	0	0	0	0	0	0
West South Central	3	-13	-125.0%	3	-13	0	0	0	0	0	0
Arkansas	10	2	321.8%	10	2	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-6	-15	-58.1%	-6	-15	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-13	-9	51.2%	-13	-9	0	0	0	0	0	0
Arizona	4	10	-64.1%	4	10	0	0	0	0	0	0
Colorado	-17	-19	-11.1%	-17	-19	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	10	17	-41.5%	10	17	0	0	0	0	0	0
California	10	18	-45.3%	10	18	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	-197.8%	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	-368	-390	-5.6%	-305	-309	-63	-81	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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	-176	-172	2.2%	0	0	-176	-172	0	0	0	0
Connecticut	2	-4	-141.7%	0	0	2	-4	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-178	-168	5.7%	0	0	-178	-168	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	-383	-446	-14.0%	-165	-211	-219	-235	0	0	0	0
New Jersey	-36	-51	-28.9%	-36	-51	0	0	0	0	0	0
New York	-129	-161	-20.0%	-129	-161	0	0	0	0	0	0
Pennsylvania	-219	-235	-6.7%	0	0	-219	-235	0	0	0	0
East North Central	-239	-243	-2.0%	-239	-243	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	-239	-243	-2.0%	-239	-243	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	244	45	443.9%	244	45	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	244	45	443.9%	244	45	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	-556	-780	-28.8%	-556	-780	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	88	-183	-148.3%	88	-183	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	-308	-137	124.6%	-308	-137	0	0	0	0	0	0
Virginia	-336	-460	-27.1%	-336	-460	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-222	-222	0.0%	-222	-222	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	-222	-222	0.0%	-222	-222	0	0	0	0	0	0
West South Central	0	-21	-102.0%	0	-21	0	0	0	0	0	0
Arkansas	38	27	38.1%	38	27	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-37	-49	-23.4%	-37	-49	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-119	-156	-23.7%	-119	-156	0	0	0	0	0	0
Arizona	-42	-31	36.2%	-42	-31	0	0	0	0	0	0
Colorado	-77	-125	-38.5%	-77	-125	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	-142	-124	14.6%	-142	-124	0	0	0	0	0	0
California	-144	-148	-2.9%	-144	-148	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	24	-92.1%	2	24	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	-1,592	-2,119	-24.9%	-1,197	-1,713	-395	-407	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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	141	133	5.8%	0	0	128	123	4	4	9	6
Connecticut	49	30	62.3%	0	0	49	30	0	0	0	0
Maine	29	24	23.8%	0	0	16	14	4	4	9	6
Massachusetts	61	76	-19.4%	0	0	61	76	0	0	0	0
New Hampshire	2	4	-47.2%	0	0	2	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	186	180	3.3%	0	0	143	139	37	41	6	0
New Jersey	46	46	0.2%	0	0	29	33	11	13	6	0
New York	71	74	-3.4%	0	0	51	53	20	20	0	0
Pennsylvania	69	61	13.9%	0	0	63	53	6	8	0	0
East North Central	75	73	3.7%	2	2	11	9	7	14	56	49
Illinois	23	23	0.5%	0	0	-1	-1	0	0	24	25
Indiana	30	23	30.6%	0	0	0	0	2	2	28	21
Michigan	18	22	-17.9%	0	0	12	10	5	12	1	0
Ohio	1	1	13.8%	0	0	0	0	0	0	1	1
Wisconsin	2	NM	NM	2	2	0	0	0	0	0	NM
West North Central	34	42	-19.4%	14	22	13	13	NM	2	5	5
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	0.7%	0	0	0	0	0	0	0	0
Minnesota	30	38	-21.5%	10	18	13	13	NM	2	4	5
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	NM	NM	4	NM	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	393	360	9.3%	0	0	227	189	14	15	152	155
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	257	228	12.6%	0	0	136	111	0	0	122	117
Georgia	7	9	-17.5%	0	0	0	0	0	0	7	9
Maryland	30	25	21.2%	0	0	30	25	0	0	0	0
North Carolina	53	55	-2.2%	0	0	32	28	0	0	22	26
South Carolina	2	4	-46.5%	0	0	0	1	0	0	2	3
Virginia	44	41	7.9%	0	0	30	26	14	15	0	0
West Virginia	-1	-1	-43.3%	0	0	-1	-1	0	0	0	0
East South Central	7	2	310.7%	6	1	0	0	0	0	NM	NM
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	6	1	622.6%	6	1	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	NM	NM	0	0	0	0	0	0	NM	NM
West South Central	70	109	-35.7%	0	0	8	11	0	0	61	97
Arkansas	0	0	-64.6%	0	0	0	0	0	0	0	0
Louisiana	37	66	-44.6%	0	0	0	0	0	0	37	66
Oklahoma	0	5	-90.2%	0	0	0	5	0	0	0	0
Texas	33	37	-13.1%	0	0	8	7	0	0	24	31
Mountain	58	61	-4.7%	7	7	25	26	0	0	26	27
Arizona	0	0	74.6%	0	0	0	0	0	0	0	0
Colorado	6	5	13.2%	0	0	2	2	0	0	4	3
Idaho	5	6	-23.6%	0	0	0	0	0	0	5	6
Montana	23	25	-4.9%	0	0	23	25	0	0	0	0
Nevada	2	2	-18.3%	2	2	0	0	0	0	0	0
New Mexico	0	0	-586.7%	0	0	0	0	0	0	0	0
Utah	20	16	27.1%	5	5	0	0	0	0	15	11
Wyoming	2	7	-66.4%	0	0	0	0	0	0	2	7
Pacific Contiguous	58	87	-33.0%	-1	0	19	22	0	0	40	64
California	51	79	-35.5%	-1	0	12	14	0	0	40	64
Oregon	4	4	7.3%	0	0	4	4	0	0	0	0
Washington	3	4	-21.5%	0	0	3	4	0	0	0	0
Pacific Noncontiguous	32	29	8.2%	14	15	0	0	18	14	0	0
Alaska	0	0	25.4%	0	0	0	0	0	0	0	0
Hawaii	32	29	8.3%	14	16	0	0	18	14	0	0
U.S. Total	1,053	1,074	-2.0%	41	47	575	532	81	91	356	405

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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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	704	700	0.6%	0	0	628	617	22	28	54	54
Connecticut	208	178	16.8%	0	0	208	178	0	0	0	0
Maine	142	153	-7.2%	0	0	65	71	22	28	54	54
Massachusetts	335	349	-4.0%	0	0	335	349	0	0	0	0
New Hampshire	19	19	-3.0%	0	0	19	19	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	888	899	-1.2%	0	0	686	713	182	180	20	6
New Jersey	219	231	-5.5%	0	0	142	162	57	63	20	6
New York	320	350	-8.7%	0	0	235	269	85	81	0	0
Pennsylvania	350	318	10.1%	0	0	309	281	41	36	0	0
East North Central	326	340	-4.1%	9	8	44	48	42	57	231	227
Illinois	82	105	-21.4%	0	0	-5	-6	0	0	87	111
Indiana	133	106	25.8%	0	0	0	0	8	9	125	97
Michigan	91	110	-16.5%	0	0	49	55	34	49	9	6
Ohio	5	5	-0.7%	0	-1	0	0	0	0	5	6
Wisconsin	14	15	-5.1%	10	9	0	0	0	0	NM	6
West North Central	149	183	-18.7%	68	87	50	55	7	13	24	28
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	2	2	-0.3%	0	0	0	0	0	0	2	2
Minnesota	129	163	-20.7%	50	69	50	55	7	13	22	26
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	18	17	0.9%	18	17	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,823	1,880	-3.0%	-1	0	1,012	1,029	61	64	750	787
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	1,243	1,259	-1.3%	-1	0	650	639	0	0	593	620
Georgia	39	31	26.5%	0	0	0	0	0	0	39	31
Maryland	92	130	-29.4%	0	0	92	130	0	0	0	0
North Carolina	235	256	-8.2%	0	0	131	131	0	0	104	124
South Carolina	16	14	8.4%	0	0	2	3	0	0	14	12
Virginia	201	194	3.6%	0	0	140	131	61	64	0	0
West Virginia	-3	-5	-47.6%	0	0	-3	-5	0	0	0	0
East South Central	18	23	-20.7%	15	19	0	0	0	0	3	5
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	15	19	-17.2%	15	19	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	3	5	-35.0%	0	0	0	0	0	0	3	5
West South Central	410	456	-10.1%	0	0	38	52	0	0	372	405
Arkansas	2	2	-22.5%	0	0	0	0	0	0	2	2
Louisiana	198	270	-26.9%	0	0	0	0	0	0	198	270
Oklahoma	3	21	-87.1%	0	0	1	20	0	0	2	1
Texas	208	163	28.0%	0	0	37	32	0	0	171	131
Mountain	295	326	-9.4%	31	36	129	136	0	0	135	155
Arizona	-2	0	377.1%	0	0	-2	0	0	0	0	0
Colorado	24	26	-6.7%	0	0	6	9	0	0	18	16
Idaho	29	32	-7.4%	0	0	0	0	0	0	29	32
Montana	125	127	-1.3%	0	0	125	127	0	0	0	0
Nevada	8	12	-34.4%	8	12	0	0	0	0	0	0
New Mexico	0	0	63.8%	0	0	0	0	0	0	0	0
Utah	82	95	-13.5%	23	24	0	0	0	0	58	71
Wyoming	29	36	-18.7%	0	0	0	0	0	0	29	36
Pacific Contiguous	325	391	-16.9%	-2	0	93	116	0	0	234	275
California	292	350	-16.5%	-2	0	61	75	0	0	234	275
Oregon	8	17	-53.7%	0	0	8	17	0	0	0	0
Washington	25	24	3.9%	0	0	25	24	0	0	0	0
Pacific Noncontiguous	143	144	-0.7%	61	71	0	0	82	73	0	0
Alaska	-1	-1	37.6%	-1	-1	0	0	0	0	0	0
Hawaii	144	145	-0.4%	62	72	0	0	82	73	0	0
U.S. Total	5,082	5,342	-4.9%	181	220	2,680	2,766	397	415	1,824	1,940

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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	297	288	3.4%	20	19	275	266	2	2	NM	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	187	187	0.2%	0	0	187	187	0	0	0	0
Massachusetts	20	18	5.7%	5	NM	13	12	NM	2	NM	0
New Hampshire	37	37	-0.1%	0	0	37	37	0	0	0	0
Rhode Island	20	11	73.2%	0	0	19	11	1	0	0	0
Vermont	33	33	0.1%	15	15	18	19	0	0	0	0
Middle Atlantic	681	648	5.1%	0	0	680	647	NM	NM	NM	0
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	380	364	4.4%	0	0	379	363	NM	NM	NM	0
Pennsylvania	299	282	5.9%	0	0	299	282	0	0	0	0
East North Central	2,495	2,063	20.9%	271	234	2,214	1,821	NM	NM	7	6
Illinois	1,181	932	26.8%	NM	NM	1,180	930	NM	NM	0	0
Indiana	523	439	19.2%	0	0	523	439	0	0	0	0
Michigan	462	402	14.8%	183	146	279	256	0	0	0	0
Ohio	166	135	22.9%	NM	NM	158	128	0	0	7	NM
Wisconsin	163	156	4.6%	85	85	75	68	NM	NM	1	1
West North Central	6,816	5,502	23.9%	2,301	1,722	4,511	3,776	NM	NM	0	0
Iowa	2,194	1,575	39.4%	1,487	1,018	706	556	0	0	0	0
Kansas	1,701	1,588	7.1%	168	156	1,532	1,431	NM	NM	0	0
Minnesota	980	830	18.1%	210	181	768	647	NM	NM	0	0
Missouri	237	207	14.6%	0	0	237	207	0	0	0	0
Nebraska	570	356	60.3%	24	13	546	343	0	0	0	0
North Dakota	903	754	19.8%	345	298	558	456	NM	0	0	0
South Dakota	230	193	19.2%	66	57	164	136	0	0	0	0
South Atlantic	237	224	6.0%	0	0	237	224	0	0	0	0
Delaware	0	0	38.2%	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	45	41	8.9%	0	0	45	41	0	0	0	0
North Carolina	40	44	-10.0%	0	0	40	44	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	152	138	10.2%	0	0	152	138	0	0	0	0
East South Central	4	NM	NM	0	0	4	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	4	NM	NM	0	0	4	NM	0	0	0	0
West South Central	10,338	9,864	4.8%	154	150	10,177	9,708	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	2,500	2,451	2.0%	131	129	2,368	2,322	0	0	0	0
Texas	7,839	7,413	5.7%	23	21	7,808	7,385	5	5	NM	NM
Mountain	2,485	2,172	14.4%	372	193	2,111	1,977	NM	NM	0	0
Arizona	76	64	19.7%	0	0	76	64	0	0	0	0
Colorado	941	784	20.0%	192	29	747	754	NM	NM	0	0
Idaho	212	202	4.8%	14	13	198	190	0	0	0	0
Montana	186	156	19.3%	20	16	166	140	0	0	0	0
Nevada	43	38	13.6%	0	0	43	38	0	0	0	0
New Mexico	601	536	12.2%	0	0	601	536	NM	NM	0	0
Utah	82	73	12.1%	0	0	82	73	0	0	0	0
Wyoming	343	319	7.7%	147	136	197	183	0	0	0	0
Pacific Contiguous	3,049	2,770	10.1%	553	547	2,495	2,222	1	1	1	1
California	1,806	1,501	20.3%	103	113	1,701	1,388	1	1	1	1
Oregon	630	702	-10.2%	123	154	507	548	0	0	0	0
Washington	613	567	8.1%	326	280	287	286	0	0	0	0
Pacific Noncontiguous	72	67	8.2%	8	8	64	59	0	0	0	0
Alaska	12	12	1.5%	8	8	4	NM	0	0	0	0
Hawaii	60	55	9.6%	0	0	60	55	0	0	0	0
U.S. Total	26,474	23,603	12.2%	3,678	2,873	22,767	20,704	18	16	11	9

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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 1.14.B. Utility Scale Facility Net Generation from Wind

by State, by Sector, Year-to-Date through May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	1,655	1,751	-5.5%	103	116	1,535	1,619	16	16	NM	2
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	1,087	1,161	-6.4%	0	0	1,087	1,161	0	0	0	0
Massachusetts	105	114	-8.4%	27	29	65	72	12	12	NM	2
New Hampshire	176	210	-16.2%	0	0	176	210	0	0	0	0
Rhode Island	109	75	44.9%	0	0	105	72	4	4	0	0
Vermont	173	185	-6.5%	76	87	97	98	0	0	0	0
Middle Atlantic	3,597	3,812	-5.6%	0	0	3,594	3,808	NM	NM	NM	2
New Jersey	10	11	-12.1%	0	0	10	11	0	0	0	0
New York	2,037	2,064	-1.3%	0	0	2,034	2,060	NM	NM	NM	2
Pennsylvania	1,550	1,737	-10.7%	0	0	1,550	1,737	0	0	0	0
East North Central	14,184	13,232	7.2%	1,336	1,400	12,792	11,777	17	18	39	37
Illinois	6,827	6,161	10.8%	6	7	6,819	6,152	NM	NM	0	0
Indiana	2,993	2,742	9.2%	0	0	2,993	2,742	0	0	0	0
Michigan	2,520	2,535	-0.6%	905	889	1,616	1,646	0	0	0	0
Ohio	1,004	851	18.0%	NM	7	962	809	2	2	35	34
Wisconsin	839	943	-11.0%	420	497	402	429	NM	14	3	3
West North Central	36,527	34,361	6.3%	12,363	11,072	24,145	23,268	20	21	0	0
Iowa	11,836	10,147	16.6%	7,952	6,580	3,882	3,566	2	1	0	0
Kansas	8,842	8,819	0.3%	812	840	8,024	7,972	NM	7	0	0
Minnesota	5,140	5,348	-3.9%	1,126	1,180	4,003	4,155	11	12	0	0
Missouri	1,298	1,380	-6.0%	0	0	1,298	1,380	0	0	0	0
Nebraska	3,028	2,333	29.8%	130	78	2,898	2,255	0	0	0	0
North Dakota	5,062	5,035	0.5%	1,955	2,001	3,107	3,034	NM	0	0	0
South Dakota	1,321	1,298	1.8%	387	392	934	906	0	0	0	0
South Atlantic	1,275	1,427	-10.7%	0	0	1,272	1,425	3	3	0	0
Delaware	3	3	1.0%	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	244	263	-6.9%	0	0	244	263	0	0	0	0
North Carolina	255	290	-11.8%	0	0	255	290	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	772	872	-11.5%	0	0	772	872	0	0	0	0
East South Central	19	25	-26.7%	0	0	19	25	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	19	25	-26.7%	0	0	19	25	0	0	0	0
West South Central	48,452	48,058	0.8%	704	693	47,714	47,336	25	23	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	12,301	12,915	-4.8%	606	594	11,696	12,321	0	0	0	0
Texas	36,150	35,143	2.9%	98	99	36,018	35,015	25	23	NM	NM
Mountain	12,485	12,330	1.3%	1,953	1,180	10,526	11,145	NM	NM	1	1
Arizona	302	283	6.8%	0	0	302	283	0	0	0	0
Colorado	4,746	4,392	8.1%	989	143	3,752	4,246	NM	NM	1	1
Idaho	1,095	1,229	-10.9%	75	81	1,020	1,149	0	0	0	0
Montana	1,048	995	5.4%	102	102	947	893	0	0	0	0
Nevada	180	176	2.4%	0	0	180	176	0	0	0	0
New Mexico	2,869	2,903	-1.2%	0	0	2,867	2,901	NM	NM	0	0
Utah	403	350	15.2%	0	0	403	350	0	0	0	0
Wyoming	1,841	2,002	-8.0%	786	855	1,055	1,147	0	0	0	0
Pacific Contiguous	12,427	13,301	-6.6%	2,239	2,778	10,183	10,518	3	3	2	1
California	7,056	6,413	10.0%	325	299	6,727	6,110	3	3	2	1
Oregon	2,426	3,311	-26.7%	357	552	2,069	2,760	0	0	0	0
Washington	2,945	3,576	-17.7%	1,558	1,928	1,387	1,648	0	0	0	0
Pacific Noncontiguous	319	329	-3.3%	39	47	279	283	0	0	0	0
Alaska	61	71	-14.3%	39	47	22	24	0	0	0	0
Hawaii	258	258	-0.3%	0	0	258	258	0	0	0	0
U.S. Total	130,939	128,626	1.8%	18,737	17,285	112,059	111,205	92	88	52	49

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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 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	557	490	13.6%	38	5	425	386	9	9	86	89
Connecticut	71	50	41.4%	0	0	71	50	0	0	0	0
Maine	212	198	7.3%	0	0	123	104	4	4	86	89
Massachusetts	90	104	-12.9%	0	0	88	101	2	3	0	0
New Hampshire	142	110	29.2%	26	5	113	102	3	2	0	0
Rhode Island	13	15	-12.4%	0	0	13	15	0	0	0	0
Vermont	28	NM	NM	12	0	16	NM	0	0	0	0
Middle Atlantic	435	464	-6.3%	0	0	344	355	43	48	47	61
New Jersey	73	81	-10.4%	0	0	60	67	13	14	0	0
New York	169	186	-8.9%	0	0	140	154	21	22	9	11
Pennsylvania	193	197	-2.1%	0	0	145	134	10	12	38	51
East North Central	450	474	-5.1%	60	68	260	261	13	20	117	125
Illinois	35	36	-4.6%	3	NM	31	33	0	0	0	0
Indiana	36	39	-6.8%	26	26	4	4	2	2	5	7
Michigan	202	214	-5.8%	0	0	148	144	5	12	49	57
Ohio	56	54	3.4%	NM	NM	37	39	1	1	16	13
Wisconsin	122	131	-7.1%	30	38	40	40	5	5	47	47
West North Central	155	199	-21.8%	44	51	54	80	4	9	54	60
Iowa	18	18	-1.3%	NM	NM	10	10	2	3	4	3
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	118	157	-25.1%	31	38	36	60	NM	2	50	57
Missouri	NM	10	NM	NM	NM	NM	NM	0	2	0	0
Nebraska	7	8	-10.0%	7	6	0	0	1	2	0	0
North Dakota	NM	0	--	0	0	0	0	0	0	NM	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,690	1,720	-1.8%	213	202	579	556	26	28	872	935
Delaware	NM	NM	NM	0	0	NM	NM	0	0	NM	1
District of Columbia	4	5	-7.2%	0	0	0	0	4	5	0	0
Florida	420	424	-0.9%	75	56	178	194	3	4	164	171
Georgia	424	408	4.0%	0	0	106	74	0	0	319	334
Maryland	48	44	8.7%	0	0	38	32	2	2	9	10
North Carolina	227	238	-4.6%	0	0	117	120	NM	1	109	117
South Carolina	206	228	-9.3%	36	37	29	31	0	0	141	159
Virginia	355	369	-3.8%	102	109	106	100	16	17	131	144
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	507	552	-8.1%	NM	NM	28	29	0	0	470	514
Alabama	282	296	-4.5%	0	0	20	21	0	0	263	275
Kentucky	39	41	-6.6%	NM	NM	NM	NM	0	0	29	32
Mississippi	108	137	-21.4%	0	0	NM	NM	0	0	107	136
Tennessee	78	78	0.9%	0	0	NM	NM	0	0	72	71
West South Central	423	556	-23.9%	0	0	56	90	0	3	366	463
Arkansas	120	131	-8.4%	0	0	NM	7	0	0	112	123
Louisiana	164	244	-32.6%	0	0	NM	NM	0	0	157	236
Oklahoma	29	28	3.8%	0	0	NM	NM	0	0	28	27
Texas	109	153	-28.5%	0	0	40	74	0	3	69	76
Mountain	93	91	1.8%	NM	NM	54	55	1	2	36	34
Arizona	16	NM	NM	0	0	16	NM	0	0	0	0
Colorado	13	15	-11.7%	0	0	13	15	0	0	0	0
Idaho	50	46	7.7%	NM	NM	12	12	1	0	35	32
Montana	1	1	-17.6%	0	0	0	0	0	0	1	1
Nevada	NM	NM	NM	0	0	NM	NM	0	0	0	0
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	0
Utah	NM	NM	NM	0	0	NM	NM	0	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	649	725	-10.4%	36	47	383	398	37	62	194	218
California	443	483	-8.3%	5	4	343	357	34	58	61	64
Oregon	75	81	-7.8%	NM	NM	32	32	2	3	36	42
Washington	132	160	-18.0%	26	38	9	9	NM	1	97	112
Pacific Noncontiguous	31	23	33.3%	5	1	NM	NM	22	18	NM	NM
Alaska	3	4	-17.0%	0	0	0	0	3	4	NM	NM
Hawaii	28	19	43.2%	5	1	NM	NM	18	14	0	0
U.S. Total	4,990	5,294	-5.7%	405	383	2,188	2,213	155	200	2,242	2,498

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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 1.15.B. Utility Scale Facility Net Generation from Biomass

by State, by Sector, Year-to-Date through May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	2,719	2,728	-0.3%	190	195	2,034	2,029	55	60	439	444
Connecticut	312	282	10.6%	0	0	312	282	0	0	0	0
Maine	1,035	1,052	-1.6%	0	0	572	578	23	30	439	444
Massachusetts	476	492	-3.3%	0	0	464	481	12	11	0	0
New Hampshire	654	635	3.0%	102	85	533	532	19	18	0	0
Rhode Island	78	82	-5.8%	0	0	78	82	0	0	0	0
Vermont	165	185	-10.8%	88	110	76	74	1	1	0	0
Middle Atlantic	2,148	2,321	-7.4%	0	0	1,668	1,769	219	218	261	334
New Jersey	373	410	-9.1%	0	0	307	337	66	73	0	0
New York	830	924	-10.2%	0	0	671	762	90	86	69	76
Pennsylvania	945	986	-4.2%	0	0	689	670	63	59	193	258
East North Central	2,238	2,370	-5.5%	289	315	1,254	1,318	72	88	624	649
Illinois	170	198	-14.0%	17	17	153	180	0	0	0	0
Indiana	178	195	-8.9%	122	133	21	21	9	9	27	32
Michigan	1,010	1,053	-4.0%	0	0	700	719	35	51	275	283
Ohio	283	293	-3.4%	NM	7	186	192	3	3	87	91
Wisconsin	597	631	-5.4%	145	157	194	205	25	26	234	242
West North Central	794	983	-19.2%	205	231	253	411	52	51	285	291
Iowa	93	88	5.3%	10	11	47	51	15	16	20	11
Kansas	23	24	-3.7%	0	0	23	24	0	0	0	0
Minnesota	587	769	-23.7%	142	165	168	316	15	11	262	277
Missouri	52	62	-16.1%	21	23	14	20	16	18	1	1
Nebraska	37	37	0.0%	32	32	0	0	6	5	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	7,970	8,538	-6.6%	943	955	2,655	2,948	120	128	4,251	4,507
Delaware	25	26	-4.8%	0	0	20	21	0	0	5	5
District of Columbia	23	25	-10.4%	0	0	0	0	23	25	0	0
Florida	2,013	2,202	-8.6%	291	247	905	1,080	17	18	800	857
Georgia	1,998	2,109	-5.3%	0	0	403	418	0	0	1,595	1,692
Maryland	181	225	-19.8%	0	0	123	170	9	9	49	46
North Carolina	1,064	1,152	-7.6%	0	0	545	581	4	5	515	566
South Carolina	1,037	1,110	-6.6%	194	198	156	173	0	0	687	740
Virginia	1,631	1,687	-3.3%	458	510	503	506	68	71	601	600
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,515	2,594	-3.0%	41	43	138	144	0	0	2,336	2,407
Alabama	1,390	1,411	-1.5%	0	0	97	101	0	0	1,294	1,310
Kentucky	193	203	-5.0%	41	43	5	4	0	0	147	156
Mississippi	544	592	-8.1%	0	0	NM	NM	0	0	539	587
Tennessee	388	387	0.1%	0	0	32	33	0	0	356	354
West South Central	2,262	2,548	-11.2%	0	0	287	354	13	16	1,962	2,178
Arkansas	623	633	-1.7%	0	0	39	41	2	2	581	590
Louisiana	946	1,117	-15.3%	0	0	35	36	0	0	911	1,081
Oklahoma	129	147	-12.2%	0	0	NM	8	0	0	121	139
Texas	565	651	-13.2%	0	0	206	269	11	14	348	368
Mountain	429	449	-4.4%	NM	NM	259	266	7	9	158	168
Arizona	76	77	-1.3%	0	0	76	77	0	0	0	0
Colorado	66	67	-0.7%	0	0	66	67	0	0	0	0
Idaho	214	227	-5.8%	NM	NM	55	57	3	4	150	160
Montana	8	8	-1.5%	0	0	0	0	0	0	8	8
Nevada	27	29	-4.5%	0	0	27	29	0	0	0	0
New Mexico	8	9	-15.0%	0	0	8	9	0	0	0	0
Utah	30	33	-7.2%	0	0	27	28	4	5	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	3,312	3,646	-9.2%	157	275	1,876	1,952	273	325	1,006	1,094
California	2,246	2,404	-6.6%	15	49	1,685	1,747	256	307	290	300
Oregon	398	429	-7.1%	24	25	141	155	13	13	220	235
Washington	668	814	-17.9%	118	201	50	50	4	5	496	558
Pacific Noncontiguous	153	138	11.1%	30	20	21	22	101	95	NM	NM
Alaska	16	20	-20.1%	0	0	0	0	15	19	NM	NM
Hawaii	137	118	16.4%	30	20	21	22	86	76	0	0
U.S. Total	24,542	26,314	-6.7%	1,862	2,039	10,446	11,214	912	989	11,322	12,072

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Negative generation denotes that electric power consumed for plant use exceeds gross generation.
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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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	352	7.1%	22	23	318	329	37	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	NM	7	NM	0	0	NM	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	328	304	7.9%	0	0	291	304	37	0	0	0
New Mexico	4	1	245.5%	0	0	4	1	0	0	0	0
Utah	38	40	-4.0%	22	23	16	17	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	979	1,056	-7.2%	50	70	929	985	0	0	0	0
California	964	1,040	-7.3%	50	70	914	969	0	0	0	0
Oregon	15	16	-3.0%	0	0	15	16	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	26	27	-3.5%	0	0	26	27	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	26	27	-3.5%	0	0	26	27	0	0	0	0
U.S. Total	1,382	1,434	-3.6%	71	93	1,273	1,341	37	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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	1,926	1,713	12.4%	108	108	1,626	1,605	191	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	32	32	-0.1%	0	0	32	32	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,677	1,486	12.8%	0	0	1,485	1,486	191	0	0	0
New Mexico	27	5	439.4%	0	0	27	5	0	0	0	0
Utah	190	190	0.2%	108	108	82	82	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,914	4,984	-1.4%	290	315	4,624	4,669	0	0	0	0
California	4,838	4,908	-1.4%	290	315	4,548	4,593	0	0	0	0
Oregon	76	76	0.6%	0	0	76	76	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	131	130	0.4%	0	0	131	130	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	131	130	0.4%	0	0	131	130	0	0	0	0
U.S. Total	6,971	6,827	2.1%	398	423	6,382	6,404	191	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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	523	454	15.3%	161	163	362	291	13	7	147	154	NM	154	NM	1	194	154	14	12	0	0	13	12	154	126
Connecticut	79	65	21.3%	17	13	62	52	0	0	16	12	NM	NM	NM	NM	22	20	NM	NM	NM	NM	3	3	37	30
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	365	329	10.9%	120	130	245	198	9	2	110	128	NM	119	NM	1	146	119	10	8	0	0	9	8	89	72
New Hampshire	13	11	16.4%	0	0	13	11	0	0	0	0	4	3	0	0	4	3	1	1	0	0	1	1	8	7
Rhode Island	24	13	89.0%	7	NM	18	9	0	0	7	NM	12	5	0	0	12	5	0	0	0	0	0	0	6	4
Vermont	33	29	15.3%	17	14	16	14	4	5	13	9	6	5	0	0	6	5	NM	NM	0	0	NM	NM	10	9
Middle Atlantic	653	576	13.4%	173	175	480	402	7	10	151	144	225	198	14	19	211	179	26	23	1	2	24	21	244	202
New Jersey	341	327	4.2%	111	129	230	198	7	10	90	101	121	117	13	17	108	99	NM	NM	NM	NM	16	13	106	86
New York	253	196	29.3%	55	36	199	160	0	0	54	36	NM	NM	NM	NM	86	64	2	2	0	0	2	2	111	94
Pennsylvania	59	53	11.2%	8	9	51	44	0	0	7	7	NM	NM	NM	NM	17	16	NM	NM	NM	NM	6	6	28	22
East North Central	153	134	14.5%	79	80	74	53	28	29	49	50	NM	NM	NM	NM	41	33	6	3	0	0	6	3	27	17
Illinois	23	16	44.9%	6	6	17	10	NM	NM	6	6	NM	NM	NM	NM	9	6	0	0	0	0	0	0	7	3
Indiana	49	49	-1.6%	35	39	13	10	17	15	19	24	9	7	0	0	9	7	0	0	0	0	0	0	4	3
Michigan	29	24	24.3%	19	15	11	9	10	12	8	NM	NM	4	NM	0	5	4	NM	0	0	0	NM	0	5	4
Ohio	36	32	13.8%	14	15	22	17	NM	NM	13	13	NM	NM	NM	NM	14	12	4	1	0	0	3	1	5	4
Wisconsin	16	13	22.4%	5	NM	11	8	0	0	4	NM	NM	3	NM	0	4	3	2	1	0	0	2	1	5	3
West North Central	234	202	15.6%	174	153	59	49	NM	NM	172	150	28	24	0	0	28	24	2	2	0	0	2	2	29	23
Iowa	NM	15	NM	NM	NM	16	13	NM	NM	NM	NM	10	8	0	0	10	8	1	0	0	0	1	0	6	4
Kansas	NM	4	NM	NM	NM	3	3	NM	NM	NM	NM	1	1	0	0	1	1	0	0	0	0	0	0	2	2
Minnesota	167	146	14.6%	156	137	11	9	NM	NM	156	136	4	3	0	0	4	3	1	1	0	0	1	1	6	5
Missouri	39	33	17.0%	12	10	27	23	0	1	11	9	13	11	0	0	13	11	1	0	0	0	1	0	14	12
Nebraska	5	4	13.2%	4	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	109.6%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	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	1,913	1,588	20.5%	1,612	1,353	301	235	433	253	1,164	1,083	92	83	14	16	78	67	NM	NM	NM	NM	34	31	188	138
Delaware	18	17	4.4%	5	6	13	11	NM	NM	5	5	4	NM	0	NM	4	3	1	1	0	0	1	1	9	7
District of Columbia	NM	7	NM	NM	0	8	7	0	0	NM	0	4	4	0	0	4	4	0	0	0	0	0	0	4	3
Florida	459	238	92.7%	393	197	66	41	336	152	56	43	NM	NM	NM	NM	14	10	NM	NM	NM	NM	1	1	51	30
Georgia	NM	253	NM	213	225	NM	27	33	31	180	194	NM	NM	NM	NM	NM	3	NM	NM	0	0	NM	NM	NM	2
Maryland	159	141	13.0%	50	47	109	93	NM	NM	48	45	NM	NM	NM	NM	28	24	4	4	0	0	4	4	76	65
North Carolina	791	744	6.3%	765	724	27	21	41	47	713	663	23	25	11	14	12	12	1	1	0	0	1	1	14	8
South Carolina	117	86	35.9%	83	62	34	24	NM	NM	82	61	8	6	0	0	8	6	NM	2	NM	0	3	2	23	16
Virginia	114	101	13.0%	102	92	12	9	21	21	80	71	NM	3	NM	0	3	3	0	0	0	0	0	0	9	5
West Virginia	1	1	27.6%	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	116	16.0%	118	101	16	15	9	10	107	90	NM	NM	NM	NM	11	10	NM	NM	NM	NM	0	NM	5	5
Alabama	NM	42	NM	45	41	NM	NM	NM	NM	41	37	1	1	0	0	1	1	0	0	0	0	0	0	NM	NM
Kentucky	9	9	2.7%	5	6	4	3	5	6	NM	NM	2	2	0	0	2	2	0	0	0	0	0	0	2	1
Mississippi	36	39	-6.5%	35	38	1	1	0	0	35	38	1	1	0	0	1	1	NM	NM	0	0	NM	NM	1	0
Tennessee	43	26	66.2%	33	16	10	9	NM	0	31	15	NM	NM	NM	NM	7	7	NM	NM	NM	NM	NM	NM	3	3
West South Central	566	448	26.2%	443	353	123	95	8	8	435	345	NM	21	NM	0	25	21	0	0	0	0	0	0	98	74
Arkansas	23	25	-6.3%	20	23	3	2	NM	NM	20	23	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Louisiana	NM	23	NM	NM	NM	27	23	NM	NM	0	0	2	1	0	0	2	1	0	0	0	0	0	0	25	22
Oklahoma	8	8	-2.9%	7	7	1	1	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	508	392	29.6%	416	323	92	69	NM	NM	415	322	NM	18	NM	0	22	18	0	0	0	0	0	0	70	50
Mountain	1,949	1,918	1.6%	1,466	1,504	482	414	97	106	1,360	1,387	137	136	9	10	128	125	7	7	0	0	7	7	348	282
Arizona	715	711	0.6%	447	475	268	235	64	73	381	402	NM	NM	NM	NM	76	74	2	2	0	0	2	2	191	159
Colorado	185	176	5.2%	122	117	63	59	NM	NM	120	114	NM	NM	NM	NM	22	22	NM	0	0	0	NM	0	40	36
Idaho	61	63	-2.4%	55	59	6	3	0	0	55	59	1	1	0	0	1	1	0	0	0	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	532	516	3.2%	465	467	67	49	4	5	454	454	17	18	6	8	11	10	4	3	0	0	4	3	53	35
New Mexico	162	167	-3.1%	133	141	29	25	28	28	105	114	8	9	0	0	8	9	0	0	0	0	0	0	20	16
Utah	267	280	-4.3%	221	240	46	40	0	0	221	240	9	8	0	0	9	8	1	1	0	0	1	1	36	31
Wyoming	20	1	NM	19	0	1	1	0	0	19	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Pacific Contiguous	4,284	4,096	4.6%	2,704	2,737	1,580	1,359	52	57	2,629	2,657	397	352	16	18	381	335	227	NM	6	NM	221	190	979	834
California	4,157	3,996	4.0%	2,629	2,677	1,528	1,319	51	57	2,555	2,598	380	340	16	18	363	322	225	NM	6	NM	219	188	946	809
Oregon	100	83	19.7%	71	60	29	23	NM	NM	70	60	14	10	0	0	14	10	2	2	0	0	2	2	14	12
Washington	NM	17	NM	NM	0	23	17	0	0	NM	0	4	3	0	0	4	3	0	0	0	0	0	0	19	14
Pacific Noncontiguous	129	117	9.7%	25	21	104	97	4	3	20	17	41	38	0	0	41	38	0	0	0	0	0	0	63	58
Alaska	1	0	40.4%	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	128	117	9.6%	25	21	104	96	4	3	20	17	41	38	0	0	41	38	0	0	0	0	0	0	63	58
U.S. Total	10,538	9,650	9.2%	6,956	6,640	3,582	3,010	655	487	6,235	6,079	1,195	1,052	56	65	1,139	986	319	275	9	9	309	266	2,134	1,758

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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	2,036	1,687	20.7%	661	578	1,375	1,109	54	25	605	549	747	614	2	3	745	611	55	47	1	1	54	46	576	452
Connecticut	305	237	28.5%	65	41	240	196	1	1	63	39	92	77	NM	NM	92	77	12	10	NM	NM	12	10	136	109
Maine	35	27	28.4%	5	5	30	22	0	0	5	5	12	7	0	0	12	7	0	0	0	0	0	0	18	15
Massachusetts	1,425	1,226	16.2%	497	467	927	759	37	6	459	457	561	479	NM	2	560	477	39	33	1	1	38	32	330	251
New Hampshire	52	43	19.3%	0	0	52	43	0	0	0	0	16	13	0	0	16	13	3	3	0	0	3	3	33	28
Rhode Island	90	49	81.7%	26	14	64	35	0	0	26	14	42	19	0	0	42	19	0	0	0	0	0	0	23	17
Vermont	130	103	25.7%	69	51	61	53	16	17	53	33	23	19	0	0	23	19	1	1	0	0	1	1	37	33
Middle Atlantic	2,536	2,129	19.1%	704	611	1,832	1,518	32	35	605	504	881	754	61	66	820	688	99	90	6	7	93	83	918	746
New Jersey	1,370	1,223	12.0%	465	453	904	770	32	35	375	353	496	454	56	61	440	393	63	55	2	4	61	52	404	325
New York	937	709	32.2%	203	127	734	582	0	0	202	125	316	237	2	2	315	235	7	7	0	0	7	7	412	340
Pennsylvania	229	197	16.2%	35	31	194	166	0	0	29	25	69	63	3	3	66	60	29	28	3	3	25	24	102	81
East North Central	577	481	19.9%	317	290	260	191	112	105	200	182	154	122	5	NM	149	119	18	11	1	1	17	10	93	62
Illinois	82	58	39.7%	23	23	59	35	1	1	21	20	36	25	NM	NM	34	23	0	0	0	0	0	0	24	12
Indiana	196	177	10.9%	146	141	50	36	66	57	80	84	34	24	0	0	34	24	1	1	0	0	1	1	15	11
Michigan	110	85	30.2%	72	54	38	31	41	43	30	11	18	16	NM	0	18	16	1	1	0	0	1	1	19	14
Ohio	133	114	16.3%	57	54	76	60	3	4	51	48	50	46	NM	NM	49	44	9	3	1	1	8	3	19	13
Wisconsin	57	47	19.5%	19	18	38	29	0	0	17	18	16	12	NM	0	14	12	7	6	0	0	7	6	17	12
West North Central	866	722	19.9%	639	538	227	185	10	9	629	528	108	91	1	1	108	90	9	7	0	0	9	7	110	88
Iowa	68	56	22.6%	8	8	60	48	5	5	NM	NM	38	30	0	0	38	30	2	1	0	0	2	1	20	16
Kansas	17	13	28.9%	NM	NM	14	9	NM	NM	NM	NM	5	3	0	0	5	3	0	0	0	0	0	0	8	6
Minnesota	610	508	20.2%	569	476	41	32	NM	NM	568	475	14	12	0	0	14	12	5	4	0	0	5	4	23	16
Missouri	150	128	17.3%	45	36	105	92	2	2	43	34	49	45	1	1	48	44	2	2	0	0	2	2	55	46
Nebraska	19	16	16.7%	14	12	5	4	NM	0	12	12	2	1	0	0	2	1	0	0	0	0	0	0	3	2
North Dakota	0	0	80.9%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	1	1	-1.5%	NM	NM	0	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	7,484	6,185	21.0%	6,322	5,276	1,162	908	1,788	1,186	4,476	4,031	370	324	55	58	315	266	143	128	NM	NM	140	126	707	517
Delaware	72	66	9.5%	22	22	51	44	NM	3	19	19	14	14	0	NM	14	13	4	4	0	0	4	4	33	27
District of Columbia	38	27	39.1%	5	0	33	27	0	0	5	0	17	16	0	0	17	16	0	0	0	0	0	0	16	11
Florida	1,878	1,155	62.7%	1,617	986	261	169	1,401	806	212	176	59	48	NM	NM	57	45	6	6	NM	NM	5	5	200	119
Georgia	943	957	-1.4%	816	845	127	111	127	120	688	724	18	15	NM	NM	17	14	102	91	0	0	102	91	8	7
Maryland	593	495	19.7%	195	153	397	342	3	4	186	145	115	97	6	4	109	93	15	15	0	0	15	15	273	235
North Carolina	3,093	2,773	11.6%	2,985	2,689	108	84	166	176	2,774	2,463	96	97	45	49	51	48	3	3	0	0	3	3	54	33
South Carolina	436	329	32.4%	306	237	131	93	NM	NM	302	236	33	23	0	0	33	23	12	8	NM	0	11	8	87	61
Virginia	426	379	12.3%	375	344	50	35	85	77	289	268	16	13	NM	0	16	13	1	1	0	0	1	1	34	21
West Virginia	5	4	26.6%	0	0	5	4	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	3
East South Central	485	427	13.6%	421	370	64	57	36	37	381	328	44	41	NM	NM	42	39	4	3	NM	NM	1	0	20	18
Alabama	169	157	7.9%	164	152	5	4	15	16	148	136	4	3	0	0	4	3	0	0	0	0	0	0	1	1
Kentucky	36	33	6.8%	20	22	15	12	19	21	NM	NM	9	7	0	0	9	7	1	0	0	0	1	0	6	5
Mississippi	134	143	-5.9%	129	138	5	5	0	0	129	138	3	3	0	0	3	3	0	0	0	0	0	0	2	2
Tennessee	146	94	54.9%	109	58	38	37	NM	0	103	53	29	29	NM	NM	27	27	3	3	NM	NM	0	0	11	10
West South Central	2,225	1,703	30.7%	1,744	1,328	481	375	30	31	1,713	1,296	100	83	NM	1	99	82	2	1	0	0	2	1	380	292
Arkansas	88	93	-5.2%	77	85	12	8	NM	NM	76	85	3	3	0	0	3	3	1	0	0	0	1	0	7	5
Louisiana	103	93	11.0%	NM	NM	102	92	NM	NM	0	0	7	6	0	0	7	6	0	0	0	0	0	0	95	86
Oklahoma	31	31	1.7%	25	26	6	4	25	26	0	0	2	1	0	0	2	1	0	0	0	0	0	0	4	3
Texas	2,002	1,486	34.8%	1,641	1,215	361	271	NM	NM	1,637	1,211	88	73	NM	1	87	73	0	0	0	0	0	0	274	199
Mountain	7,520	7,253	3.7%	5,512	5,609	2,008	1,645	372	392	5,104	5,178	590	553	36	38	554	516	29	28	1	1	28	27	1,425	1,102
Arizona	2,886	2,723	6.0%	1,713	1,780	1,173	943	250	270	1,460	1,507	350	313	4	3	346	309	7	10	0	0	7	10	820	623
Colorado	713	668	6.7%	462	431	251	237	NM	NM	453	422	95	97	6	7	89	91	1	1	0	0	1	1	161	145
Idaho	222	226	-1.5%	203	215	20	11	0	0	203	215	2	2	0	0	2	2	1	0	0	0	1	0	16	9
Montana	23	23	2.3%	14	16	9	7	0	0	14	16	3	2	0	0	3	2	0	0	0	0	0	0	6	5
Nevada	1,988	1,949	2.0%	1,733	1,762	255	188	15	17	1,691	1,716	69	70	26	28	44	42	16	13	1	1	16	12	196	134
New Mexico	622	622	0.0%	502	517	120	106	105	102	397	414	36	37	0	0	36	37	0	0	0	0	0	0	84	68
Utah	996	1,040	-4.2%	818	889	177	151	0	0	818	889	34	31	0	0	34	31	4	3	0	0	4	3	139	117
Wyoming	70	2	NM	67	0	3	2	0	0	67	0	1	1	0	0	1	1	0	0	0	0	0	0	2	2
Pacific Contiguous	16,259	15,185	7.1%	10,235	10,041	6,024	5,144	201	207	9,946	9,753	1,555	1,332	65	61	1,490	1,271	865	746	23	20	843	726	3,692	3,147
California	15,815	14,842	6.6%	9,958	9,828	5,856	5,014	198	205	9,672	9,543	1,501	1,291	65	61	1,436	1,230	859	740	23	20	836	720	3,584	3,063
Oregon	354	288	22.8%	261	213	93	75	NM	3	258	210	43	32	0	0	43	32	6	6	0	0	6	6	44	38
Washington	91	55	66.2%	16	0	75	55	0	0	16	0	11	9	0	0	11	9	0	0	0	0	0	0	63	46
Pacific Noncontiguous	547	500	9.4%	97	81	450	419	17	14	81	67	178	163	0	0	178	163	1	1	0	0	1	1	271	255
Alaska	2	1	44.0%	0	0	2	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Hawaii	546	499	9.4%	97	81	448	418	17	14	81	67	177	163	0	0	177	163	1	1	0	0	1	1	270	254
U.S. Total	40,536	36,271	11.8%	26,654	24,721	13,882	11,550	2,650	2,041	23,739	22,415	4,728	4,076	228	231	4,500	3,845	1,225	1,060	37	34	1,189	1,026	8,193	6,678

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values 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, May 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	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	3	3	9.3%	3	3	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3	3	9.3%	3	3	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	103	133	-22.5%	0	0	103	133	0	0	0	0
Arizona	91	107	-14.9%	0	0	91	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	12	26	-53.8%	0	0	12	26	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	230	294	-21.8%	0	0	230	294	0	0	0	0
California	230	294	-21.8%	0	0	230	294	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	336	430	-21.8%	3	3	333	427	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 May 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	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	26	24	8.0%	26	24	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	26	24	8.0%	26	24	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	386	372	3.9%	0	0	386	372	0	0	0	0
Arizona	298	295	0.9%	0	0	298	295	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	88	77	15.4%	0	0	88	77	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	759	925	-17.9%	0	0	759	925	0	0	0	0
California	759	925	-17.9%	0	0	759	925	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	1,172	1,321	-11.3%	26	24	1,146	1,297	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-May 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
Year to Date					
2017	255,461	186,630	67,587	42	1,202
2018	242,584	179,493	61,850	41	1,200
2019	218,164	160,958	56,197	39	970
Rolling 12 Months Ending in May					
2018	651,034	477,253	170,906	94	2,781
2019	611,413	455,028	153,798	93	2,494

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-May 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
Year to Date					
2017	6,226	1,181	481	233	4,331
2018	6,118	1,009	537	220	4,352
2019	5,479	936	439	206	3,898
Rolling 12 Months Ending in May					
2018	14,560	2,630	1,214	502	10,213
2019	13,081	2,247	1,063	479	9,291

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-May 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
Year to Date					
2017	261,687	187,811	68,068	275	5,533
2018	248,702	180,502	62,387	261	5,552
2019	223,642	161,893	56,635	245	4,869
Rolling 12 Months Ending in May					
2018	665,593	479,883	172,121	596	12,994
2019	624,494	457,275	154,862	572	11,785

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-May 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
Year to Date					
2017	8,329	6,364	1,695	71	199
2018	15,133	8,934	5,826	129	243
2019	8,017	5,766	1,955	87	209
Rolling 12 Months Ending in May					
2018	28,499	18,138	9,593	249	520
2019	20,129	14,565	4,821	239	504

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 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	765	33	84	113	536
2018	1,341	64	159	192	925
2019	1,179	38	111	242	788
Rolling 12 Months Ending in May					
2018	2,588	104	295	318	1,871
2019	2,532	66	272	413	1,782

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-May 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
Year to Date					
2017	9,095	6,396	1,779	184	736
2018	16,474	8,999	5,985	322	1,169
2019	9,196	5,804	2,066	329	997
Rolling 12 Months Ending in May					
2018	31,088	18,242	9,888	567	2,391
2019	22,661	14,631	5,093	651	2,285

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-May 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
Year to Date					
2017	1,406	1,107	216	1	82
2018	1,276	1,061	149	1	65
2019	1,263	1,001	191	1	70
Rolling 12 Months Ending in May					
2018	3,359	2,685	474	3	197
2019	3,298	2,680	431	2	185

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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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-May 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
Year to Date					
2017	392	2	50	6	334
2018	339	5	42	5	286
2019	335	7	42	5	282
Rolling 12 Months Ending in May					
2018	924	14	107	14	788
2019	829	13	93	10	713

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 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	1,798	1,109	266	7	416
2018	1,615	1,066	190	6	352
2019	1,599	1,007	233	7	351
Rolling 12 Months Ending in May					
2018	4,283	2,699	581	17	986
2019	4,128	2,693	525	12	898

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

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2009-May 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
Year to Date					
2017	3,324,479	1,686,434	1,398,819	19,376	219,850
2018	3,891,674	1,990,579	1,660,182	20,243	220,670
2019	4,038,484	2,052,637	1,735,085	21,009	229,753
Rolling 12 Months Ending in May					
2018	10,074,955	5,059,028	4,423,350	50,927	541,650
2019	11,001,965	5,556,928	4,831,783	52,610	560,644

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

Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	470,104	16,487	125,948	40,419	287,250
2018	504,911	16,189	135,551	42,857	310,314
2019	520,094	17,182	136,796	42,384	323,732
Rolling 12 Months Ending in May					
2018	1,203,657	38,442	319,548	106,762	738,905
2019	1,250,886	42,031	334,149	102,813	771,892

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

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	3,794,584	1,702,921	1,524,767	59,795	507,100
2018	4,396,585	2,006,768	1,795,734	63,100	530,984
2019	4,558,578	2,069,820	1,871,880	63,393	553,485
Rolling 12 Months Ending in May					
2018	11,278,612	5,097,470	4,742,899	157,688	1,280,555
2019	12,252,851	5,598,959	5,165,932	155,424	1,332,536

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

Table 2.5.A. Landfill Gas: Consumption for Electricity Generation, by Sector, 2009-May 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
Year to Date					
2017	118,181	10,999	97,096	8,406	1,680
2018	121,305	12,117	99,313	8,358	1,517
2019	109,883	8,996	93,047	6,526	1,313
Rolling 12 Months Ending in May					
2018	281,236	26,192	231,267	20,073	3,704
2019	273,245	22,526	230,122	17,634	2,963

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.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	1,680	1	790	471	419
2018	1,869	4	1,064	386	415
2019	1,825	3	1,052	396	373
Rolling 12 Months Ending in May					
2018	4,128	5	2,222	1,014	887
2019	3,988	7	2,231	921	829

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-May 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
Year to Date					
2017	119,861	11,000	97,886	8,876	2,099
2018	123,174	12,121	100,377	8,743	1,932
2019	111,707	9,000	94,099	6,922	1,686
Rolling 12 Months Ending in May					
2018	285,364	26,197	233,489	21,087	4,591
2019	277,233	22,533	232,353	18,556	3,792

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-May 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
Year to Date					
2017	6,706	160	5,510	1,035	2
2018	6,745	174	5,598	969	4
2019	6,527	129	5,433	960	4
Rolling 12 Months Ending in May					
2018	16,387	436	13,470	2,471	10
2019	16,339	422	13,537	2,370	9

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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-May 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
Year to Date					
2017	915	0	348	480	87
2018	785	0	301	411	73
2019	722	0	331	313	79
Rolling 12 Months Ending in May					
2018	1,994	0	766	1,033	194
2019	1,835	0	782	859	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.
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.
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-May 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
Year to Date					
2017	7,622	160	5,858	1,515	89
2018	7,530	174	5,899	1,380	77
2019	7,250	129	5,764	1,273	83
Rolling 12 Months Ending in May					
2018	18,381	436	14,236	3,504	204
2019	18,174	422	14,319	3,229	204

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

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-May 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
Year to Date					
2017	146,568	18,221	60,770	208	67,369
2018	146,851	17,851	57,753	189	71,058
2019	140,969	19,140	54,366	223	67,240
Rolling 12 Months Ending in May					
2018	364,254	42,436	148,860	440	172,518
2019	345,280	46,402	132,618	554	165,707

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.
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Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-May 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
Year to Date					
2017	423,863	5,172	9,253	1,850	407,588
2018	426,926	4,545	9,832	2,079	410,471
2019	411,233	5,089	9,206	2,157	394,781
Rolling 12 Months Ending in May					
2018	1,039,490	11,028	23,565	4,752	1,000,146
2019	1,020,717	11,420	22,487	4,885	981,926

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-May 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
Year to Date					
2017	570,431	23,393	70,023	2,058	474,957
2018	573,777	22,396	67,585	2,268	481,529
2019	552,202	24,229	63,572	2,380	462,021
Rolling 12 Months Ending in May					
2018	1,403,744	53,464	172,425	5,192	1,172,663
2019	1,365,998	57,822	155,104	5,439	1,147,633

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	1	2	-40.0%	0	1	1	1	0	0	NM	NM
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	1	1	-6.4%	0	0	1	1	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	1	-68.0%	0	1	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,275	1,803	-29.0%	0	0	1,270	1,797	0	0	5	6
New Jersey	33	26	28.0%	0	0	33	26	0	0	0	0
New York	0	1	-100.0%	0	0	0	1	0	0	0	0
Pennsylvania	1,241	1,776	-30.0%	0	0	1,237	1,770	0	0	5	6
East North Central	8,984	10,523	-15.0%	5,495	6,397	3,438	4,059	1	1	49	66
Illinois	2,056	2,799	-27.0%	164	177	1,853	2,574	0	NM	38	47
Indiana	2,457	2,801	-12.0%	2,353	2,652	103	148	1	1	0	0
Michigan	1,607	1,773	-9.4%	1,587	1,745	19	19	0	0	NM	9
Ohio	1,617	1,741	-7.1%	153	424	1,463	1,318	0	0	0	0
Wisconsin	1,247	1,409	-12.0%	1,238	1,400	0	0	0	0	9	9
West North Central	6,875	8,952	-23.0%	6,774	8,853	0	0	1	1	100	98
Iowa	823	1,297	-37.0%	776	1,252	0	0	1	1	46	44
Kansas	749	1,083	-31.0%	749	1,083	0	0	0	0	0	0
Minnesota	857	935	-8.4%	841	917	0	0	0	0	16	18
Missouri	2,531	2,944	-14.0%	2,531	2,944	0	0	0	0	0	0
Nebraska	599	1,026	-42.0%	564	994	0	0	0	0	35	32
North Dakota	1,230	1,517	-19.0%	1,227	1,514	0	0	0	0	3	NM
South Dakota	86	150	-43.0%	86	150	0	0	0	0	0	0
South Atlantic	6,577	7,051	-6.7%	6,140	5,946	423	1,086	0	0	13	18
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	906	1,161	-22.0%	906	1,157	0	3	0	0	NM	1
Georgia	1,593	1,227	30.0%	1,591	1,224	0	0	0	0	2	3
Maryland	194	504	-61.0%	0	0	193	503	0	0	1	1
North Carolina	1,066	1,051	1.4%	1,060	1,045	3	4	0	0	2	2
South Carolina	572	688	-17.0%	572	688	0	0	0	0	0	0
Virginia	128	397	-68.0%	119	347	3	40	0	0	6	10
West Virginia	2,116	2,019	4.8%	1,893	1,486	224	532	0	0	0	0
East South Central	4,208	4,891	-14.0%	3,900	4,574	300	303	0	0	9	14
Alabama	991	1,236	-20.0%	991	1,234	0	0	0	0	1	1
Kentucky	1,974	2,284	-14.0%	1,974	2,284	0	0	0	0	0	0
Mississippi	428	478	-11.0%	128	176	300	303	0	0	0	0
Tennessee	815	893	-8.8%	807	880	0	0	0	0	8	13
West South Central	7,286	8,606	-15.0%	3,595	4,412	3,689	4,182	0	0	2	12
Arkansas	992	1,198	-17.0%	835	954	156	244	0	0	0	1
Louisiana	528	606	-13.0%	364	372	164	234	0	0	0	0
Oklahoma	337	677	-50.0%	336	593	0	72	0	0	2	12
Texas	5,429	6,125	-11.0%	2,060	2,493	3,369	3,632	0	0	0	0
Mountain	4,751	5,556	-14.0%	4,326	5,020	418	526	0	0	7	10
Arizona	877	1,185	-26.0%	877	1,185	0	0	0	0	0	0
Colorado	999	1,039	-3.8%	999	1,039	0	0	0	0	0	0
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	338	411	-18.0%	12	6	326	405	0	0	0	0
Nevada	58	67	-13.0%	45	30	14	37	0	0	0	0
New Mexico	502	497	1.0%	502	497	0	0	0	0	0	0
Utah	793	826	-4.0%	754	789	39	37	0	0	0	0
Wyoming	1,184	1,530	-23.0%	1,137	1,475	40	47	0	0	7	9
Pacific Contiguous	5	5	-1.6%	0	0	0	0	0	0	5	5
California	4	5	-8.7%	0	0	0	0	0	0	4	5
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	0	177.0%	0	0	0	0	0	0	1	0
Pacific Noncontiguous	90	81	11.0%	NM	NM	70	59	2	NM	0	0
Alaska	33	37	-10.0%	NM	NM	13	NM	2	NM	0	0
Hawaii	57	44	29.0%	0	0	57	44	0	0	0	0
U.S. Total	40,051	47,470	-16.0%	30,247	35,222	9,609	12,012	5	6	190	230

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	129	354	-64.0%	76	200	52	152	0	0	NM	NM
Connecticut	46	146	-69.0%	0	0	46	146	0	0	0	0
Maine	8	8	-5.0%	0	0	6	6	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	76	200	-62.0%	76	200	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	9,142	10,320	-11.0%	0	0	9,120	10,289	0	0	23	31
New Jersey	187	220	-15.0%	0	0	187	220	0	0	0	0
New York	147	158	-7.2%	0	0	147	154	0	0	0	4
Pennsylvania	8,809	9,942	-11.0%	0	0	8,786	9,914	0	0	23	28
East North Central	51,090	57,773	-12.0%	30,372	35,375	20,413	22,047	9	10	296	341
Illinois	12,981	14,379	-9.7%	871	872	11,888	13,262	5	6	217	239
Indiana	13,840	15,438	-10.0%	13,084	14,649	752	785	4	4	0	0
Michigan	9,203	9,481	-2.9%	9,131	9,361	62	95	0	0	10	26
Ohio	8,627	10,557	-18.0%	915	2,651	7,712	7,905	0	0	0	1
Wisconsin	6,440	7,917	-19.0%	6,371	7,842	0	0	0	0	69	76
West North Central	41,788	46,409	-10.0%	41,351	45,883	0	0	9	9	428	516
Iowa	5,308	5,730	-7.4%	5,102	5,519	0	0	7	8	199	203
Kansas	4,386	5,069	-13.0%	4,386	5,069	0	0	0	0	0	0
Minnesota	4,364	5,157	-15.0%	4,285	5,027	0	0	0	0	79	130
Missouri	13,774	14,860	-7.3%	13,772	14,858	0	0	1	1	0	0
Nebraska	5,050	5,678	-11.0%	4,915	5,512	0	0	0	0	135	166
North Dakota	8,180	9,241	-11.0%	8,164	9,224	0	0	0	0	16	17
South Dakota	726	674	7.7%	726	674	0	0	0	0	0	0
South Atlantic	26,105	33,188	-21.0%	23,368	28,113	2,652	4,964	7	5	78	106
Delaware	25	53	-52.0%	0	0	25	53	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3,410	4,930	-31.0%	3,405	4,919	0	3	0	0	5	8
Georgia	5,234	5,625	-7.0%	5,222	5,608	0	0	0	0	12	17
Maryland	893	2,306	-61.0%	0	0	885	2,297	0	0	8	8
North Carolina	3,804	5,071	-25.0%	3,774	5,038	12	16	6	4	12	13
South Carolina	2,408	2,983	-19.0%	2,407	2,981	0	0	0	0	1	2
Virginia	641	2,070	-69.0%	574	1,878	27	134	1	1	40	58
West Virginia	9,689	10,151	-4.6%	7,986	7,690	1,702	2,461	0	0	0	0
East South Central	20,778	22,980	-9.6%	19,499	21,736	1,232	1,175	0	0	46	69
Alabama	5,463	6,572	-17.0%	5,458	6,566	0	0	0	0	5	6
Kentucky	10,232	10,416	-1.8%	10,232	10,416	0	0	0	0	0	0
Mississippi	1,735	1,589	9.2%	502	413	1,232	1,175	0	0	0	0
Tennessee	3,347	4,404	-24.0%	3,306	4,341	0	0	0	0	41	63
West South Central	35,260	39,111	-9.8%	18,431	20,689	16,798	18,362	0	0	31	60
Arkansas	5,091	5,676	-10.0%	4,357	4,600	731	1,072	0	0	4	4
Louisiana	2,115	2,577	-18.0%	1,313	1,583	803	994	0	0	0	0
Oklahoma	2,481	3,684	-33.0%	2,415	3,261	39	366	0	0	27	56
Texas	25,572	27,175	-5.9%	10,347	11,246	15,225	15,929	0	0	0	0
Mountain	31,337	31,454	-0.4%	27,229	27,401	4,069	4,005	0	0	39	47
Arizona	5,077	6,283	-19.0%	5,077	6,283	0	0	0	0	0	0
Colorado	5,851	5,719	2.3%	5,850	5,718	0	0	0	0	1	2
Idaho	2	2	-13.0%	0	0	0	0	0	0	2	2
Montana	3,574	3,508	1.9%	115	71	3,458	3,436	0	0	1	1
Nevada	616	226	173.0%	386	30	230	196	0	0	0	0
New Mexico	2,871	2,170	32.0%	2,871	2,170	0	0	0	0	0	0
Utah	4,702	4,320	8.8%	4,532	4,155	170	165	0	0	0	0
Wyoming	8,644	9,225	-6.3%	8,398	8,974	211	208	0	0	35	43
Pacific Contiguous	2,028	526	285.0%	483	0	1,517	499	0	0	28	27
California	25	24	0.9%	0	0	0	0	0	0	25	24
Oregon	483	0	--	483	0	0	0	0	0	0	0
Washington	1,521	502	203.0%	0	0	1,517	499	0	0	3	3
Pacific Noncontiguous	507	469	8.0%	150	96	343	357	14	16	0	0
Alaska	222	175	27.0%	150	96	58	63	14	16	0	0
Hawaii	284	294	-3.3%	0	0	284	294	0	0	0	0
U.S. Total	218,164	242,584	-10.0%	160,958	179,493	56,197	61,850	39	41	970	1,200

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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, May 2019 and May 2018 (Thousand Barrels)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	21	41	-49.0%	NM	NM	NM	28	2	2	NM	1
Connecticut	NM	21	NM	NM	NM	NM	20	NM	NM	0	0
Maine	2	3	-41.0%	0	0	NM	1	1	0	NM	1
Massachusetts	NM	NM	NM	NM	NM	NM	NM	NM	NM	0	0
New Hampshire	1	3	-59.0%	NM	3	NM	NM	1	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	62	139	-56.0%	NM	NM	46	112	NM	NM	3	4
New Jersey	NM	32	NM	0	0	NM	32	0	0	0	0
New York	24	74	-67.0%	NM	NM	13	50	NM	NM	1	3
Pennsylvania	35	33	3.9%	0	0	32	31	1	1	2	1
East North Central	74	104	-29.0%	54	52	19	50	0	1	NM	2
Illinois	9	11	-18.0%	NM	NM	7	9	NM	0	0	0
Indiana	19	23	-15.0%	19	21	0	0	0	0	0	1
Michigan	12	18	-33.0%	12	17	0	0	0	1	NM	NM
Ohio	30	48	-37.0%	19	7	11	41	0	0	0	0
Wisconsin	NM	4	NM	3	4	0	0	0	0	NM	NM
West North Central	60	53	15.0%	60	50	NM	NM	0	0	0	0
Iowa	11	10	9.5%	11	10	0	0	0	0	0	0
Kansas	15	10	50.0%	15	10	0	0	0	0	0	0
Minnesota	NM	8	NM	NM	5	NM	NM	0	0	0	0
Missouri	15	12	21.0%	15	12	0	0	0	0	0	0
Nebraska	NM	NM	NM	NM	NM	0	0	0	0	0	0
North Dakota	5	9	-43.0%	5	9	0	0	0	0	0	0
South Dakota	2	2	-14.0%	2	2	0	0	NM	NM	0	0
South Atlantic	177	290	-39.0%	142	235	17	33	11	14	7	8
Delaware	NM	4	NM	0	0	NM	NM	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	65	72	-10.0%	63	68	0	2	0	0	2	2
Georgia	13	19	-32.0%	8	14	NM	NM	1	0	4	4
Maryland	8	14	-41.0%	0	1	8	13	NM	NM	0	0
North Carolina	34	39	-13.0%	32	37	NM	1	NM	NM	1	1
South Carolina	15	20	-24.0%	14	19	0	0	NM	NM	1	1
Virginia	23	95	-75.0%	7	71	6	10	10	13	NM	NM
West Virginia	17	27	-36.0%	17	25	0	2	0	0	0	0
East South Central	52	35	49.0%	51	34	0	0	0	0	1	1
Alabama	4	3	22.0%	3	2	NM	NM	0	0	1	1
Kentucky	16	14	15.0%	16	14	0	0	0	0	0	0
Mississippi	3	2	71.0%	2	1	0	0	0	0	0	0
Tennessee	30	17	80.0%	30	16	0	0	0	0	0	0
West South Central	35	25	39.0%	24	20	9	4	0	0	1	1
Arkansas	11	5	99.0%	7	5	4	0	0	0	0	0
Louisiana	5	4	11.0%	5	4	0	0	0	0	0	0
Oklahoma	5	2	121.0%	5	2	0	0	0	0	0	0
Texas	14	13	7.7%	8	9	6	4	0	0	0	0
Mountain	38	30	27.0%	34	26	NM	4	NM	0	0	0
Arizona	9	8	9.4%	9	8	0	0	NM	0	0	0
Colorado	1	2	-34.0%	1	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	4	NM	NM	NM	NM	4	0	0	0	0
Nevada	2	4	-63.0%	1	4	1	1	0	0	0	0
New Mexico	11	2	350.0%	11	2	0	0	0	0	0	0
Utah	6	5	23.0%	6	5	0	0	0	0	0	0
Wyoming	6	4	40.0%	6	4	0	0	0	0	0	0
Pacific Contiguous	NM	12	NM	5	5	1	2	NM	NM	NM	5
California	6	11	-44.0%	5	5	1	1	0	0	0	4
Oregon	NM	NM	NM	0	0	0	0	NM	NM	0	0
Washington	NM	1	NM	NM	NM	NM	NM	0	0	NM	1
Pacific Noncontiguous	1,083	1,051	3.0%	816	845	242	185	2	1	24	20
Alaska	125	96	30.0%	120	93	0	0	0	NM	5	4
Hawaii	957	954	0.3%	695	752	242	185	1	1	19	17
U.S. Total	1,609	1,780	-9.6%	1,200	1,297	353	421	18	20	37	42

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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 May 2019 and May 2018 (Thousand Barrels)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	257	1,790	-86.0%	39	310	191	1,439	19	26	7	15
Connecticut	98	456	-78.0%	3	NM	90	448	3	NM	2	1
Maine	17	276	-94.0%	0	0	9	260	3	3	5	14
Massachusetts	98	705	-86.0%	NM	126	76	566	5	NM	1	1
New Hampshire	24	250	-90.0%	15	162	NM	80	7	8	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	812	3,288	-75.0%	294	929	489	2,308	NM	NM	20	27
New Jersey	68	361	-81.0%	3	3	64	353	0	4	0	1
New York	569	2,162	-74.0%	291	924	262	1,205	NM	NM	10	20
Pennsylvania	176	765	-77.0%	0	2	163	750	4	7	9	NM
East North Central	372	530	-30.0%	224	304	140	213	2	3	6	10
Illinois	44	75	-41.0%	7	NM	37	61	NM	0	0	0
Indiana	100	93	7.2%	96	84	0	1	0	0	3	8
Michigan	66	117	-44.0%	64	114	0	0	1	3	1	0
Ohio	134	220	-39.0%	36	69	97	149	0	0	2	1
Wisconsin	28	25	11.0%	22	NM	5	2	1	0	NM	NM
West North Central	275	305	-9.7%	267	271	NM	NM	1	1	1	0
Iowa	52	61	-15.0%	52	60	1	1	0	0	0	0
Kansas	51	NM	NM	51	NM	0	0	0	0	0	0
Minnesota	34	NM	NM	26	17	NM	NM	1	1	1	0
Missouri	80	93	-14.0%	80	93	0	0	0	0	0	0
Nebraska	13	9	52.0%	13	9	0	0	0	0	0	0
North Dakota	38	28	37.0%	38	28	0	0	0	0	0	0
South Dakota	7	5	38.0%	7	5	0	0	NM	NM	0	0
South Atlantic	885	3,687	-76.0%	639	2,525	168	1,039	41	67	38	55
Delaware	21	213	-90.0%	0	12	21	202	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	181	470	-61.0%	171	435	2	24	0	0	8	11
Georgia	76	267	-72.0%	52	NM	NM	NM	1	5	19	24
Maryland	81	415	-81.0%	2	6	77	403	NM	NM	1	2
North Carolina	187	754	-75.0%	178	701	5	NM	NM	NM	3	NM
South Carolina	68	363	-81.0%	61	NM	3	42	NM	NM	4	6
Virginia	193	1,062	-82.0%	97	791	54	213	38	54	3	NM
West Virginia	78	141	-45.0%	78	123	1	19	0	0	0	0
East South Central	237	271	-13.0%	229	205	2	58	0	0	6	8
Alabama	16	99	-83.0%	11	36	1	57	0	0	4	6
Kentucky	73	73	0.3%	73	73	0	0	0	0	0	0
Mississippi	14	NM	NM	13	NM	0	0	0	0	1	2
Tennessee	133	84	59.0%	131	83	0	0	0	0	2	0
West South Central	118	NM	NM	85	NM	28	NM	0	1	4	4
Arkansas	39	NM	NM	25	NM	12	5	0	0	1	2
Louisiana	13	NM	NM	13	NM	0	0	0	0	0	0
Oklahoma	18	13	40.0%	17	12	0	0	0	0	1	1
Texas	49	58	-16.0%	31	39	16	NM	0	1	2	1
Mountain	169	143	18.0%	156	130	12	13	NM	0	0	0
Arizona	48	47	3.3%	48	47	0	0	NM	0	0	0
Colorado	12	13	-5.4%	12	13	0	0	0	0	0	0
Idaho	0	0	244.0%	0	0	0	0	0	0	0	0
Montana	12	10	14.0%	NM	NM	9	10	0	0	0	0
Nevada	9	6	55.0%	7	4	2	2	0	0	0	0
New Mexico	33	12	177.0%	33	12	0	0	0	0	0	0
Utah	30	29	1.0%	29	28	1	1	0	0	0	0
Wyoming	25	26	-7.3%	25	26	0	0	0	0	0	0
Pacific Contiguous	53	49	8.2%	30	27	8	5	NM	NM	14	17
California	41	42	-2.0%	26	25	3	3	0	NM	10	13
Oregon	NM	NM	NM	2	0	0	0	NM	NM	0	0
Washington	10	7	43.0%	NM	NM	4	NM	0	0	NM	4
Pacific Noncontiguous	4,840	4,899	-1.2%	3,804	4,087	913	699	11	7	111	106
Alaska	614	608	1.0%	587	579	0	0	4	3	23	26
Hawaii	4,225	4,291	-1.5%	3,218	3,508	913	699	7	4	88	81
U.S. Total	8,017	15,133	-47.0%	5,766	8,934	1,955	5,826	87	129	209	243

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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, May 2019 and May 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	0	199.0%	0	0	0	0	0	0	1	0
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	75	42	79.0%	45	40	26	0	0	0	4	2
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	47	38	24.0%	44	36	0	0	0	0	4	2
Ohio	26	0	NM	0	0	26	0	0	0	0	0
Wisconsin	2	4	-55.0%	2	4	0	0	0	0	0	0
West North Central	0	1	-100.0%	0	0	0	0	0	0	0	1
Iowa	0	1	-100.0%	0	0	0	0	0	0	0	1
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	47	30	57.0%	45	28	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	45	28	57.0%	45	28	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	136	79	72.0%	130	72	0	0	0	0	6	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	130	75	73.0%	130	72	0	0	0	0	0	3
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	6	5	41.0%	0	0	0	0	0	0	6	5
Mountain	16	8	88.0%	0	0	16	8	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	16	8	88.0%	0	0	16	8	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	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	276	161	71.0%	219	140	41	8	0	0	15	13

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	10	8	19.0%	0	0	0	0	0	0	10	8
New Jersey	3	2	45.0%	0	0	0	0	0	0	3	2
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	7	6	11.0%	0	0	0	0	0	0	7	6
East North Central	331	336	-1.5%	193	241	116	84	0	0	21	11
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	201	235	-15.0%	180	225	0	0	0	0	21	10
Ohio	116	84	38.0%	0	0	116	84	0	0	0	0
Wisconsin	14	16	-16.0%	14	16	0	0	0	0	0	0
West North Central	1	6	-81.0%	0	0	0	0	1	1	0	5
Iowa	1	6	-81.0%	0	0	0	0	1	1	0	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	220	213	3.5%	207	199	0	0	0	0	14	14
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	207	199	3.9%	207	199	0	0	0	0	0	0
Georgia	14	14	-1.6%	0	0	0	0	0	0	14	14
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	626	649	-3.5%	601	621	0	0	0	0	25	28
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	602	632	-4.8%	601	621	0	0	0	0	1	11
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	24	17	48.0%	0	0	0	0	0	0	24	17
Mountain	75	64	17.0%	0	0	75	64	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	75	64	17.0%	0	0	75	64	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	1,263	1,276	-1.0%	1,001	1,061	191	149	1	1	70	65

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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, May 2019 and May 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	23,221	24,120	-3.7%	NM	NM	22,165	22,981	334	312	643	618
Connecticut	10,706	9,029	19.0%	25	30	10,251	8,606	121	114	309	279
Maine	897	1,448	-38.0%	0	0	769	1,313	11	13	117	122
Massachusetts	6,762	8,732	-23.0%	NM	NM	6,440	8,291	181	164	93	104
New Hampshire	290	868	-67.0%	5	6	267	844	2	2	16	17
Rhode Island	4,565	4,042	13.0%	0	0	4,438	3,927	20	19	NM	NM
Vermont	0	0	0.0%	0	0	0	0	0	0	0	0
Middle Atlantic	90,807	87,960	3.2%	5,733	7,286	83,501	79,023	573	545	1,000	1,106
New Jersey	19,967	20,660	-3.4%	NM	NM	19,660	20,301	70	86	152	116
New York	22,898	30,121	-24.0%	5,648	7,118	16,572	22,188	455	412	223	404
Pennsylvania	47,942	37,179	29.0%	0	11	47,269	36,535	48	47	625	586
East North Central	75,475	87,580	-14.0%	22,797	35,889	49,927	48,985	670	658	2,082	2,048
Illinois	9,050	15,277	-41.0%	556	2,238	7,927	12,481	202	180	364	378
Indiana	15,192	18,003	-16.0%	5,399	10,599	8,547	6,262	86	88	1,160	1,055
Michigan	17,010	22,286	-24.0%	4,113	8,233	12,391	13,552	261	227	245	274
Ohio	24,715	22,953	7.7%	4,170	6,425	20,389	16,327	84	122	72	80
Wisconsin	9,507	9,060	4.9%	8,558	8,394	672	363	37	42	240	262
West North Central	16,887	25,196	-33.0%	14,016	21,826	2,537	3,004	149	141	185	224
Iowa	3,008	5,301	-43.0%	2,900	5,111	0	NM	43	43	65	146
Kansas	3,206	5,066	-37.0%	3,141	5,045	0	0	0	0	65	21
Minnesota	4,205	5,788	-27.0%	3,658	4,744	473	973	33	34	40	36
Missouri	5,061	6,375	-21.0%	2,922	4,272	2,065	2,030	67	62	7	11
Nebraska	659	1,314	-50.0%	653	1,313	0	0	6	1	0	0
North Dakota	396	NM	NM	388	NM	0	0	0	0	8	10
South Dakota	NM	NM	NM	NM	NM	0	0	0	0	0	0
South Atlantic	235,335	220,537	6.7%	195,181	173,128	36,678	44,473	982	981	2,495	1,955
Delaware	2,334	3,484	-33.0%	10	8	1,835	3,238	0	0	489	238
District of Columbia	18	27	-36.0%	0	0	0	0	18	27	0	0
Florida	125,522	105,442	19.0%	119,185	98,789	5,601	5,939	8	9	729	705
Georgia	33,565	33,905	-1.0%	24,905	23,808	8,285	9,776	1	0	374	321
Maryland	8,802	11,704	-25.0%	1,576	2,111	6,313	8,693	879	861	33	38
North Carolina	23,142	24,956	-7.3%	17,430	20,277	5,580	4,552	NM	77	58	50
South Carolina	15,780	11,914	32.0%	15,327	10,147	401	1,706	0	0	52	60
Virginia	25,252	27,997	-9.8%	16,717	17,821	8,021	9,683	2	6	512	487
West Virginia	921	1,108	-17.0%	30	166	642	887	0	0	249	55
East South Central	84,976	87,723	-3.1%	60,923	60,021	22,805	26,582	49	72	1,198	1,047
Alabama	36,097	38,747	-6.8%	15,345	15,649	20,158	22,498	0	0	594	600
Kentucky	7,838	9,730	-19.0%	7,745	9,253	11	448	0	0	83	29
Mississippi	30,351	33,522	-9.5%	27,538	29,723	2,625	3,621	0	0	188	178
Tennessee	10,690	5,724	87.0%	10,295	5,396	12	15	49	72	334	240
West South Central	220,120	237,935	-7.5%	80,609	94,753	106,918	111,979	410	305	32,182	30,898
Arkansas	10,313	13,016	-21.0%	9,704	12,400	437	461	NM	NM	139	122
Louisiana	43,262	39,778	8.8%	26,279	23,492	3,486	4,629	46	49	13,451	11,608
Oklahoma	20,183	34,157	-41.0%	12,318	21,179	7,618	12,754	0	0	247	224
Texas	146,361	150,983	-3.1%	32,308	37,682	95,377	94,135	331	222	18,346	18,944
Mountain	60,061	59,824	0.4%	48,984	47,560	10,031	11,168	185	165	861	931
Arizona	23,818	20,724	15.0%	17,716	14,867	6,052	5,799	50	59	0	0
Colorado	9,670	10,221	-5.4%	8,336	8,816	1,307	1,375	0	0	27	30
Idaho	790	1,071	-26.0%	NM	NM	NM	NM	14	13	48	40
Montana	237	368	-35.0%	236	357	NM	NM	0	0	0	0
Nevada	12,529	14,113	-11.0%	11,047	12,609	1,350	1,352	23	23	109	129
New Mexico	6,902	8,544	-19.0%	6,140	6,536	NM	1,980	44	NM	7	2
Utah	5,594	4,313	30.0%	5,130	3,768	43	46	54	43	368	455
Wyoming	520	470	11.0%	215	NM	4	0	0	0	302	273
Pacific Contiguous	35,300	39,269	-10.0%	11,550	13,776	17,433	18,996	810	924	5,507	5,573
California	29,264	32,917	-11.0%	8,453	9,771	14,590	16,738	791	898	5,430	5,510
Oregon	3,115	3,175	-1.9%	1,543	1,750	1,520	1,366	18	19	34	40
Washington	2,921	3,176	-8.0%	1,553	2,255	1,324	892	1	6	43	23
Pacific Noncontiguous	1,822	2,012	-9.4%	1,796	1,991	0	0	0	0	26	21
Alaska	1,822	2,012	-9.4%	1,796	1,991	0	0	0	0	26	21
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	844,004	872,155	-3.2%	441,667	456,439	351,997	367,191	4,163	4,104	46,177	44,420

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	128,969	132,399	-2.6%	393	NM	123,506	126,595	1,877	1,881	3,192	3,196
Connecticut	54,313	48,575	12.0%	140	149	52,002	46,287	778	781	1,393	1,357
Maine	4,604	7,321	-37.0%	0	0	3,939	6,639	59	60	606	622
Massachusetts	46,470	54,816	-15.0%	NM	NM	44,736	52,730	942	939	555	584
New Hampshire	5,650	2,943	92.0%	12	12	5,542	2,835	19	14	77	83
Rhode Island	17,925	18,739	-4.3%	0	0	17,288	18,105	76	85	561	550
Vermont	8	5	51.0%	5	3	0	0	3	2	0	0
Middle Atlantic	466,752	429,331	8.7%	32,147	33,920	426,012	386,585	2,980	3,127	5,613	5,699
New Jersey	103,872	99,764	4.1%	NM	NM	102,270	97,716	310	444	799	807
New York	128,219	136,863	-6.3%	31,643	33,079	92,608	99,791	2,377	2,361	1,591	1,632
Pennsylvania	234,661	192,703	22.0%	12	42	231,134	189,079	293	322	3,222	3,260
East North Central	415,232	396,069	4.8%	139,271	144,353	262,013	237,758	3,402	3,317	10,546	10,641
Illinois	50,932	59,028	-14.0%	2,732	3,938	45,480	52,104	1,080	1,046	1,639	1,939
Indiana	80,612	73,528	9.6%	31,645	33,823	43,109	33,929	366	379	5,492	5,397
Michigan	89,029	100,019	-11.0%	26,076	34,747	60,054	62,461	1,328	1,266	1,570	1,546
Ohio	137,524	115,855	19.0%	26,283	28,058	110,378	86,929	397	437	466	431
Wisconsin	57,135	47,639	20.0%	52,535	43,788	2,991	2,336	231	188	1,378	1,327
West North Central	78,471	89,274	-12.0%	66,337	77,507	9,967	9,757	699	646	1,468	1,365
Iowa	17,254	19,361	-11.0%	16,227	18,380	0	NM	200	208	827	772
Kansas	8,412	11,823	-29.0%	8,143	11,633	0	0	0	0	269	190
Minnesota	26,458	25,510	3.7%	22,759	21,578	3,197	3,476	229	187	272	269
Missouri	19,197	23,904	-20.0%	12,119	17,324	6,769	6,280	257	227	51	74
Nebraska	2,453	3,433	-29.0%	2,440	3,408	0	0	13	25	0	0
North Dakota	2,618	2,464	6.2%	2,569	2,404	0	0	0	0	49	60
South Dakota	2,080	2,780	-25.0%	2,080	2,780	0	0	0	0	0	0
South Atlantic	1,030,579	969,990	6.2%	851,384	787,125	162,930	169,237	4,661	3,753	11,604	9,874
Delaware	10,735	15,605	-31.0%	17	15	8,426	14,275	0	0	2,292	1,315
District of Columbia	228	259	-12.0%	0	0	0	0	228	259	0	0
Florida	493,736	468,231	5.4%	472,254	442,930	18,012	22,006	48	50	3,422	3,245
Georgia	146,128	142,249	2.7%	111,052	107,204	33,470	33,417	1	0	1,606	1,627
Maryland	42,098	38,894	8.2%	12,065	8,867	25,897	26,807	3,957	3,030	178	190
North Carolina	120,272	120,498	-0.2%	96,148	104,359	23,402	15,477	392	380	331	282
South Carolina	64,259	49,484	30.0%	58,616	41,554	5,313	7,582	0	1	330	347
Virginia	149,809	131,258	14.0%	100,635	81,164	46,590	47,641	35	34	2,549	2,418
West Virginia	3,315	3,513	-5.7%	598	1,033	1,821	2,031	0	0	896	449
East South Central	361,489	393,257	-8.1%	248,333	273,917	106,855	113,691	340	443	5,961	5,206
Alabama	149,930	157,662	-4.9%	55,982	58,679	91,009	96,145	0	0	2,939	2,839
Kentucky	38,977	48,768	-20.0%	37,342	45,031	1,225	3,419	0	0	410	318
Mississippi	128,557	151,394	-15.0%	113,035	136,402	14,561	14,053	0	39	961	902
Tennessee	44,025	35,432	24.0%	41,973	33,806	60	74	340	404	1,651	1,148
West South Central	945,843	940,634	0.6%	346,860	342,625	437,800	444,287	2,020	1,546	159,163	152,176
Arkansas	46,691	56,732	-18.0%	42,873	52,936	2,952	2,962	NM	NM	700	667
Louisiana	192,743	169,361	14.0%	113,305	98,099	11,970	12,673	284	264	67,184	58,325
Oklahoma	107,068	107,633	-0.5%	68,550	63,317	37,216	43,167	0	0	1,302	1,149
Texas	599,340	606,908	-1.2%	122,132	128,273	385,663	385,485	1,569	1,114	89,976	92,036
Mountain	306,676	252,846	21.0%	241,074	204,546	59,485	41,954	956	915	5,161	5,431
Arizona	114,215	74,991	52.0%	85,796	61,908	28,170	12,826	249	258	0	0
Colorado	49,317	45,711	7.9%	40,670	38,453	8,498	7,128	7	0	142	130
Idaho	8,548	6,094	40.0%	3,805	1,920	4,363	3,840	69	72	310	262
Montana	1,867	1,586	18.0%	1,231	1,413	629	166	0	0	7	6
Nevada	65,362	68,282	-4.3%	58,349	61,331	6,018	5,877	115	106	880	968
New Mexico	35,929	33,962	5.8%	24,118	21,826	11,578	11,887	223	207	10	42
Utah	28,796	19,752	46.0%	26,128	17,084	219	222	294	272	2,155	2,173
Wyoming	2,643	2,467	7.1%	977	611	10	8	0	0	1,656	1,848
Pacific Contiguous	290,658	275,347	5.6%	113,151	113,438	146,516	130,318	4,074	4,613	26,917	26,978
California	211,629	213,592	-0.9%	72,582	79,930	108,636	102,670	3,954	4,475	26,457	26,517
Oregon	50,600	38,556	31.0%	23,665	20,597	26,599	17,636	91	97	245	225
Washington	28,429	23,199	23.0%	16,904	12,910	11,282	10,011	29	42	215	236
Pacific Noncontiguous	13,814	12,527	10.0%	13,686	12,422	0	0	0	2	128	103
Alaska	13,814	12,527	10.0%	13,686	12,422	0	0	0	2	128	103
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	4,038,484	3,891,674	3.8%	2,052,637	1,990,579	1,735,085	1,660,182	21,009	20,243	229,753	220,670

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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 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, May 2019 and May 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	777	816	-4.7%	0	0	761	802	16	14	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	307	315	-2.5%	0	0	307	315	0	0	0	0
New Hampshire	93	92	1.3%	0	0	NM	NM	16	14	0	0
Rhode Island	258	287	-10.0%	0	0	258	287	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	4,369	4,629	-5.6%	0	0	4,236	4,483	NM	39	86	107
New Jersey	614	669	-8.2%	0	0	595	649	NM	NM	0	0
New York	1,458	1,498	-2.7%	0	0	1,458	1,498	0	0	0	0
Pennsylvania	2,296	2,462	-6.7%	0	0	2,182	2,336	28	19	86	107
East North Central	5,293	5,333	-0.8%	709	738	4,520	4,537	41	37	22	21
Illinois	769	827	-7.0%	NM	NM	699	766	0	0	0	0
Indiana	734	785	-6.5%	639	677	96	108	0	0	0	0
Michigan	1,903	1,807	5.3%	0	0	1,903	1,807	0	0	0	0
Ohio	914	943	-3.0%	0	0	914	943	0	0	0	0
Wisconsin	972	971	0.1%	0	0	908	913	41	37	22	21
West North Central	875	1,048	-17.0%	344	362	532	687	0	0	0	0
Iowa	207	227	-8.7%	0	0	207	227	0	0	0	0
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	NM	319	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	4,533	4,579	-1.0%	439	459	3,880	3,874	NM	107	121	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	758	786	-3.5%	145	165	614	621	0	0	0	0
Georgia	717	676	6.1%	0	0	699	656	0	0	18	20
Maryland	NM	251	NM	0	0	NM	NM	NM	77	0	0
North Carolina	920	918	0.2%	0	0	903	902	NM	NM	0	0
South Carolina	419	437	-4.2%	288	291	NM	NM	0	0	NM	109
Virginia	1,399	1,397	0.1%	6	4	1,380	1,381	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	487	510	-4.6%	NM	NM	285	299	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	1,122	1,215	-7.7%	0	0	1,122	1,163	0	52	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	947	1,034	-8.5%	0	0	947	982	0	52	0	0
Mountain	536	587	-8.7%	NM	NM	493	528	20	37	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	20	9	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	0	28	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	3,460	4,780	-28.0%	NM	402	3,049	3,260	289	1,118	0	0
California	2,885	3,973	-27.0%	NM	NM	2,615	2,876	262	1,088	0	0
Oregon	467	438	6.5%	NM	NM	325	293	NM	NM	0	0
Washington	NM	369	NM	0	279	NM	NM	0	0	0	0
Pacific Noncontiguous	59	70	-15.0%	0	0	0	0	59	70	0	0
Alaska	59	70	-15.0%	0	0	0	0	59	70	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	21,512	23,568	-8.7%	1,838	2,195	18,878	19,632	566	1,474	229	267

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

Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector, Year-to-Date through May 2019 and May 2018 (Million Cubic Feet)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	4,123	4,329	-4.7%	0	0	4,019	4,234	104	95	0	0
Connecticut	NM	200	NM	0	0	NM	200	0	0	0	0
Maine	300	321	-6.5%	0	0	300	321	0	0	0	0
Massachusetts	1,504	1,593	-5.6%	0	0	1,504	1,593	0	0	0	0
New Hampshire	471	478	-1.5%	0	0	366	383	104	95	0	0
Rhode Island	1,559	1,629	-4.3%	0	0	1,559	1,629	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	21,809	23,363	-6.7%	0	0	20,972	22,358	383	385	453	620
New Jersey	3,321	3,461	-4.0%	0	0	3,185	3,319	137	142	0	0
New York	7,060	7,304	-3.3%	0	0	7,060	7,304	0	0	0	0
Pennsylvania	11,427	12,598	-9.3%	0	0	10,728	11,735	246	243	453	620
East North Central	25,745	27,049	-4.8%	3,428	3,866	22,030	22,891	176	182	112	110
Illinois	3,782	4,511	-16.0%	349	378	3,433	4,133	0	0	0	0
Indiana	3,551	3,987	-11.0%	3,079	3,488	473	499	0	0	0	0
Michigan	9,269	9,150	1.3%	0	0	9,269	9,150	0	0	0	0
Ohio	4,518	4,551	-0.7%	0	0	4,518	4,551	0	0	0	0
Wisconsin	4,624	4,850	-4.7%	0	0	4,337	4,558	176	182	112	110
West North Central	4,283	5,284	-19.0%	1,714	1,878	2,569	3,407	0	0	0	0
Iowa	983	1,091	-9.9%	0	0	983	1,091	0	0	0	0
Kansas	578	610	-5.2%	0	0	578	610	0	0	0	0
Minnesota	1,045	1,641	-36.0%	414	454	632	1,186	0	0	0	0
Missouri	970	1,182	-18.0%	594	662	376	520	0	0	0	0
Nebraska	706	761	-7.2%	706	761	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	22,089	23,522	-6.1%	2,161	2,278	18,539	19,789	641	668	748	787
Delaware	542	579	-6.3%	0	0	497	530	0	0	45	49
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	3,651	3,853	-5.3%	710	717	2,941	3,137	0	0	0	0
Georgia	3,201	3,446	-7.1%	0	0	3,147	3,394	0	0	54	52
Maryland	1,154	1,341	-14.0%	0	0	723	891	430	450	0	0
North Carolina	4,558	4,705	-3.1%	0	0	4,436	4,580	123	125	0	0
South Carolina	2,247	2,404	-6.5%	1,423	1,533	NM	186	0	0	649	685
Virginia	6,736	7,194	-6.4%	29	29	6,619	7,073	88	92	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,419	2,549	-5.1%	998	1,060	1,421	1,490	0	0	0	0
Alabama	440	462	-4.9%	0	0	440	462	0	0	0	0
Kentucky	1,102	1,161	-5.1%	998	1,060	NM	101	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	774	817	-5.3%	0	0	774	817	0	0	0	0
West South Central	5,684	6,176	-8.0%	0	0	5,495	5,923	189	253	0	0
Arkansas	662	694	-4.6%	0	0	662	694	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	205	NM	0	0	NM	205	0	0	0	0
Texas	4,828	5,277	-8.5%	0	0	4,639	5,024	189	253	0	0
Mountain	2,751	2,977	-7.6%	NM	NM	2,489	2,668	153	193	0	0
Arizona	399	420	-5.0%	0	0	399	420	0	0	0	0
Colorado	460	483	-4.8%	0	0	460	483	0	0	0	0
Idaho	336	357	-5.8%	NM	NM	NM	175	61	65	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	757	806	-6.1%	0	0	757	806	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	756	859	-12.0%	0	0	663	732	92	128	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	20,691	25,700	-19.0%	587	2,919	15,514	16,554	4,590	6,228	0	0
California	17,884	21,388	-16.0%	NM	813	13,432	14,537	4,412	6,039	0	0
Oregon	2,277	2,326	-2.1%	547	574	1,552	1,563	178	189	0	0
Washington	530	1,986	-73.0%	0	1,531	530	455	0	0	0	0
Pacific Noncontiguous	290	355	-18.0%	0	0	0	0	290	355	0	0
Alaska	290	355	-18.0%	0	0	0	0	290	355	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	109,883	121,305	-9.4%	8,996	12,117	93,047	99,313	6,526	8,358	1,313	1,517

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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, May 2019 and May 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	288	303	-5.0%	0	0	277	290	11	13	0	0
Connecticut	113	102	11.0%	0	0	113	102	0	0	0	0
Maine	21	23	-7.7%	0	0	10	10	11	13	0	0
Massachusetts	146	168	-13.0%	0	0	146	168	0	0	0	0
New Hampshire	8	10	-23.0%	0	0	8	10	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	450	458	-1.8%	0	0	362	360	88	98	0	0
New Jersey	112	123	-8.6%	0	0	86	92	26	31	0	0
New York	168	164	2.0%	0	0	122	119	45	45	0	0
Pennsylvania	170	171	-0.6%	0	0	153	149	16	22	0	0
East North Central	16	22	-25.0%	3	3	0	0	13	18	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	17	-32.0%	0	0	0	0	11	17	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	3	-1.3%	3	3	0	0	0	0	0	0
West North Central	47	62	-24.0%	24	40	22	22	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	47	62	-24.0%	24	40	22	22	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	491	458	7.3%	0	0	448	413	44	44	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	309	5.1%	0	0	325	309	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	58	48	21.0%	0	0	58	48	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	109	101	7.6%	0	0	65	57	44	44	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	37.0%	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	37.0%	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	53	58	-7.5%	0	0	53	58	0	0	0	0
California	33	36	-6.9%	0	0	33	36	0	0	0	0
Oregon	10	10	4.0%	0	0	10	10	0	0	0	0
Washington	10	12	-19.0%	0	0	10	12	0	0	0	0
Pacific Noncontiguous	42	37	14.0%	0	0	0	0	42	37	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	42	37	14.0%	0	0	0	0	42	37	0	0
U.S. Total	1,389	1,398	-0.7%	28	43	1,162	1,143	199	212	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 May 2019 and May 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	1,408	1,453	-3.1%	0	0	1,341	1,375	67	78	0	0
Connecticut	485	477	1.6%	0	0	485	477	0	0	0	0
Maine	113	126	-10.0%	0	0	47	48	67	78	0	0
Massachusetts	760	800	-5.0%	0	0	760	800	0	0	0	0
New Hampshire	50	51	-1.2%	0	0	50	51	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	2,112	2,167	-2.6%	0	0	1,672	1,723	440	444	0	0
New Jersey	546	598	-8.8%	0	0	406	448	140	149	0	0
New York	756	786	-3.8%	0	0	557	588	199	198	0	0
Pennsylvania	810	784	3.4%	0	0	710	687	100	96	0	0
East North Central	85	95	-11.0%	15	14	0	0	70	82	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	8	8	-6.6%	0	0	0	0	8	8	0	0
Michigan	62	73	-15.0%	0	0	0	0	62	73	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	15	14	10.0%	15	14	0	0	0	0	0	0
West North Central	193	253	-24.0%	114	161	79	92	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	193	253	-24.0%	114	161	79	92	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	2,244	2,297	-2.3%	0	0	2,056	2,110	188	187	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	1,489	1,567	-4.9%	0	0	1,489	1,567	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	259	254	2.0%	0	0	259	254	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	496	477	4.0%	0	0	308	290	188	187	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	4	4	9.6%	0	0	0	0	0	0	4	4
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	4	4	9.6%	0	0	0	0	0	0	4	4
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	285	298	-4.5%	0	0	285	298	0	0	0	0
California	171	188	-8.7%	0	0	171	188	0	0	0	0
Oregon	50	47	5.6%	0	0	50	47	0	0	0	0
Washington	64	63	0.5%	0	0	64	63	0	0	0	0
Pacific Noncontiguous	196	177	11.0%	0	0	0	0	196	177	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	196	177	11.0%	0	0	0	0	196	177	0	0
U.S. Total	6,527	6,745	-3.2%	129	174	5,433	5,598	960	969	4	4

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, May 2019 and May 2018 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	4,440	3,577	24.0%	655	96	3,373	3,049	1	1	410	431
Connecticut	219	NM	NM	0	0	219	NM	0	0	0	0
Maine	1,678	1,574	6.5%	0	0	1,267	1,143	0	0	410	431
Massachusetts	NM	NM	NM	0	0	NM	NM	0	0	0	0
New Hampshire	1,967	1,445	36.0%	476	96	1,492	1,349	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	375	NM	NM	180	0	NM	NM	1	1	0	0
Middle Atlantic	740	1,095	-32.0%	0	0	504	584	0	0	236	511
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	549	640	-14.0%	0	0	504	584	0	0	46	56
Pennsylvania	190	455	-58.0%	0	0	0	0	0	0	190	455
East North Central	2,018	2,103	-4.0%	392	461	1,059	1,044	0	0	566	598
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,320	1,342	-1.7%	0	0	1,050	1,030	0	0	269	312
Ohio	82	75	9.9%	0	0	8	14	0	0	74	61
Wisconsin	616	686	-10.0%	392	461	0	0	0	0	223	225
West North Central	510	792	-36.0%	174	154	110	371	4	17	222	249
Iowa	4	0	--	0	0	0	0	4	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	506	780	-35.0%	174	154	110	371	0	6	222	249
Missouri	0	11	-100.0%	0	0	0	0	0	11	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	10,577	10,923	-3.2%	2,473	2,404	2,841	2,844	13	13	5,251	5,663
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	1,706	1,954	-13.0%	838	676	NM	528	0	0	718	750
Georgia	2,991	2,737	9.3%	0	0	1,032	664	0	0	1,958	2,072
Maryland	60	66	-9.8%	0	0	0	0	13	13	47	53
North Carolina	1,524	1,521	0.2%	0	0	953	913	0	0	571	608
South Carolina	1,416	1,552	-8.8%	149	156	454	481	0	0	813	915
Virginia	2,881	3,093	-6.9%	1,486	1,571	251	NM	0	0	1,144	1,265
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,964	3,239	-8.5%	0	0	168	183	0	0	2,796	3,056
Alabama	1,956	2,093	-6.5%	0	0	168	183	0	0	1,788	1,910
Kentucky	139	152	-8.5%	0	0	0	0	0	0	139	152
Mississippi	514	643	-20.0%	0	0	0	0	0	0	514	643
Tennessee	354	352	0.7%	0	0	0	0	0	0	354	352
West South Central	2,027	3,008	-33.0%	0	0	0	480	0	0	2,027	2,528
Arkansas	560	614	-8.9%	0	0	0	0	0	0	560	614
Louisiana	949	1,373	-31.0%	0	0	0	0	0	0	949	1,373
Oklahoma	162	153	6.4%	0	0	0	0	0	0	162	153
Texas	356	868	-59.0%	0	0	0	480	0	0	356	388
Mountain	518	503	3.1%	0	0	347	342	0	0	172	161
Arizona	224	NM	NM	0	0	224	NM	0	0	0	0
Colorado	90	114	-21.0%	0	0	90	114	0	0	0	0
Idaho	190	174	9.7%	0	0	32	29	0	0	159	145
Montana	13	16	-18.0%	0	0	0	0	0	0	13	16
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	5,240	5,328	-1.6%	371	340	3,126	3,265	0	0	1,743	1,722
California	3,681	3,657	0.6%	0	0	2,923	3,058	0	0	758	599
Oregon	524	572	-8.4%	0	0	NM	NM	0	0	321	365
Washington	1,035	1,098	-5.7%	371	340	0	0	0	0	664	758
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	29,033	30,567	-5.0%	4,067	3,455	11,527	12,161	18	32	13,422	14,920

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	21,090	20,388	3.4%	3,209	2,977	15,771	15,265	4	13	2,106	2,134
Connecticut	1,037	1,007	3.0%	0	0	1,037	1,007	0	0	0	0
Maine	8,127	8,059	0.9%	0	0	6,022	5,916	0	9	2,106	2,134
Massachusetts	906	861	5.2%	0	0	906	861	0	0	0	0
New Hampshire	8,758	8,010	9.3%	1,846	1,383	6,912	6,627	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	2,260	2,452	-7.8%	1,362	1,594	894	854	4	4	0	0
Middle Atlantic	3,725	5,452	-32.0%	0	0	2,401	2,815	0	0	1,324	2,637
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	2,774	3,228	-14.0%	0	0	2,400	2,814	0	0	374	415
Pennsylvania	950	2,224	-57.0%	0	0	0	1	0	0	950	2,223
East North Central	9,905	9,922	-0.2%	1,958	1,977	4,972	4,849	0	0	2,975	3,095
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	6,393	6,316	1.2%	0	0	4,916	4,788	0	0	1,477	1,528
Ohio	450	481	-6.6%	0	0	56	61	0	0	394	420
Wisconsin	3,062	3,124	-2.0%	1,958	1,977	0	0	0	0	1,105	1,147
West North Central	2,639	4,218	-37.0%	775	769	548	2,112	163	123	1,152	1,213
Iowa	26	1	NM	0	0	0	0	26	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	2,523	4,115	-39.0%	775	769	548	2,112	47	20	1,152	1,213
Missouri	90	102	-12.0%	0	0	0	0	90	102	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	49,850	51,812	-3.8%	11,475	10,472	12,753	14,399	55	53	25,567	26,888
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	8,580	8,928	-3.9%	3,579	2,532	1,633	2,768	0	0	3,368	3,628
Georgia	13,532	14,218	-4.8%	0	0	3,818	3,850	0	0	9,714	10,369
Maryland	312	297	5.3%	0	0	0	0	55	53	257	244
North Carolina	6,405	6,991	-8.4%	0	0	3,713	4,075	0	0	2,692	2,917
South Carolina	7,157	7,590	-5.7%	805	820	2,398	2,550	0	0	3,955	4,220
Virginia	13,863	13,787	0.6%	7,091	7,119	1,191	1,157	0	0	5,581	5,511
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	14,665	15,165	-3.3%	0	0	835	879	0	0	13,830	14,286
Alabama	9,657	9,891	-2.4%	0	0	835	879	0	0	8,821	9,012
Kentucky	699	740	-5.6%	0	0	0	0	0	0	699	740
Mississippi	2,549	2,778	-8.2%	0	0	0	0	0	0	2,549	2,778
Tennessee	1,760	1,755	0.3%	0	0	0	0	0	0	1,760	1,755
West South Central	11,033	12,810	-14.0%	0	0	295	896	0	0	10,738	11,914
Arkansas	2,898	2,952	-1.8%	0	0	0	0	0	0	2,898	2,952
Louisiana	5,386	6,309	-15.0%	0	0	0	0	0	0	5,386	6,309
Oklahoma	688	800	-14.0%	0	0	0	3	0	0	688	797
Texas	2,061	2,749	-25.0%	0	0	295	893	0	0	1,766	1,856
Mountain	2,423	2,382	1.7%	0	0	1,659	1,569	0	0	763	813
Arizona	1,037	993	4.5%	0	0	1,037	993	0	0	0	0
Colorado	505	460	9.8%	0	0	505	460	0	0	0	0
Idaho	788	835	-5.7%	0	0	118	117	0	0	670	718
Montana	93	95	-1.5%	0	0	0	0	0	0	93	95
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	25,640	24,701	3.8%	1,724	1,655	15,132	14,969	0	0	8,784	8,077
California	17,805	16,513	7.8%	0	0	14,169	14,034	0	0	3,636	2,479
Oregon	2,727	2,803	-2.7%	0	0	963	935	0	0	1,764	1,869
Washington	5,108	5,385	-5.1%	1,724	1,655	0	0	0	0	3,384	3,730
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	140,969	146,851	-4.0%	19,140	17,851	54,366	57,753	223	189	67,240	71,058

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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 - May 2019

	Electric Power Sector			Electric Utilities			Independent Power Producers		
Period	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroleum Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
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

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, May 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	May 2019	May 2018	Percentage Change	May 2019	May 2018	Percentage Change	May 2019	May 2018	Percentage Change
New England	507	699	-27.5%	2,926	3,182	-8.0%	0	0	--
Connecticut	W	W	W	843	1,187	-29.0%	0	0	--
Maine	0	0	--	283	218	29.7%	0	0	--
Massachusetts	W	W	W	1,267	1,351	-6.2%	0	0	--
New Hampshire	W	W	W	359	243	47.9%	0	0	--
Rhode Island	0	W	W	133	138	-3.2%	0	0	--
Vermont	0	0	--	40	45	-9.6%	0	0	--
Middle Atlantic	4,491	3,381	32.8%	4,791	4,630	3.5%	0	0	--
New Jersey	W	148	W	608	685	-11.3%	0	0	--
New York	W	W	W	3,009	2,961	1.6%	0	0	--
Pennsylvania	4,305	W	W	1,174	984	19.4%	0	0	--
East North Central	22,897	24,998	-8.4%	1,020	1,062	-4.0%	90	123	-27.1%
Illinois	5,548	5,867	-5.4%	94	77	22.1%	0	0	--
Indiana	6,991	8,107	-13.8%	85	95	-9.9%	W	W	W
Michigan	3,128	4,017	-22.1%	282	328	-14.0%	W	W	W
Ohio	4,202	3,727	12.7%	371	346	7.3%	0	W	W
Wisconsin	3,029	3,280	-7.7%	188	216	-13.3%	W	W	W
West North Central	19,936	24,572	-18.9%	815	895	-8.9%	0	0	--
Iowa	3,296	5,687	-42.1%	116	135	-14.6%	0	0	--
Kansas	3,508	3,450	1.7%	100	111	-10.3%	0	0	--
Minnesota	3,210	2,920	9.9%	114	112	1.9%	0	0	--
Missouri	6,060	8,116	-25.3%	321	350	-8.3%	0	0	--
Nebraska	2,353	2,698	-12.8%	103	115	-10.7%	0	0	--
North Dakota	W	W	W	24	24	-1.2%	0	0	--
South Dakota	W	W	W	37	47	-19.8%	0	0	--
South Atlantic	22,570	22,137	2.0%	9,633	11,000	-12.4%	W	W	W
Delaware	W	W	W	342	384	-10.9%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,462	3,909	-11.4%	3,893	5,238	-25.7%	W	W	W
Georgia	4,305	4,816	-10.6%	677	715	-5.3%	0	0	--
Maryland	1,875	846	121.8%	662	593	11.6%	0	0	--
North Carolina	4,393	3,879	13.3%	1,119	1,162	-3.8%	0	0	--
South Carolina	2,417	3,332	-27.4%	528	579	-8.7%	0	0	--
Virginia	1,282	881	45.4%	2,256	2,202	2.5%	0	0	--
West Virginia	W	W	W	155	126	22.8%	W	W	W
East South Central	11,243	12,113	-7.2%	1,399	1,602	-12.6%	0	W	W
Alabama	W	3,045	W	207	194	6.5%	0	0	--
Kentucky	6,037	5,887	2.5%	234	255	-8.3%	0	W	W
Mississippi	W	994	W	177	487	-63.6%	0	0	--
Tennessee	2,630	2,187	20.3%	781	666	17.4%	0	0	--
West South Central	14,746	19,253	-23.4%	1,440	1,628	-11.6%	W	W	W
Arkansas	3,177	3,103	2.4%	152	175	-13.1%	0	0	--
Louisiana	2,578	2,610	-1.2%	335	369	-9.2%	W	W	W
Oklahoma	2,563	3,788	-32.3%	97	105	-7.7%	0	0	--
Texas	6,427	9,751	-34.1%	856	979	-12.6%	0	0	--
Mountain	16,975	19,827	-14.4%	352	401	-12.4%	W	W	W
Arizona	3,617	3,440	5.2%	145	133	9.5%	0	0	--
Colorado	4,063	4,594	-11.6%	118	134	-12.3%	0	0	--
Idaho	0	0	--	0	0	-36.3%	0	0	--
Montana	W	W	W	14	17	-18.8%	W	W	W
Nevada	W	W	W	4	3	20.9%	0	0	--
New Mexico	W	W	W	NM	34	NM	0	0	--
Utah	2,830	4,793	-41.0%	30	43	-30.2%	0	0	--
Wyoming	3,903	4,419	-11.7%	28	36	-22.2%	0	0	--
Pacific Contiguous	W	W	W	337	332	1.6%	0	0	--
California	0	0	--	169	157	7.9%	0	0	--
Oregon	W	W	W	69	74	-6.4%	0	0	--
Washington	W	W	W	99	101	-2.1%	0	0	--
Pacific Noncontiguous	W	W	W	2,480	2,321	6.8%	0	0	--
Alaska	0	0	--	49	150	-67.4%	0	0	--
Hawaii	W	W	W	2,431	2,171	12.0%	0	0	--
U.S. Total	114,947	128,454	-10.5%	25,194	27,053	-6.9%	446	715	-37.6%

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values 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, May 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**May 2019**	**May 2018**	**Percentage Change**	**May 2019**	**May 2018**	**May 2019**	**May 2018**
Coal (Thousand Tons)							
New England	507	699	-27.5%	W	W	W	W
Middle Atlantic	4,491	3,381	32.8%	0	W	4,491	W
East North Central	22,897	24,998	-8.4%	14,386	16,806	8,511	8,192
West North Central	19,936	24,572	-18.9%	19,936	24,572	0	0
South Atlantic	22,570	22,137	2.0%	19,434	20,314	3,136	1,823
East South Central	11,243	12,113	-7.2%	11,243	12,113	0	0
West South Central	14,746	19,253	-23.4%	10,692	13,988	4,054	5,265
Mountain	16,975	19,827	-14.4%	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	**114,947**	**128,454**	**-10.5%**	**92,516**	**107,594**	**22,432**	**20,859**
Petroleum Liquids (Thousand Barrels)							
New England	2,926	3,182	-8.0%	458	638	2,468	2,544
Middle Atlantic	4,791	4,630	3.5%	1,941	1,786	2,850	2,844
East North Central	1,020	1,062	-4.0%	669	733	351	329
West North Central	815	895	-8.9%	792	883	23	12
South Atlantic	9,633	11,000	-12.4%	7,755	9,240	1,878	1,760
East South Central	1,399	1,602	-12.6%	1,309	1,528	91	73
West South Central	1,440	1,628	-11.6%	1,118	1,283	322	345
Mountain	352	401	-12.4%	323	371	28	30
Pacific Contiguous	337	332	1.6%	257	227	80	105
Pacific Noncontiguous	2,480	2,321	6.8%	2,448	2,289	32	32
U.S. Total	**25,194**	**27,053**	**-6.9%**	**17,070**	**18,978**	**8,125**	**8,075**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	90	123	-27.1%	90	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	**446**	**715**	**-37.6%**	**436**	**649**	**10**	**66**

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 - May 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

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 - May 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
Year to Date												
2017	4,955,017	258,509	2.08	39.79	1.31	98.8	41,153	6,870	11.68	69.98	0.50	75.5
2018	4,452,333	232,442	2.06	39.45	1.30	93.5	63,042	10,455	13.55	81.95	0.44	63.5
2019	4,419,422	228,904	2.08	40.09	1.37	102.4	37,245	6,153	13.71	82.98	0.48	66.9
Rolling 12 Months Ending in May												
2018	11,758,346	616,297	2.05	39.12	1.28	92.6	118,866	19,712	12.82	77.44	0.46	63.4
2019	11,324,609	591,145	2.07	39.63	1.33	94.7	93,076	15,415	14.49	87.52	0.43	68.0

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

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

- Values for 2017 and prior years are final. Values for 2018 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 - May 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
Year to Date												
2017	35,891	1,281	2.05	57.45	5.55	71.3	3,535,010	3,421,442	3.57	3.69	90.2	2.71
2018	33,527	1,190	2.47	69.51	5.66	73.7	3,738,688	3,620,903	3.61	3.72	82.4	2.81
2019	21,449	750	2.31	65.96	5.78	46.9	4,012,591	3,884,307	3.36	3.47	85.2	2.71
Rolling 12 Months Ending in May												
2018	90,473	3,218	2.29	64.42	5.60	75.1	10,155,493	9,828,194	3.39	3.50	87.1	2.69
2019	73,044	2,570	2.50	71.11	5.78	62.3	10,640,046	10,302,636	3.46	3.57	84.1	2.76

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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 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - May 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
Year to Date												
2017	3,595,176	185,816	2.13	41.30	1.19	98.9	31,373	5,214	11.44	68.85	0.49	81.5
2018	3,292,231	171,468	2.10	40.30	1.18	95.0	36,894	6,079	13.52	82.09	0.39	67.6
2019	3,245,850	167,730	2.14	41.41	1.22	103.6	27,991	4,598	13.61	82.88	0.45	79.2
Rolling 12 Months Ending in May												
2018	8,708,684	453,246	2.10	40.42	1.15	94.5	75,943	12,505	12.60	76.53	0.42	68.5
2019	8,339,794	434,285	2.12	40.82	1.19	95.0	65,980	10,843	14.36	87.36	0.39	74.1

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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 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - May 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
Year to Date												
2017	35,891	1,281	2.05	57.45	5.55	115.5	1,708,740	1,654,570	3.76	3.88	97.2	2.70
2018	33,527	1,190	2.47	69.51	5.66	111.6	1,820,937	1,764,514	3.80	3.93	87.9	2.78
2019	21,449	750	2.31	65.96	5.78	74.5	1,932,868	1,871,913	3.54	3.65	90.4	2.72
Rolling 12 Months Ending in May												
2018	88,117	3,133	2.31	64.98	5.59	116.1	4,906,580	4,750,771	3.64	3.76	93.2	2.71
2019	71,133	2,500	2.52	71.78	5.79	92.8	5,088,024	4,930,097	3.59	3.70	88.1	2.74

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - May 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
Year to Date												
2017	1,277,620	68,780	1.88	34.95	1.65	101.1	9,039	1,536	12.55	73.85	0.46	86.4
2018	1,088,635	57,543	1.91	36.14	1.68	92.2	25,017	4,195	13.65	81.85	0.47	70.1
2019	1,108,233	58,022	1.86	35.52	1.82	102.5	8,431	1,421	14.05	83.35	0.50	68.8
Rolling 12 Months Ending in May												
2018	2,867,230	154,330	1.86	34.58	1.65	89.7	40,683	6,849	13.29	79.26	0.47	69.3
2019	2,825,510	149,165	1.87	35.52	1.75	96.3	25,084	4,248	14.91	88.06	0.45	83.4

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

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

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

Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - May 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
Year to Date												
2017	0	0	--	--	--	0.0	1,484,095	1,435,337	3.40	3.51	94.1	2.65
2018	0	0	--	--	--	0.0	1,604,855	1,552,632	3.44	3.56	86.5	2.84
2019	0	0	--	--	--	0.0	1,744,565	1,686,993	3.16	3.28	90.1	2.64
Rolling 12 Months Ending in May												
2018	0	0	--	--	--	0.0	4,466,916	4,318,867	3.10	3.20	91.1	2.61
2019	0	0	--	--	--	0.0	4,747,721	4,590,943	3.30	3.41	88.9	2.74

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

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2009 - May 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
Year to Date												
2017	319	14	2.77	63.17	3.00	5.1	0	0	--	--	--	0.0
2018	130	6	2.92	66.44	3.13	2.2	0	0	--	--	--	0.0
2019	115	5	2.90	65.74	2.96	2.1	0	0	--	--	--	0.0
Rolling 12 Months Ending in May												
2018	359	16	2.83	64.58	3.04	2.6	0	0	--	--	--	0.0
2019	275	12	2.93	66.23	2.96	2.1	0	0	--	--	--	0.0

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - May 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
Year to Date												
2017	0	0	--	--	--	0.0	2,986	2,897	3.97	4.09	4.8	3.85
2018	0	0	--	--	--	0.0	3,829	3,723	3.58	3.68	5.9	3.56
2019	0	0	--	--	--	0.0	3,974	3,837	3.34	3.45	6.1	3.32
Rolling 12 Months Ending in May												
2018	0	0	--	--	--	0.0	8,684	8,419	3.67	3.78	5.3	3.63
2019	0	0	--	--	--	0.0	9,235	8,937	3.38	3.49	5.8	3.37

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

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

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

Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - May 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
Year to Date												
2017	81,903	3,899	2.52	53.03	1.26	70.5	741	119	11.34	70.61	1.23	16.2
2018	71,338	3,425	2.51	52.22	1.22	61.7	1,131	181	12.73	79.50	1.30	15.5
2019	65,224	3,147	2.59	53.77	1.18	64.6	824	134	13.42	82.49	1.47	13.4
Rolling 12 Months Ending in May												
2018	182,073	8,705	2.48	51.93	1.34	67.0	2,240	359	11.91	74.23	1.43	15.0
2019	159,031	7,682	2.52	52.19	1.22	65.2	2,012	325	13.86	85.85	1.44	14.2

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

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - May 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
Year to Date												
2017	0	0	--	--	--	0.0	339,189	328,637	3.26	3.36	64.8	3.13
2018	0	0	--	--	--	0.0	309,067	300,034	3.16	3.25	56.5	3.06
2019	0	0	--	--	--	0.0	331,183	321,563	3.20	3.30	58.1	3.13
Rolling 12 Months Ending in May												
2018	2,356	85	1.59	44.08	5.84	8.6	773,313	750,137	3.14	3.23	58.6	3.03
2019	1,911	71	1.75	47.47	5.74	7.9	795,066	772,659	3.37	3.47	58.0	3.25

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	52	71	-27.0%	49	0	3	71	0	0	0	0
Connecticut	0	67	-100.0%	0	0	0	67	0	0	0	0
Maine	3	4	-15.0%	0	0	3	4	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	49	0	--	49	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	1,639	1,491	9.9%	0	0	1,628	1,480	0	0	11	11
New Jersey	56	38	49.0%	0	0	56	38	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	1,583	1,453	8.9%	0	0	1,572	1,442	0	0	11	11
East North Central	11,764	11,127	5.7%	7,029	6,845	4,561	4,136	0	0	174	145
Illinois	3,268	3,245	0.7%	773	751	2,348	2,363	0	0	146	132
Indiana	2,177	2,422	-10.0%	2,018	2,247	159	175	0	0	0	0
Michigan	2,436	2,117	15.0%	2,387	2,082	49	35	0	0	0	1
Ohio	2,152	1,989	8.2%	148	426	2,004	1,564	0	0	0	0
Wisconsin	1,731	1,353	28.0%	1,704	1,340	0	0	0	0	28	13
West North Central	8,533	8,631	-1.1%	8,266	8,319	0	0	0	0	267	311
Iowa	1,458	1,205	21.0%	1,266	1,015	0	0	0	0	191	189
Kansas	1,040	909	14.0%	1,040	909	0	0	0	0	0	0
Minnesota	1,291	1,031	25.0%	1,291	972	0	0	0	0	0	59
Missouri	2,328	2,841	-18.0%	2,328	2,841	0	0	0	0	0	0
Nebraska	915	919	-0.5%	839	856	0	0	0	0	76	63
North Dakota	1,376	1,571	-12.0%	1,376	1,571	0	0	0	0	0	0
South Dakota	125	155	-19.0%	125	155	0	0	0	0	0	0
South Atlantic	6,477	6,607	-2.0%	5,803	5,573	607	960	0	0	67	74
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	808	1,121	-28.0%	808	1,111	0	0	0	0	0	10
Georgia	1,294	932	39.0%	1,285	915	0	0	0	0	10	17
Maryland	197	338	-42.0%	0	0	180	321	0	0	17	17
North Carolina	1,092	893	22.0%	1,069	856	2	15	0	0	21	22
South Carolina	494	462	6.9%	494	462	0	0	0	0	0	0
Virginia	268	493	-46.0%	226	429	23	55	0	0	20	8
West Virginia	2,323	2,368	-1.9%	1,920	1,799	402	569	0	0	0	0
East South Central	4,844	4,821	0.5%	4,500	4,443	300	302	0	0	44	76
Alabama	1,029	1,158	-11.0%	1,029	1,158	0	0	0	0	0	0
Kentucky	2,613	2,839	-7.9%	2,613	2,839	0	0	0	0	0	0
Mississippi	461	444	3.7%	161	142	300	302	0	0	0	0
Tennessee	741	379	95.0%	697	303	0	0	0	0	44	76
West South Central	6,195	7,721	-20.0%	2,897	3,864	3,294	3,835	0	0	4	22
Arkansas	469	1,149	-59.0%	300	911	165	232	0	0	4	7
Louisiana	555	515	7.7%	393	367	162	148	0	0	0	0
Oklahoma	158	387	-59.0%	158	295	0	76	0	0	0	15
Texas	5,013	5,670	-12.0%	2,046	2,291	2,968	3,379	0	0	0	0
Mountain	5,473	5,441	0.6%	5,062	4,953	411	488	0	0	0	0
Arizona	959	1,016	-5.6%	959	1,016	0	0	0	0	0	0
Colorado	1,074	1,060	1.3%	1,074	1,060	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	329	380	-13.0%	12	6	317	374	0	0	0	0
Nevada	148	30	392.0%	133	0	15	30	0	0	0	0
New Mexico	677	582	16.0%	677	582	0	0	0	0	0	0
Utah	838	901	-7.0%	799	864	39	37	0	0	0	0
Wyoming	1,449	1,472	-1.6%	1,409	1,425	40	47	0	0	0	0
Pacific Contiguous	517	165	213.0%	125	0	336	121	0	0	55	44
California	55	44	25.0%	0	0	0	0	0	0	55	44
Oregon	125	0	--	125	0	0	0	0	0	0	0
Washington	336	121	177.0%	0	0	336	121	0	0	0	0
Pacific Noncontiguous	77	76	1.0%	15	16	62	60	0	0	0	0
Alaska	15	16	-5.4%	15	16	0	0	0	0	0	0
Hawaii	62	60	2.8%	0	0	62	60	0	0	0	0
U.S. Total	45,571	46,150	-1.3%	33,745	34,012	11,203	11,454	0	0	623	684

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

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

Table 4.6.B. Receipts of Coal Delivered for Electricity Generation by State, (Year-to-Date) May 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	82	144	-43.0%	49	45	33	99	0	0	0	0
Connecticut	0	67	-100.0%	0	0	0	67	0	0	0	0
Maine	33	32	3.5%	0	0	33	32	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	8,640	8,128	6.3%	0	0	8,608	8,075	0	0	32	52
New Jersey	245	273	-10.0%	0	0	245	273	0	0	0	0
New York	69	172	-60.0%	0	0	69	163	0	0	0	9
Pennsylvania	8,326	7,683	8.4%	0	0	8,293	7,639	0	0	32	44
East North Central	52,179	53,146	-1.8%	30,091	31,702	21,322	20,643	0	0	766	802
Illinois	15,706	17,413	-9.8%	3,095	3,540	11,874	13,088	0	0	738	785
Indiana	12,593	12,026	4.7%	11,723	11,227	870	798	0	0	0	0
Michigan	7,777	7,181	8.3%	7,714	7,115	62	62	0	0	0	3
Ohio	9,585	9,061	5.8%	1,069	2,367	8,516	6,694	0	0	0	0
Wisconsin	6,517	7,465	-13.0%	6,489	7,452	0	0	0	0	28	13
West North Central	41,214	44,445	-7.3%	39,913	43,116	0	0	5	6	1,296	1,323
Iowa	5,901	5,625	4.9%	4,996	4,709	0	0	0	0	905	917
Kansas	4,439	4,350	2.0%	4,439	4,350	0	0	0	0	0	0
Minnesota	4,941	4,637	6.6%	4,873	4,577	0	0	0	0	68	59
Missouri	11,625	14,465	-20.0%	11,620	14,460	0	0	5	6	0	0
Nebraska	4,971	4,822	3.1%	4,649	4,474	0	0	0	0	322	347
North Dakota	8,658	9,859	-12.0%	8,658	9,859	0	0	0	0	0	0
South Dakota	680	687	-1.0%	680	687	0	0	0	0	0	0
South Atlantic	32,072	31,350	2.3%	28,373	26,461	3,307	4,459	0	0	392	430
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	3,802	4,645	-18.0%	3,779	4,600	0	0	0	0	23	44
Georgia	6,341	5,313	19.0%	6,279	5,244	0	0	0	0	61	68
Maryland	1,327	1,720	-23.0%	0	0	1,235	1,626	0	0	92	93
North Carolina	5,201	4,684	11.0%	5,080	4,535	19	35	0	0	102	114
South Carolina	3,407	2,344	45.0%	3,400	2,341	0	0	0	0	8	3
Virginia	1,214	2,077	-42.0%	963	1,760	146	211	0	0	106	106
West Virginia	10,707	10,568	1.3%	8,872	7,980	1,836	2,587	0	0	0	0
East South Central	22,425	22,691	-1.2%	20,932	21,110	1,231	1,174	0	0	261	407
Alabama	5,431	6,439	-16.0%	5,431	6,439	0	0	0	0	0	0
Kentucky	12,766	12,298	3.8%	12,766	12,298	0	0	0	0	0	0
Mississippi	1,834	1,774	3.4%	603	600	1,231	1,174	0	0	0	0
Tennessee	2,394	2,181	9.8%	2,133	1,773	0	0	0	0	261	407
West South Central	37,215	39,289	-5.3%	19,746	21,089	17,364	18,040	0	0	105	160
Arkansas	5,537	6,141	-9.8%	4,589	4,951	918	1,150	0	0	30	40
Louisiana	2,668	2,704	-1.3%	1,999	1,653	669	1,052	0	0	0	0
Oklahoma	2,141	3,794	-44.0%	2,052	3,269	14	406	0	0	75	120
Texas	26,870	26,650	0.8%	11,106	11,216	15,764	15,434	0	0	0	0
Mountain	31,815	31,754	0.2%	27,884	27,869	3,930	3,885	0	0	0	0
Arizona	6,038	6,544	-7.7%	6,038	6,544	0	0	0	0	0	0
Colorado	5,949	5,838	1.9%	5,949	5,838	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	3,427	3,371	1.6%	113	71	3,313	3,300	0	0	0	0
Nevada	753	212	256.0%	517	0	236	212	0	0	0	0
New Mexico	3,181	2,369	34.0%	3,181	2,369	0	0	0	0	0	0
Utah	4,267	4,497	-5.1%	4,097	4,332	170	165	0	0	0	0
Wyoming	8,200	8,923	-8.1%	7,990	8,715	211	208	0	0	0	0
Pacific Contiguous	2,832	1,117	154.0%	612	0	1,925	866	0	0	295	250
California	295	250	18.0%	0	0	0	0	0	0	295	250
Oregon	612	0	--	612	0	0	0	0	0	0	0
Washington	1,925	866	122.0%	0	0	1,925	866	0	0	0	0
Pacific Noncontiguous	431	378	14.0%	130	76	301	302	0	0	0	0
Alaska	130	76	71.0%	130	76	0	0	0	0	0	0
Hawaii	301	302	-0.3%	0	0	301	302	0	0	0	0
U.S. Total	228,904	232,442	-1.5%	167,730	171,468	58,022	57,543	5	6	3,147	3,425

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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, May 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	1	77	-98.0%	1	0	0	77	0	0	0	0
Connecticut	0	24	-100.0%	0	0	0	24	0	0	0	0
Maine	0	2	-78.0%	0	0	0	2	0	0	0	0
Massachusetts	0	52	-100.0%	0	0	0	52	0	0	0	0
New Hampshire	1	0	740.0%	1	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	32	208	-84.0%	0	106	27	94	0	0	6	7
New Jersey	0	31	-99.0%	0	0	0	31	0	0	0	0
New York	0	142	-100.0%	0	106	0	36	0	0	0	0
Pennsylvania	32	35	-7.8%	0	0	26	28	0	0	6	7
East North Central	76	79	-4.4%	39	28	35	48	0	0	1	3
Illinois	10	7	46.0%	1	0	9	7	0	0	0	0
Indiana	15	10	54.0%	15	10	0	0	0	0	0	0
Michigan	7	15	-51.0%	7	15	0	0	0	0	0	0
Ohio	40	46	-13.0%	13	2	26	41	0	0	1	3
Wisconsin	3	1	143.0%	3	1	0	0	0	0	0	0
West North Central	48	45	5.4%	48	45	0	0	0	0	0	0
Iowa	4	6	-37.0%	4	6	0	0	0	0	0	0
Kansas	15	13	22.0%	15	13	0	0	0	0	0	0
Minnesota	4	2	118.0%	4	2	0	0	0	0	0	0
Missouri	16	13	26.0%	16	13	0	0	0	0	0	0
Nebraska	3	0	--	3	0	0	0	0	0	0	0
North Dakota	6	10	-43.0%	6	10	0	0	0	0	0	0
South Dakota	0	2	-100.0%	0	2	0	0	0	0	0	0
South Atlantic	88	179	-51.0%	71	152	9	14	0	0	8	14
Delaware	0	2	-100.0%	0	0	0	2	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6	50	-87.0%	5	48	0	0	0	0	2	2
Georgia	15	9	55.0%	11	9	0	0	0	0	4	1
Maryland	8	5	61.0%	0	0	8	5	0	0	0	0
North Carolina	32	22	44.0%	31	20	0	0	0	0	1	2
South Carolina	6	13	-52.0%	6	11	0	0	0	0	0	1
Virginia	7	50	-86.0%	4	35	1	8	0	0	2	8
West Virginia	14	28	-51.0%	14	28	0	0	0	0	0	0
East South Central	36	24	51.0%	36	23	0	0	0	0	0	1
Alabama	2	2	-10.0%	2	2	0	0	0	0	0	0
Kentucky	17	15	14.0%	17	15	0	0	0	0	0	0
Mississippi	2	2	35.0%	2	2	0	0	0	0	0	0
Tennessee	15	6	173.0%	15	5	0	0	0	0	0	1
West South Central	33	23	42.0%	22	22	11	2	0	0	0	0
Arkansas	3	10	-65.0%	0	10	3	0	0	0	0	0
Louisiana	5	0	--	5	0	0	0	0	0	0	0
Oklahoma	7	1	761.0%	7	1	0	0	0	0	0	0
Texas	18	13	41.0%	10	11	8	2	0	0	0	0
Mountain	41	31	32.0%	35	25	6	6	0	0	0	0
Arizona	20	3	621.0%	20	3	0	0	0	0	0	0
Colorado	0	2	-100.0%	0	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	4	5	-25.0%	0	0	4	5	0	0	0	0
Nevada	2	4	-45.0%	1	4	2	0	0	0	0	0
New Mexico	5	0	--	5	0	0	0	0	0	0	0
Utah	2	11	-80.0%	2	11	0	0	0	0	0	0
Wyoming	8	7	24.0%	8	7	0	0	0	0	0	0
Pacific Contiguous	1	2	-13.0%	0	0	1	2	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	1	2	-13.0%	0	0	1	2	0	0	0	0
Pacific Noncontiguous	732	772	-5.1%	551	625	181	146	0	0	0	0
Alaska	3	0	--	3	0	0	0	0	0	0	0
Hawaii	729	772	-5.5%	549	625	181	146	0	0	0	0
U.S. Total	1,089	1,441	-24.0%	804	1,028	270	389	0	0	15	24

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

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

Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) May 2019 and 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	190	1,085	-83.0%	7	114	182	971	0	0	0	0
Connecticut	6	130	-95.0%	0	0	6	130	0	0	0	0
Maine	126	253	-50.0%	0	0	126	253	0	0	0	0
Massachusetts	51	420	-88.0%	0	12	51	408	0	0	0	0
New Hampshire	7	182	-96.0%	7	102	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	612	2,539	-76.0%	295	744	288	1,752	0	0	30	43
New Jersey	22	207	-89.0%	0	0	22	207	0	0	0	0
New York	377	1,801	-79.0%	295	744	82	1,046	0	0	0	11
Pennsylvania	213	531	-60.0%	0	0	184	499	0	0	30	32
East North Central	401	345	16.0%	219	188	165	142	0	0	18	15
Illinois	42	35	20.0%	1	1	40	34	0	0	0	0
Indiana	84	68	24.0%	84	67	0	1	0	0	0	0
Michigan	54	69	-21.0%	48	65	0	0	0	0	6	4
Ohio	201	139	45.0%	72	31	117	97	0	0	12	11
Wisconsin	20	35	-42.0%	13	24	8	11	0	0	0	0
West North Central	215	209	2.9%	215	209	0	0	0	0	0	0
Iowa	44	63	-30.0%	44	63	0	0	0	0	0	0
Kansas	40	41	-2.8%	40	41	0	0	0	0	0	0
Minnesota	16	6	172.0%	16	6	0	0	0	0	0	0
Missouri	67	68	-1.7%	67	68	0	0	0	0	0	0
Nebraska	9	2	323.0%	9	2	0	0	0	0	0	0
North Dakota	39	27	44.0%	39	27	0	0	0	0	0	0
South Dakota	0	2	-100.0%	0	2	0	0	0	0	0	0
South Atlantic	557	2,358	-76.0%	426	1,633	48	604	0	0	84	121
Delaware	1	71	-99.0%	0	0	1	71	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	49	248	-80.0%	30	228	0	0	0	0	19	20
Georgia	98	146	-33.0%	58	95	1	25	0	0	39	26
Maryland	34	360	-91.0%	0	0	34	360	0	0	0	0
North Carolina	135	625	-78.0%	122	601	0	0	0	0	13	24
South Carolina	41	252	-84.0%	37	179	0	43	0	0	4	30
Virginia	102	519	-80.0%	83	415	11	84	0	0	8	21
West Virginia	97	136	-29.0%	97	116	0	20	0	0	0	0
East South Central	141	179	-21.0%	130	119	8	58	0	0	3	2
Alabama	17	91	-82.0%	8	33	8	58	0	0	0	0
Kentucky	71	54	31.0%	71	54	0	0	0	0	0	0
Mississippi	13	9	45.0%	13	9	0	0	0	0	0	0
Tennessee	42	26	61.0%	39	24	0	0	0	0	3	2
West South Central	111	74	49.0%	78	56	32	18	0	0	0	0
Arkansas	33	23	41.0%	20	17	13	6	0	0	0	0
Louisiana	5	3	37.0%	5	3	0	0	0	0	0	0
Oklahoma	19	15	25.0%	19	15	0	0	0	0	0	0
Texas	54	32	68.0%	35	20	19	12	0	0	0	0
Mountain	170	125	36.0%	157	115	13	10	0	0	0	0
Arizona	70	42	69.0%	70	42	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	11	7	51.0%	0	0	11	7	0	0	0	0
Nevada	11	6	85.0%	8	4	3	2	0	0	0	0
New Mexico	21	9	138.0%	21	9	0	0	0	0	0	0
Utah	34	39	-14.0%	34	38	0	1	0	0	0	0
Wyoming	21	18	15.0%	21	18	0	0	0	0	0	0
Pacific Contiguous	10	2	553.0%	6	0	4	2	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	10	2	553.0%	6	0	4	2	0	0	0	0
Pacific Noncontiguous	3,745	3,538	5.9%	3,064	2,900	681	638	0	0	0	0
Alaska	8	0	--	8	0	0	0	0	0	0	0
Hawaii	3,737	3,538	5.6%	3,057	2,900	681	638	0	0	0	0
U.S. Total	6,153	10,455	-41.0%	4,598	6,079	1,421	4,195	0	0	134	181

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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, May 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 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	50	39	28.0%	50	39	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	48	36	33.0%	48	36	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	2	3	-31.0%	2	3	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	0	--	38	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	38	0	--	38	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	74	114	-35.0%	74	114	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	74	114	-35.0%	74	114	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	162	152	6.5%	162	152	0	0	0	0	0	0

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NM = Not meaningful due to large relative standard error or excessive percentage change.
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Notes:
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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) May 2019 and 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	95	262	-64.0%	95	262	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	77	237	-68.0%	77	237	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	18	25	-26.0%	18	25	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	191	375	-49.0%	191	375	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	191	375	-49.0%	191	375	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	464	554	-16.0%	464	554	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	464	554	-16.0%	464	554	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	750	1,190	-37.0%	750	1,190	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, May 2019 and 2018
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	19,374	18,723	3.5%	10	11	19,364	18,712	0	0	0	0
Connecticut	10,039	7,837	28.0%	0	0	10,039	7,837	0	0	0	0
Maine	471	868	-46.0%	0	0	471	868	0	0	0	0
Massachusetts	5,308	6,647	-20.0%	5	5	5,303	6,642	0	0	0	0
New Hampshire	273	851	-68.0%	5	6	268	845	0	0	0	0
Rhode Island	3,284	2,521	30.0%	0	0	3,284	2,521	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	86,631	77,235	12.0%	5,409	6,414	80,441	69,929	0	0	780	892
New Jersey	19,348	18,314	5.7%	0	0	19,348	18,314	0	0	0	0
New York	20,525	25,942	-21.0%	5,409	6,414	14,577	18,876	0	0	539	651
Pennsylvania	46,758	32,980	42.0%	0	0	46,516	32,739	0	0	241	241
East North Central	69,470	70,861	-2.0%	20,769	27,473	47,036	41,651	568	538	1,098	1,197
Illinois	4,435	6,622	-33.0%	557	1,234	3,875	5,384	0	0	3	4
Indiana	13,650	15,644	-13.0%	4,980	9,088	8,670	6,556	0	0	0	0
Michigan	18,542	21,738	-15.0%	3,765	5,872	13,786	14,850	568	538	423	477
Ohio	24,221	20,175	20.0%	3,820	5,255	19,915	14,451	0	0	487	468
Wisconsin	8,623	6,682	29.0%	7,648	6,024	789	410	0	0	185	248
West North Central	14,864	17,088	-13.0%	12,820	14,446	1,767	2,102	215	220	62	321
Iowa	4,737	5,746	-18.0%	4,677	5,425	0	0	0	0	60	320
Kansas	2,301	3,574	-36.0%	2,301	3,574	0	0	0	0	0	0
Minnesota	2,806	2,798	0.3%	2,794	2,525	10	272	0	1	1	0
Missouri	4,451	4,616	-3.6%	2,479	2,567	1,757	1,830	214	219	0	0
Nebraska	388	330	17.0%	388	330	0	0	0	0	0	0
North Dakota	181	25	634.0%	181	25	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	220,860	200,967	9.9%	186,149	161,228	31,667	36,959	0	0	3,045	2,781
Delaware	1,786	2,813	-37.0%	0	0	1,786	2,813	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	119,640	98,943	21.0%	115,124	94,426	4,126	4,133	0	0	389	384
Georgia	29,704	28,409	4.6%	22,516	20,538	6,526	7,131	0	0	662	740
Maryland	7,776	10,338	-25.0%	1,586	2,074	5,989	8,059	0	0	202	205
North Carolina	21,701	22,399	-3.1%	16,672	19,204	4,789	2,976	0	0	240	219
South Carolina	15,454	11,078	40.0%	15,219	9,291	162	1,728	0	0	73	58
Virginia	23,506	25,624	-8.3%	15,002	15,486	7,677	9,348	0	0	827	790
West Virginia	1,293	1,364	-5.2%	30	207	612	770	0	0	651	386
East South Central	86,125	79,170	8.8%	60,730	50,941	23,231	26,792	0	0	2,165	1,438
Alabama	34,430	31,510	9.3%	13,841	8,793	20,589	22,717	0	0	0	0
Kentucky	7,808	8,938	-13.0%	7,797	8,490	11	448	0	0	0	0
Mississippi	31,936	32,842	-2.8%	29,305	29,216	2,631	3,626	0	0	0	0
Tennessee	11,951	5,881	103.0%	9,787	4,443	0	0	0	0	2,165	1,438
West South Central	233,745	244,003	-4.2%	66,011	75,027	113,688	117,950	0	0	54,046	51,026
Arkansas	9,340	11,542	-19.0%	8,275	10,505	813	853	0	0	251	184
Louisiana	44,561	40,191	11.0%	22,183	18,764	3,751	4,863	0	0	18,628	16,564
Oklahoma	18,307	31,750	-42.0%	10,489	18,731	7,465	12,720	0	0	353	299
Texas	161,537	160,520	0.6%	25,064	27,027	101,659	99,513	0	0	34,814	33,979
Mountain	53,283	52,797	0.9%	45,744	44,027	7,521	8,718	0	0	17	52
Arizona	22,833	19,150	19.0%	16,826	13,364	6,007	5,786	0	0	0	0
Colorado	9,007	9,740	-7.5%	8,081	8,690	926	1,050	0	0	0	0
Idaho	11	0	--	11	0	0	0	0	0	0	0
Montana	200	245	-18.0%	200	245	0	0	0	0	0	0
Nevada	11,024	12,513	-12.0%	11,024	12,513	0	0	0	0	0	0
New Mexico	5,083	7,572	-33.0%	4,498	5,690	585	1,882	0	0	0	0
Utah	4,925	3,463	42.0%	4,908	3,412	0	0	0	0	17	52
Wyoming	199	114	75.0%	196	114	4	0	0	0	0	0
Pacific Contiguous	26,500	28,435	-6.8%	8,591	8,629	15,646	17,465	0	0	2,263	2,341
California	23,521	25,827	-8.9%	7,840	7,553	13,418	15,933	0	0	2,263	2,341
Oregon	1,769	1,476	20.0%	273	188	1,496	1,288	0	0	0	0
Washington	1,209	1,131	6.9%	477	888	732	243	0	0	0	0
Pacific Noncontiguous	5	39	-86.0%	5	39	0	0	0	0	0	0
Alaska	5	39	-86.0%	5	39	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	810,857	789,317	2.7%	406,239	388,233	340,361	340,277	782	758	63,475	60,048

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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) May 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	110,410	104,916	5.2%	41	48	110,369	104,868	0	0	0	0
Connecticut	51,008	43,560	17.0%	0	0	51,008	43,560	0	0	0	0
Maine	2,776	3,314	-16.0%	0	0	2,776	3,314	0	0	0	0
Massachusetts	39,712	44,461	-11.0%	29	36	39,684	44,426	0	0	0	0
New Hampshire	5,572	2,868	94.0%	12	12	5,560	2,856	0	0	0	0
Rhode Island	11,342	10,713	5.9%	0	0	11,342	10,713	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	445,547	380,694	17.0%	31,059	29,061	410,272	347,246	0	0	4,216	4,387
New Jersey	100,752	90,170	12.0%	0	0	100,752	90,170	0	0	0	0
New York	118,895	114,406	3.9%	31,059	29,061	84,691	82,244	0	0	3,145	3,102
Pennsylvania	225,900	176,119	28.0%	0	0	224,829	174,833	0	0	1,071	1,285
East North Central	378,468	331,663	14.0%	124,503	120,466	244,560	201,802	2,982	2,805	6,423	6,590
Illinois	26,307	23,280	13.0%	2,427	1,891	23,869	21,375	0	0	11	13
Indiana	73,308	60,712	21.0%	29,197	28,503	44,111	32,210	0	0	0	0
Michigan	92,503	103,178	-10.0%	20,856	28,600	65,872	68,812	2,982	2,805	2,793	2,961
Ohio	134,404	103,939	29.0%	24,634	24,757	107,143	76,812	0	0	2,627	2,370
Wisconsin	51,945	40,554	28.0%	47,389	36,715	3,565	2,593	0	0	991	1,245
West North Central	65,425	62,308	5.0%	56,870	53,615	5,907	6,057	855	918	1,793	1,718
Iowa	22,501	22,704	-0.9%	20,743	21,001	0	0	0	0	1,758	1,703
Kansas	6,514	9,012	-28.0%	6,514	9,012	0	0	0	0	0	0
Minnesota	17,377	13,627	28.0%	17,250	13,214	90	395	2	3	35	15
Missouri	17,281	15,933	8.5%	10,611	9,356	5,817	5,662	853	915	0	0
Nebraska	1,012	812	25.0%	1,012	812	0	0	0	0	0	0
North Dakota	740	220	237.0%	740	220	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	973,518	903,810	7.7%	813,456	744,746	144,927	144,567	0	0	15,135	14,497
Delaware	7,910	13,079	-40.0%	0	0	7,910	13,079	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	463,675	441,822	4.9%	450,303	425,096	11,583	15,198	0	0	1,789	1,528
Georgia	134,938	128,335	5.1%	102,826	97,400	28,625	27,064	0	0	3,486	3,870
Maryland	37,824	28,035	35.0%	12,113	4,720	24,560	22,251	0	0	1,151	1,064
North Carolina	115,986	114,494	1.3%	94,184	101,950	20,537	11,337	0	0	1,265	1,207
South Carolina	64,082	47,895	34.0%	58,901	40,262	4,727	7,232	0	0	453	401
Virginia	144,361	125,255	15.0%	94,536	74,335	45,479	46,880	0	0	4,347	4,040
West Virginia	4,742	4,896	-3.1%	592	983	1,506	1,527	0	0	2,644	2,385
East South Central	357,882	375,378	-4.7%	238,486	253,580	108,126	113,793	0	0	11,269	8,006
Alabama	140,676	143,018	-1.6%	48,366	46,721	92,309	96,297	0	0	0	0
Kentucky	36,796	45,247	-19.0%	35,571	41,827	1,225	3,419	0	0	0	0
Mississippi	129,006	148,868	-13.0%	114,414	134,791	14,592	14,077	0	0	0	0
Tennessee	51,404	38,246	34.0%	40,135	30,241	0	0	0	0	11,269	8,006
West South Central	1,053,297	1,024,448	2.8%	298,027	286,637	483,946	484,832	0	0	271,324	252,979
Arkansas	45,629	53,844	-15.0%	38,800	47,259	5,608	5,549	0	0	1,221	1,036
Louisiana	205,363	181,113	13.0%	99,729	84,223	13,660	14,374	0	0	91,973	82,516
Oklahoma	100,109	100,913	-0.8%	61,365	56,765	36,831	42,720	0	0	1,914	1,428
Texas	702,196	688,577	2.0%	98,133	98,389	427,847	422,189	0	0	176,216	167,999
Mountain	271,413	221,594	22.0%	226,246	191,451	45,127	29,847	0	0	39	296
Arizona	108,083	69,015	57.0%	80,195	56,241	27,889	12,775	0	0	0	0
Colorado	45,941	43,737	5.0%	39,641	37,918	6,300	5,818	0	0	0	0
Idaho	2,918	356	720.0%	2,918	356	0	0	0	0	0	0
Montana	1,015	1,096	-7.4%	1,015	1,096	0	0	0	0	0	0
Nevada	57,959	61,044	-5.1%	57,959	61,044	0	0	0	0	0	0
New Mexico	30,081	29,717	1.2%	19,152	18,471	10,928	11,246	0	0	0	0
Utah	24,487	16,194	51.0%	24,448	15,897	0	0	0	0	39	296
Wyoming	928	436	113.0%	919	428	10	8	0	0	0	0
Pacific Contiguous	228,105	215,292	6.0%	82,984	84,111	133,758	119,620	0	0	11,363	11,561
California	171,181	173,659	-1.4%	59,237	66,138	100,580	95,960	0	0	11,363	11,561
Oregon	40,771	29,716	37.0%	14,437	12,253	26,335	17,463	0	0	0	0
Washington	16,153	11,917	36.0%	9,310	5,720	6,843	6,197	0	0	0	0
Pacific Noncontiguous	241	800	-70.0%	241	800	0	0	0	0	0	0
Alaska	241	800	-70.0%	241	800	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	3,884,307	3,620,903	7.3%	1,871,913	1,764,514	1,686,993	1,552,632	3,837	3,723	321,563	300,034

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018
New England	W	W	W	3.54	--	W	W
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	3.54	--	--	3.54	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	1.92	2.18	-12.0%	--	--	1.92	2.18
New Jersey	W	W	W	--	--	W	W
New York	--	--	--	--	--	--	--
Pennsylvania	W	W	W	--	--	W	W
East North Central	1.98	1.96	1.0%	2.10	2.07	1.81	1.79
Illinois	W	1.74	W	1.96	1.89	W	1.69
Indiana	W	W	W	2.10	2.08	W	W
Michigan	W	W	W	2.07	2.06	W	W
Ohio	1.75	W	W	1.79	1.78	1.75	W
Wisconsin	2.24	2.28	-1.8%	2.24	2.28	--	--
West North Central	1.64	1.73	-5.2%	1.64	1.73	--	--
Iowa	1.54	1.70	-9.4%	1.54	1.70	--	--
Kansas	1.60	1.72	-7.0%	1.60	1.72	--	--
Minnesota	1.99	2.19	-9.1%	1.99	2.19	--	--
Missouri	1.66	1.78	-6.7%	1.66	1.78	--	--
Nebraska	1.24	1.24	0.0%	1.24	1.24	--	--
North Dakota	1.60	1.56	2.6%	1.60	1.56	--	--
South Dakota	1.80	1.91	-5.8%	1.80	1.91	--	--
South Atlantic	2.54	2.59	-1.9%	2.56	2.66	2.34	2.22
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.86	2.88	-0.7%	2.86	2.88	--	--
Georgia	2.72	2.79	-2.5%	2.72	2.79	--	--
Maryland	2.63	2.45	7.3%	--	--	2.63	2.45
North Carolina	W	W	W	2.72	3.10	W	W
South Carolina	3.27	3.28	-0.3%	3.27	3.28	--	--
Virginia	W	W	W	2.68	2.64	W	W
West Virginia	W	W	W	2.08	2.10	W	W
East South Central	W	W	W	2.10	2.01	W	W
Alabama	2.39	2.20	8.6%	2.39	2.20	--	--
Kentucky	1.93	1.92	0.5%	1.93	1.92	--	--
Mississippi	W	W	W	3.04	2.43	W	W
Tennessee	2.16	1.97	9.6%	2.16	1.97	--	--
West South Central	1.88	1.82	3.3%	2.27	2.03	1.53	1.60
Arkansas	W	W	W	2.08	1.86	W	W
Louisiana	W	W	W	3.71	2.60	W	W
Oklahoma	1.84	W	W	1.84	1.79	--	W
Texas	W	1.74	W	2.06	2.04	W	1.53
Mountain	W	W	W	2.11	2.02	W	W
Arizona	2.96	2.59	14.0%	2.96	2.59	--	--
Colorado	1.64	1.59	3.1%	1.64	1.59	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	2.20	2.15	W	W
Nevada	W	W	W	2.76	--	W	W
New Mexico	2.44	2.34	4.3%	2.44	2.34	--	--
Utah	2.00	2.06	-2.9%	2.00	2.06	--	--
Wyoming	W	W	W	1.69	1.71	W	W
Pacific Contiguous	W	W	W	2.19	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.19	--	--	2.19	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.44	3.50	W	W
Alaska	3.44	3.50	-1.7%	3.44	3.50	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.04	2.04	0.0%	2.11	2.09	1.83	1.87

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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) May 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 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	2.00	2.38	-16.0%	--	--	2.00	2.38
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	1.93	2.31	-16.0%	--	--	1.93	2.31
East North Central	2.00	1.98	1.0%	2.12	2.09	1.83	1.81
Illinois	1.83	1.76	4.0%	1.98	1.85	1.79	1.73
Indiana	W	W	W	2.14	2.11	W	W
Michigan	W	W	W	2.08	2.14	W	W
Ohio	W	W	W	1.86	1.78	W	W
Wisconsin	2.24	2.24	0.0%	2.24	2.24	--	--
West North Central	1.64	1.72	-4.7%	1.64	1.72	--	--
Iowa	1.56	1.71	-8.8%	1.56	1.71	--	--
Kansas	1.64	1.69	-3.0%	1.64	1.69	--	--
Minnesota	2.03	2.13	-4.7%	2.03	2.13	--	--
Missouri	1.70	1.84	-7.6%	1.70	1.84	--	--
Nebraska	1.22	1.26	-3.2%	1.22	1.26	--	--
North Dakota	1.56	1.51	3.3%	1.56	1.51	--	--
South Dakota	1.84	1.91	-3.7%	1.84	1.91	--	--
South Atlantic	2.64	2.63	0.4%	2.67	2.70	2.36	2.25
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.90	2.89	0.3%	2.90	2.89	--	--
Georgia	2.72	2.80	-2.9%	2.72	2.80	--	--
Maryland	2.72	2.55	6.7%	--	--	2.72	2.55
North Carolina	W	W	W	3.03	3.07	W	W
South Carolina	3.28	3.36	-2.4%	3.28	3.36	--	--
Virginia	W	W	W	2.76	2.66	W	W
West Virginia	W	W	W	2.11	2.16	W	W
East South Central	W	W	W	2.10	2.09	W	W
Alabama	2.34	2.29	2.2%	2.34	2.29	--	--
Kentucky	1.95	1.96	-0.5%	1.95	1.96	--	--
Mississippi	W	W	W	3.20	2.69	W	W
Tennessee	2.24	2.13	5.2%	2.24	2.13	--	--
West South Central	1.92	1.84	4.3%	2.15	1.97	1.65	1.67
Arkansas	W	W	W	2.05	1.93	W	W
Louisiana	W	W	W	3.22	2.19	W	W
Oklahoma	W	W	W	1.79	1.75	W	W
Texas	W	1.78	W	2.07	2.02	W	1.60
Mountain	W	W	W	2.14	2.01	W	W
Arizona	2.68	2.45	9.4%	2.68	2.45	--	--
Colorado	1.78	1.63	9.2%	1.78	1.63	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.98	1.88	W	W
Nevada	W	W	W	2.79	--	W	W
New Mexico	2.47	2.32	6.5%	2.47	2.32	--	--
Utah	1.99	2.05	-2.9%	1.99	2.05	--	--
Wyoming	W	W	W	1.88	1.78	W	W
Pacific Contiguous	W	W	W	2.18	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.18	--	--	2.18	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.44	3.34	W	W
Alaska	3.44	3.34	3.0%	3.44	3.34	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.07	2.05	1.0%	2.14	2.10	1.86	1.91

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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, May 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018
New England	W	W	W	17.60	13.16	W	W
Connecticut	--	W	W	--	--	--	W
Maine	W	W	W	--	--	W	W
Massachusetts	--	W	W	--	--	--	W
New Hampshire	17.60	13.16	34.0%	17.60	13.16	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	15.44	13.77	12.0%	--	13.74	15.44	13.82
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	13.74	W	W
Pennsylvania	W	W	W	--	--	W	W
East North Central	15.98	15.76	1.4%	15.84	16.91	16.13	15.07
Illinois	W	W	W	16.40	--	W	W
Indiana	15.84	17.08	-7.3%	15.84	17.08	--	--
Michigan	15.27	16.68	-8.5%	15.27	16.68	--	--
Ohio	W	W	W	16.02	18.03	W	W
Wisconsin	16.29	16.53	-1.5%	16.29	16.53	--	--
West North Central	15.80	17.16	-7.9%	15.80	17.16	--	--
Iowa	15.71	17.00	-7.6%	15.71	17.00	--	--
Kansas	15.90	17.63	-9.8%	15.90	17.63	--	--
Minnesota	16.30	17.64	-7.6%	16.30	17.64	--	--
Missouri	15.42	16.69	-7.6%	15.42	16.69	--	--
Nebraska	15.85	--	--	15.85	--	--	--
North Dakota	16.31	17.18	-5.1%	16.31	17.18	--	--
South Dakota	--	17.17	--	--	17.17	--	--
South Atlantic	W	14.74	W	15.58	14.82	W	13.85
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	16.06	17.28	-7.1%	16.06	17.28	--	--
Georgia	16.19	16.52	-2.0%	16.19	16.52	--	--
Maryland	W	W	W	--	--	W	W
North Carolina	15.36	16.69	-8.0%	15.36	16.69	--	--
South Carolina	15.65	17.23	-9.2%	15.65	17.23	--	--
Virginia	W	W	W	16.08	7.35	W	W
West Virginia	15.26	17.92	-15.0%	15.26	17.92	--	--
East South Central	15.20	17.18	-12.0%	15.20	17.18	--	--
Alabama	15.91	19.21	-17.0%	15.91	19.21	--	--
Kentucky	15.28	17.14	-11.0%	15.28	17.14	--	--
Mississippi	15.04	15.97	-5.8%	15.04	15.97	--	--
Tennessee	15.07	16.99	-11.0%	15.07	16.99	--	--
West South Central	W	W	W	15.69	16.85	W	W
Arkansas	W	17.00	W	--	17.00	W	--
Louisiana	15.24	--	--	15.24	--	--	--
Oklahoma	15.80	17.81	-11.0%	15.80	17.81	--	--
Texas	W	W	W	15.81	16.64	W	W
Mountain	W	W	W	18.84	19.12	W	W
Arizona	19.72	15.06	31.0%	19.72	15.06	--	--
Colorado	--	18.56	--	--	18.56	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	16.30	18.70	W	W
New Mexico	17.86	--	--	17.86	--	--	--
Utah	17.95	20.52	-13.0%	17.95	20.52	--	--
Wyoming	17.82	18.94	-5.9%	17.82	18.94	--	--
Pacific Contiguous	W	W	W	--	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	13.24	13.61	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	13.23	13.61	W	W
U.S. Total	14.46	14.29	1.2%	14.09	14.30	15.62	14.24

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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) May 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	W	W	W	17.70	11.40	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	15.00	W	W
New Hampshire	17.70	W	W	17.70	11.00	--	W
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	12.86	13.35	-3.7%	11.93	11.79	13.85	14.22
New Jersey	W	15.06	W	--	--	W	15.06
New York	12.59	12.87	-2.2%	11.93	11.79	15.06	13.72
Pennsylvania	W	15.68	W	--	--	W	15.68
East North Central	15.49	15.79	-1.9%	15.08	16.00	16.03	15.50
Illinois	W	W	W	16.18	15.27	W	W
Indiana	15.07	W	W	15.07	15.86	--	W
Michigan	13.98	15.51	-9.9%	13.98	15.51	--	--
Ohio	15.68	15.56	0.8%	15.78	16.21	15.62	15.36
Wisconsin	W	17.44	W	15.16	17.44	W	--
West North Central	14.92	15.91	-6.2%	14.92	15.91	--	--
Iowa	15.07	15.98	-5.7%	15.07	15.98	--	--
Kansas	15.40	16.18	-4.8%	15.40	16.18	--	--
Minnesota	15.42	16.26	-5.2%	15.42	16.26	--	--
Missouri	14.71	15.72	-6.4%	14.71	15.72	--	--
Nebraska	15.02	15.60	-3.7%	15.02	15.60	--	--
North Dakota	14.39	15.68	-8.2%	14.39	15.68	--	--
South Dakota	--	17.17	--	--	17.17	--	--
South Atlantic	14.80	14.54	1.8%	14.87	14.78	14.16	13.79
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	15.12	15.96	-5.3%	15.12	15.96	--	--
Georgia	W	W	W	14.68	15.35	W	W
Maryland	W	14.15	W	--	--	W	14.15
North Carolina	14.86	17.10	-13.0%	14.86	17.10	--	--
South Carolina	15.37	16.84	-8.7%	15.37	16.84	--	--
Virginia	W	W	W	13.94	10.01	W	W
West Virginia	15.53	W	W	15.53	16.60	--	W
East South Central	W	W	W	14.68	15.63	W	W
Alabama	W	W	W	15.17	15.77	W	W
Kentucky	14.71	15.69	-6.2%	14.71	15.69	--	--
Mississippi	14.54	15.06	-3.5%	14.54	15.06	--	--
Tennessee	14.57	15.54	-6.2%	14.57	15.54	--	--
West South Central	W	15.85	W	14.61	15.82	W	15.93
Arkansas	W	W	W	15.19	15.97	W	W
Louisiana	15.24	13.95	9.2%	15.24	13.95	--	--
Oklahoma	15.68	15.89	-1.3%	15.68	15.89	--	--
Texas	W	W	W	13.61	15.95	W	W
Mountain	W	17.58	W	17.08	17.63	W	16.97
Arizona	16.83	16.03	5.0%	16.83	16.03	--	--
Colorado	17.36	17.17	1.1%	17.36	17.17	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	14.96	18.70	W	W
New Mexico	18.25	17.70	3.1%	18.25	17.70	--	--
Utah	17.60	W	W	17.60	19.07	--	W
Wyoming	16.80	18.04	-6.9%	16.80	18.04	--	--
Pacific Contiguous	W	W	W	16.52	--	W	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	W	W	16.52	--	W	W
Pacific Noncontiguous	W	W	W	13.18	12.82	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	13.18	12.82	W	W
U.S. Total	13.72	13.57	1.1%	13.61	13.52	14.05	13.65

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

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

Table 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, May 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.54	1.50	2.7%	1.54	1.50	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.53	1.47	4.1%	1.53	1.47	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.84	1.75	5.1%	1.84	1.75	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.87	--	--	2.87	--	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.87	--	--	2.87	--	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.36	2.70	-13.0%	2.36	2.70	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.36	2.70	-13.0%	2.36	2.70	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.24	2.41	-7.1%	2.24	2.41	--	--

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) May 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.61	1.56	3.2%	1.61	1.56	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.54	1.54	0.0%	1.54	1.54	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.88	1.77	6.2%	1.88	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.76	2.92	-5.5%	2.76	2.92	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.76	2.92	-5.5%	2.76	2.92	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.26	2.58	-12.0%	2.26	2.58	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.26	2.58	-12.0%	2.26	2.58	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.31	2.47	-6.5%	2.31	2.47	--	--

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019	May 2018	Percentage Change	May 2019	May 2018	May 2019	May 2018
New England	W	W	W	5.43	3.64	W	W
Connecticut	2.47	2.67	-7.5%	--	--	2.47	2.67
Maine	--	W	W	--	--	--	W
Massachusetts	W	2.40	W	2.54	2.63	W	2.40
New Hampshire	W	W	W	8.01	4.44	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.41	2.51	-4.0%	2.51	2.84	2.40	2.47
New Jersey	2.53	2.45	3.3%	--	--	2.53	2.45
New York	2.51	2.74	-8.4%	2.51	2.84	2.51	2.70
Pennsylvania	2.33	2.36	-1.3%	--	--	2.33	2.36
East North Central	2.53	2.84	-11.0%	2.65	2.94	2.47	2.77
Illinois	2.51	3.13	-20.0%	2.64	3.08	2.49	3.14
Indiana	2.62	2.94	-11.0%	2.86	3.07	2.48	2.75
Michigan	2.60	2.86	-9.1%	2.73	3.11	2.57	2.77
Ohio	2.40	2.61	-8.0%	2.43	2.53	2.40	2.65
Wisconsin	2.59	2.90	-11.0%	2.59	2.90	--	--
West North Central	W	W	W	2.46	2.59	W	W
Iowa	2.24	2.43	-7.8%	2.24	2.43	--	--
Kansas	2.45	2.57	-4.7%	2.45	2.57	--	--
Minnesota	W	W	W	2.98	2.96	W	W
Missouri	W	W	W	2.17	2.57	W	W
Nebraska	2.68	2.88	-6.9%	2.68	2.88	--	--
North Dakota	3.70	2.30	61.0%	3.70	2.30	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.43	3.85	-11.0%	3.50	3.97	2.84	3.18
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.66	4.12	W	W
Georgia	W	W	W	2.90	3.37	W	W
Maryland	2.90	3.43	-15.0%	3.09	3.16	2.85	3.50
North Carolina	W	W	W	3.78	4.83	W	W
South Carolina	3.17	W	W	3.17	3.50	--	W
Virginia	3.13	3.09	1.3%	3.23	3.18	2.69	2.86
West Virginia	W	W	W	2.46	2.77	W	W
East South Central	2.85	2.93	-2.7%	2.86	2.89	2.80	3.01
Alabama	W	W	W	2.87	3.00	W	W
Kentucky	W	W	W	3.27	3.01	W	W
Mississippi	W	W	W	2.76	2.86	W	W
Tennessee	2.82	2.61	8.0%	2.82	2.61	--	--
West South Central	2.45	2.77	-12.0%	2.38	2.70	2.50	2.83
Arkansas	W	W	W	2.62	2.90	W	W
Louisiana	W	W	W	2.70	2.98	W	W
Oklahoma	W	W	W	2.56	2.39	W	W
Texas	2.38	2.80	-15.0%	1.93	2.65	2.51	2.85
Mountain	2.00	2.48	-19.0%	1.98	2.45	2.20	3.87
Arizona	W	W	W	1.19	2.53	W	W
Colorado	W	W	W	3.10	2.80	W	W
Idaho	24.46	--	--	24.46	--	--	--
Montana	1.54	1.08	43.0%	1.54	1.08	--	--
Nevada	2.57	2.30	12.0%	2.57	2.30	--	--
New Mexico	0.56	2.10	-73.0%	0.56	2.10	--	--
Utah	2.24	2.40	-6.7%	2.24	2.40	--	--
Wyoming	W	W	W	2.30	2.40	W	W
Pacific Contiguous	2.80	2.74	2.2%	3.09	2.98	2.58	2.55
California	2.81	2.80	0.4%	3.05	3.04	2.63	2.63
Oregon	W	W	W	3.01	3.51	W	W
Washington	W	W	W	3.78	2.41	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	2.77	3.05	-9.2%	2.96	3.24	2.51	2.77

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	May 2019 YTD	May 2018 YTD	Percentage Change	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	4.90	6.07	-19.0%	7.73	4.34	4.90	6.07
Connecticut	4.29	5.77	-26.0%	--	--	4.29	5.77
Maine	W	W	W	--	--	W	W
Massachusetts	6.33	6.63	-4.5%	6.89	3.20	6.33	6.64
New Hampshire	W	W	W	9.65	7.65	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.24	3.72	-13.0%	4.42	5.12	3.14	3.59
New Jersey	3.40	3.56	-4.5%	--	--	3.40	3.56
New York	3.91	4.46	-12.0%	4.42	5.12	3.68	4.19
Pennsylvania	2.84	3.33	-15.0%	--	--	2.84	3.33
East North Central	2.92	3.05	-4.3%	3.09	3.21	2.83	2.95
Illinois	3.07	3.33	-7.8%	3.15	3.60	3.07	3.30
Indiana	2.94	3.17	-7.3%	3.08	3.34	2.85	3.02
Michigan	2.95	3.05	-3.3%	3.13	3.32	2.89	2.94
Ohio	2.77	2.85	-2.8%	2.88	2.88	2.75	2.84
Wisconsin	3.18	3.24	-1.9%	3.18	3.24	--	--
West North Central	W	W	W	3.08	2.96	W	W
Iowa	2.83	2.71	4.4%	2.83	2.71	--	--
Kansas	3.46	2.98	16.0%	3.46	2.98	--	--
Minnesota	W	W	W	3.41	3.39	W	W
Missouri	W	W	W	2.76	2.76	W	W
Nebraska	3.30	3.92	-16.0%	3.30	3.92	--	--
North Dakota	4.24	6.02	-30.0%	4.24	6.02	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.88	4.56	-15.0%	3.99	4.64	3.16	3.98
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.13	4.46	W	W
Georgia	W	W	W	3.32	3.77	W	W
Maryland	3.53	4.44	-20.0%	4.03	3.21	3.29	4.70
North Carolina	W	W	W	4.10	5.40	W	W
South Carolina	W	W	W	3.47	4.05	W	W
Virginia	3.95	5.26	-25.0%	4.23	6.19	3.02	3.06
West Virginia	2.76	W	W	3.07	3.28	2.63	W
East South Central	3.16	3.20	-1.2%	3.21	3.21	3.04	3.18
Alabama	W	W	W	3.19	3.21	W	W
Kentucky	W	W	W	3.70	3.58	W	W
Mississippi	W	W	W	3.08	3.14	W	W
Tennessee	3.14	3.04	3.3%	3.14	3.04	--	--
West South Central	2.78	3.02	-7.9%	2.79	3.02	2.76	3.01
Arkansas	W	W	W	2.90	3.05	W	W
Louisiana	W	W	W	2.98	3.24	W	W
Oklahoma	W	W	W	2.97	2.69	W	W
Texas	2.70	3.02	-11.0%	2.44	3.02	2.77	3.02
Mountain	W	3.08	W	3.06	3.05	W	3.94
Arizona	W	W	W	2.17	2.93	W	W
Colorado	W	W	W	3.48	3.91	W	W
Idaho	8.17	3.32	146.0%	8.17	3.32	--	--
Montana	2.05	1.52	35.0%	2.05	1.52	--	--
Nevada	3.83	2.85	34.0%	3.83	2.85	--	--
New Mexico	1.43	2.54	-44.0%	1.43	2.54	--	--
Utah	3.86	2.80	38.0%	3.86	2.80	--	--
Wyoming	W	W	W	3.01	3.17	W	W
Pacific Contiguous	4.56	W	W	4.79	3.45	4.35	W
California	4.65	3.28	42.0%	5.15	3.72	4.25	2.84
Oregon	W	W	W	3.25	2.22	W	W
Washington	W	W	W	5.22	3.38	W	W
Pacific Noncontiguous	7.76	8.08	-4.0%	7.76	8.08	--	--
Alaska	7.76	8.08	-4.0%	7.76	8.08	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.38	3.65	-7.4%	3.54	3.80	3.16	3.44

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, May 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	52	0.70	5.6	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	3	0.80	10.0	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	49	0.69	5.2	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,389	2.79	8.9	0	--	--	0	--	--
New Jersey	56	1.76	6.8	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,333	2.83	9.0	0	--	--	0	--	--
East North Central	5,228	3.26	10.2	6,537	0.24	4.6	0	--	--
Illinois	829	3.12	18.1	2,439	0.21	4.5	0	--	--
Indiana	1,997	2.87	9.0	180	0.19	4.4	0	--	--
Michigan	175	2.08	7.3	2,261	0.26	4.7	0	--	--
Ohio	2,152	3.77	9.2	0	--	--	0	--	--
Wisconsin	75	1.90	8.9	1,657	0.24	4.8	0	--	--
West North Central	65	3.30	8.9	7,092	0.28	5.0	1,376	0.80	9.7
Iowa	22	3.60	7.5	1,436	0.26	4.7	0	--	--
Kansas	11	3.62	13.8	1,029	0.32	5.1	0	--	--
Minnesota	0	--	--	1,291	0.34	6.0	0	--	--
Missouri	32	2.99	8.3	2,297	0.24	4.7	0	--	--
Nebraska	0	--	--	915	0.25	4.7	0	--	--
North Dakota	0	--	--	0	--	--	1,376	0.80	9.7
South Dakota	0	--	--	125	0.35	5.5	0	--	--
South Atlantic	5,652	2.42	10.0	791	0.34	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	808	2.35	8.2	0	--	--	0	--	--
Georgia	504	2.36	7.8	791	0.34	4.7	0	--	--
Maryland	197	2.24	12.9	0	--	--	0	--	--
North Carolina	1,092	1.81	9.9	0	--	--	0	--	--
South Carolina	494	1.58	9.4	0	--	--	0	--	--
Virginia	268	1.00	18.8	0	--	--	0	--	--
West Virginia	2,288	3.08	10.2	0	--	--	0	--	--
East South Central	3,104	2.57	9.3	1,440	0.31	5.4	300	0.47	13.7
Alabama	292	1.06	13.0	736	0.33	5.4	0	--	--
Kentucky	2,124	2.85	9.0	490	0.26	5.4	0	--	--
Mississippi	49	0.43	9.2	112	0.33	5.4	300	0.47	13.7
Tennessee	639	2.44	8.4	102	0.33	5.1	0	--	--
West South Central	14	2.33	9.4	4,453	0.29	5.0	1,728	0.99	16.0
Arkansas	4	0.46	9.5	465	0.22	4.9	0	--	--
Louisiana	10	3.18	9.3	426	0.26	4.8	119	0.51	15.1
Oklahoma	0	--	--	158	0.20	4.5	0	--	--
Texas	0	--	--	3,404	0.30	5.0	1,609	1.03	16.1
Mountain	1,787	0.58	12.6	3,635	0.50	8.6	12	0.49	9.4
Arizona	568	0.53	10.8	391	0.74	11.5	0	--	--
Colorado	109	0.45	11.1	965	0.29	5.3	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	317	0.69	9.2	12	0.49	9.4
Nevada	72	0.38	11.5	76	0.44	9.0	0	--	--
New Mexico	257	0.95	23.9	420	0.83	20.0	0	--	--
Utah	781	0.54	10.9	18	0.97	8.8	0	--	--
Wyoming	0	--	--	1,449	0.44	6.6	0	--	--
Pacific Contiguous	55	0.40	9.3	462	0.35	7.8	0	--	--
California	55	0.40	9.3	0	--	--	0	--	--
Oregon	0	--	--	125	0.26	4.9	0	--	--
Washington	0	--	--	336	0.38	8.9	0	--	--
Pacific Noncontiguous	0	--	--	62	0.18	4.0	9	0.18	11.9
Alaska	0	--	--	0	--	--	9	0.18	11.9
Hawaii	0	--	--	62	0.18	4.0	0	--	--
U.S. Total	17,345	2.55	10.1	24,472	0.31	5.5	3,425	0.87	13.2

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, May 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	49	0.69	5.2	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	49	0.69	5.2	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	2,424	2.82	8.9	4,606	0.25	4.7	0	--	--
Illinois	265	2.25	9.3	509	0.21	4.4	0	--	--
Indiana	1,838	2.83	9.0	180	0.19	4.4	0	--	--
Michigan	126	2.51	7.7	2,261	0.26	4.7	0	--	--
Ohio	148	3.89	9.1	0	--	--	0	--	--
Wisconsin	47	2.63	7.9	1,657	0.24	4.8	0	--	--
West North Central	43	3.15	9.7	6,847	0.28	5.1	1,376	0.80	9.7
Iowa	0	--	--	1,266	0.26	4.7	0	--	--
Kansas	11	3.62	13.8	1,029	0.32	5.1	0	--	--
Minnesota	0	--	--	1,291	0.34	6.0	0	--	--
Missouri	32	2.99	8.3	2,297	0.24	4.7	0	--	--
Nebraska	0	--	--	839	0.25	4.8	0	--	--
North Dakota	0	--	--	0	--	--	1,376	0.80	9.7
South Dakota	0	--	--	125	0.35	5.5	0	--	--
South Atlantic	5,012	2.40	10.1	791	0.34	4.7	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	808	2.35	8.2	0	--	--	0	--	--
Georgia	494	2.39	7.8	791	0.34	4.7	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,069	1.83	10.0	0	--	--	0	--	--
South Carolina	494	1.58	9.4	0	--	--	0	--	--
Virginia	226	1.06	21.5	0	--	--	0	--	--
West Virginia	1,920	3.08	10.5	0	--	--	0	--	--
East South Central	3,060	2.59	9.3	1,440	0.31	5.4	0	--	--
Alabama	292	1.06	13.0	736	0.33	5.4	0	--	--
Kentucky	2,124	2.85	9.0	490	0.26	5.4	0	--	--
Mississippi	49	0.43	9.2	112	0.33	5.4	0	--	--
Tennessee	595	2.56	8.4	102	0.33	5.1	0	--	--
West South Central	10	3.18	9.3	2,327	0.26	4.8	560	1.23	18.7
Arkansas	0	--	--	300	0.23	4.8	0	--	--
Louisiana	10	3.18	9.3	264	0.24	4.7	119	0.51	15.1
Oklahoma	0	--	--	158	0.20	4.5	0	--	--
Texas	0	--	--	1,605	0.27	4.9	441	1.45	19.9
Mountain	1,787	0.58	12.6	3,263	0.49	8.6	12	0.49	9.4
Arizona	568	0.53	10.8	391	0.74	11.5	0	--	--
Colorado	109	0.45	11.1	965	0.29	5.3	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	12	0.49	9.4
Nevada	72	0.38	11.5	61	0.46	9.8	0	--	--
New Mexico	257	0.95	23.9	420	0.83	20.0	0	--	--
Utah	781	0.54	10.9	18	0.97	8.8	0	--	--
Wyoming	0	--	--	1,409	0.44	6.6	0	--	--
Pacific Contiguous	0	--	--	125	0.26	4.9	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	125	0.26	4.9	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	9	0.18	11.9
Alaska	0	--	--	0	--	--	9	0.18	11.9
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,383	2.29	10.0	19,399	0.31	5.6	1,957	0.91	12.2

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, May 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	1,378	2.79	8.9	0	--	--	0	--	--
New Jersey	56	1.76	6.8	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,322	2.83	9.0	0	--	--	0	--	--
East North Central	2,710	3.67	11.3	1,851	0.21	4.5	0	--	--
Illinois	498	3.64	25.7	1,851	0.21	4.5	0	--	--
Indiana	159	3.31	8.5	0	--	--	0	--	--
Michigan	49	0.71	6.1	0	--	--	0	--	--
Ohio	2,004	3.76	9.2	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	0	--	--	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	573	2.72	9.7	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	180	2.27	12.2	0	--	--	0	--	--
North Carolina	2	0.68	6.1	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	23	0.73	7.9	0	--	--	0	--	--
West Virginia	368	3.08	8.6	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	300	0.47	13.7
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	300	0.47	13.7
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	2,126	0.32	5.1	1,169	0.89	14.8
Arkansas	0	--	--	165	0.21	5.1	0	--	--
Louisiana	0	--	--	162	0.29	4.8	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	1,799	0.33	5.2	1,169	0.89	14.8
Mountain	0	--	--	372	0.65	8.7	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	317	0.69	9.2	0	--	--
Nevada	0	--	--	15	0.33	5.7	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	40	0.46	5.5	0	--	--
Pacific Contiguous	0	--	--	336	0.38	8.9	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	336	0.38	8.9	0	--	--
Pacific Noncontiguous	0	--	--	62	0.18	4.0	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	62	0.18	4.0	0	--	--
U.S. Total	4,664	3.27	10.4	4,747	0.31	5.4	1,468	0.82	14.6

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

Notes:
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, May 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	0	--	--	0	--	--	0	--	--
Illinois	0	--	--	0	--	--	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	0	--	--	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	0	--	--	0	--	--	0	--	--

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 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, May 2019

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	11	2.28	8.1	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	11	2.28	8.1	0	--	--	0	--	--
East North Central	94	2.58	9.4	80	0.22	5.6	0	--	--
Illinois	66	3.50	8.8	80	0.22	5.6	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	28	0.50	10.6	0	--	--	0	--	--
West North Central	22	3.60	7.5	245	0.21	4.4	0	--	--
Iowa	22	3.60	7.5	169	0.21	4.5	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	76	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	67	1.02	10.9	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	10	0.90	11.4	0	--	--	0	--	--
Maryland	17	1.82	21.8	0	--	--	0	--	--
North Carolina	21	0.80	7.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	20	0.75	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	44	1.01	7.6	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	44	1.01	7.6	0	--	--	0	--	--
West South Central	4	0.46	9.5	0	--	--	0	--	--
Arkansas	4	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	55	0.40	9.3	0	--	--	0	--	--
California	55	0.40	9.3	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	297	1.59	9.3	326	0.21	4.7	0	--	--

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W = Withheld to avoid disclosure of individual company data.

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 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 - May 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
Year to Date					
2017	522,282	528,762	395,906	3,119	1,450,070
2018	567,823	540,025	381,520	3,218	1,492,587
2019	552,325	535,714	384,548	3,253	1,475,840
Rolling 12 Months Ending in May					
2018	1,424,189	1,364,150	969,912	7,622	3,765,873
2019	1,448,875	1,372,430	956,104	7,772	3,785,181

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 - May 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
Year to Date					
2017	66,360	55,139	26,386	296	148,182
2018	72,354	56,765	25,816	307	155,242
2019	71,105	56,018	25,563	314	153,000
Rolling 12 Months Ending in May					
2018	183,656	145,867	67,121	739	397,383
2019	187,493	145,949	65,836	763	400,041

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Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

Table 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - May 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
Year to Date					
2017	12.71	10.43	6.66	9.49	10.22
2018	12.74	10.51	6.77	9.53	10.40
2019	12.87	10.46	6.65	9.65	10.37
Rolling 12 Months Ending in May					
2018	12.90	10.69	6.92	9.70	10.55
2019	12.94	10.63	6.89	9.82	10.57

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Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report.
Form EIA-826, Monthly Electric Sales and Revenue Report with State Distributions Report;
Form EIA-861, Annual Electric Power Industry Report; and Form EIA-861S, Annual Electric Power Industry Report (Short Form).

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	3,126	3,154	3,960	4,074	1,323	1,383	50	45	8,459	8,656
Connecticut	814	836	930	1,007	248	319	21	15	2,013	2,177
Maine	364	329	338	303	271	229	0	0	973	861
Massachusetts	1,292	1,331	1,921	1,973	487	499	27	27	3,727	3,830
New Hampshire	303	303	337	351	158	164	0	0	798	818
Rhode Island	210	211	283	283	51	60	2	2	546	557
Vermont	143	143	151	158	109	112	0	0	402	414
Middle Atlantic	8,634	9,082	12,128	12,257	5,767	6,024	282	296	26,811	27,659
New Jersey	1,862	1,988	3,037	3,122	617	603	22	23	5,538	5,736
New York	3,397	3,464	5,713	5,764	1,117	1,362	212	217	10,439	10,806
Pennsylvania	3,375	3,630	3,377	3,371	4,034	4,060	48	56	10,835	11,116
East North Central	11,975	13,809	14,446	15,538	15,452	16,167	49	47	41,922	45,561
Illinois	2,875	3,466	3,868	4,227	3,479	3,618	45	42	10,268	11,353
Indiana	2,080	2,393	1,896	2,044	3,516	3,636	2	2	7,493	8,075
Michigan	2,219	2,526	3,021	3,250	2,454	2,700	1	1	7,694	8,477
Ohio	3,290	3,772	3,797	4,055	4,015	4,165	3	3	11,104	11,995
Wisconsin	1,511	1,651	1,864	1,962	1,988	2,048	0	0	5,363	5,661
West North Central	6,763	7,685	8,065	8,609	7,408	7,512	4	4	22,239	23,810
Iowa	919	961	929	967	1,933	1,966	0	0	3,781	3,894
Kansas	887	1,153	1,223	1,313	940	953	0	0	3,051	3,419
Minnesota	1,484	1,611	1,795	1,927	1,701	1,755	2	2	4,981	5,294
Missouri	2,217	2,625	2,466	2,693	986	997	2	2	5,671	6,316
Nebraska	626	690	740	803	873	901	0	0	2,239	2,394
North Dakota	304	315	527	512	755	715	0	0	1,586	1,543
South Dakota	326	329	385	395	220	225	0	0	931	950
South Atlantic	28,257	26,476	27,500	26,666	11,976	12,301	114	105	67,847	65,548
Delaware	306	311	362	347	154	199	0	0	822	858
District of Columbia	181	167	690	673	20	15	29	27	920	882
Florida	10,525	9,340	8,407	7,903	1,447	1,418	8	7	20,387	18,668
Georgia	4,680	4,265	4,130	4,029	2,758	2,758	14	14	11,582	11,066
Maryland	1,781	1,864	2,466	2,430	322	340	45	42	4,614	4,676
North Carolina	4,480	4,344	4,237	4,167	2,385	2,437	2	1	11,103	10,949
South Carolina	2,493	2,287	1,937	1,895	2,303	2,391	0	0	6,733	6,573
Virginia	3,149	3,130	4,649	4,559	1,332	1,526	17	14	9,146	9,229
West Virginia	662	768	622	663	1,255	1,217	0	0	2,538	2,648
East South Central	8,213	8,501	7,569	7,684	8,160	8,056	0	0	23,943	24,241
Alabama	2,474	2,414	1,942	1,960	2,804	2,876	0	0	7,220	7,250
Kentucky	1,782	2,008	1,606	1,667	2,353	2,205	0	0	5,740	5,880
Mississippi	1,276	1,263	1,109	1,113	1,380	1,429	0	0	3,765	3,805
Tennessee	2,682	2,816	2,913	2,945	1,623	1,545	0	0	7,218	7,306
West South Central	15,589	16,437	15,925	16,646	16,154	15,552	16	15	47,684	48,650
Arkansas	1,111	1,206	919	984	1,423	1,482	0	0	3,452	3,672
Louisiana	2,183	2,220	1,973	2,012	2,868	2,886	1	1	7,025	7,120
Oklahoma	1,550	1,881	1,590	1,980	1,770	1,567	0	0	4,910	5,427
Texas	10,746	11,131	11,443	11,670	10,093	9,617	15	14	32,296	32,431
Mountain	6,684	7,546	7,855	8,170	6,963	7,006	15	13	21,518	22,736
Arizona	2,365	2,885	2,313	2,536	1,120	1,165	1	1	5,799	6,586
Colorado	1,357	1,420	1,664	1,673	1,346	1,326	9	7	4,375	4,426
Idaho	540	543	498	510	793	853	0	0	1,831	1,906
Montana	346	351	378	398	383	338	0	0	1,106	1,086
Nevada	822	1,045	1,026	1,033	993	997	1	1	2,842	3,076
New Mexico	449	505	752	795	714	673	0	0	1,914	1,973
Utah	616	617	937	934	756	788	4	4	2,314	2,344
Wyoming	190	181	287	292	858	866	0	0	1,335	1,339
Pacific Contiguous	10,219	10,345	12,912	12,488	7,098	7,057	80	67	30,309	29,956
California	6,556	6,621	9,284	8,923	4,077	4,053	67	64	19,984	19,661
Oregon	1,269	1,316	1,337	1,230	978	894	2	2	3,587	3,443
Washington	2,394	2,407	2,291	2,334	2,043	2,110	11	1	6,738	6,853
Pacific Noncontiguous	360	359	463	464	405	402	0	0	1,227	1,226
Alaska	146	149	211	213	104	111	0	0	460	473
Hawaii	214	210	252	251	301	292	0	0	767	752
U.S. Total	99,820	103,395	110,823	112,597	80,706	81,461	610	591	291,959	298,044

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	18,939	19,161	20,743	20,723	6,367	6,424	233	236	46,283	46,544
Connecticut	4,992	5,159	4,792	4,876	1,207	1,273	73	74	11,064	11,383
Maine	2,105	2,014	1,698	1,609	1,102	1,097	0	0	4,905	4,719
Massachusetts	7,912	8,033	10,288	10,209	2,447	2,406	149	151	20,795	20,798
New Hampshire	1,877	1,888	1,728	1,755	769	779	0	0	4,373	4,422
Rhode Island	1,159	1,169	1,440	1,464	279	305	11	12	2,889	2,949
Vermont	895	898	797	811	565	563	0	0	2,257	2,272
Middle Atlantic	52,544	54,067	62,259	63,022	29,158	29,529	1,627	1,694	145,587	148,312
New Jersey	10,144	10,516	15,015	15,319	2,776	2,836	127	134	28,061	28,805
New York	19,525	19,904	29,790	30,083	6,618	6,890	1,195	1,259	57,128	58,136
Pennsylvania	22,876	23,647	17,453	17,619	19,764	19,803	305	301	60,398	61,371
East North Central	73,848	76,649	72,558	74,287	74,998	75,753	302	259	221,706	226,948
Illinois	17,286	18,081	19,948	20,431	16,965	17,136	271	228	54,469	55,876
Indiana	13,184	13,799	9,411	9,653	17,011	16,912	9	9	39,615	40,373
Michigan	13,271	13,690	15,226	15,547	11,927	12,326	3	3	40,426	41,565
Ohio	20,985	21,957	18,490	18,926	19,398	19,631	19	19	58,892	60,533
Wisconsin	9,121	9,122	9,484	9,731	9,698	9,748	1	0	28,303	28,601
West North Central	43,313	44,486	41,264	41,896	35,766	35,429	22	22	120,364	121,834
Iowa	6,027	6,081	5,003	5,042	9,505	9,345	0	0	20,535	20,469
Kansas	4,962	5,239	6,047	6,158	4,451	4,419	0	0	15,460	15,816
Minnesota	9,321	9,368	9,191	9,432	8,410	8,467	11	12	26,934	27,278
Missouri	14,016	14,826	12,202	12,499	4,582	4,605	11	11	30,811	31,940
Nebraska	4,335	4,361	3,846	3,887	4,001	4,093	0	0	12,182	12,341
North Dakota	2,395	2,391	2,896	2,815	3,730	3,399	0	0	9,022	8,605
South Dakota	2,256	2,221	2,077	2,064	1,087	1,101	0	0	5,420	5,386
South Atlantic	139,738	143,943	123,506	122,888	56,169	56,311	554	527	319,967	323,670
Delaware	1,994	2,081	1,722	1,719	744	842	0	0	4,460	4,643
District of Columbia	995	1,006	3,174	3,268	81	71	130	129	4,380	4,474
Florida	45,232	45,012	37,022	36,516	6,581	6,586	36	32	88,871	88,145
Georgia	21,934	22,455	18,291	18,427	12,913	12,865	69	71	53,207	53,818
Maryland	11,166	11,695	11,546	11,770	1,514	1,488	227	213	24,453	25,166
North Carolina	23,187	24,381	19,075	19,045	10,752	10,743	7	2	53,021	54,171
South Carolina	11,669	12,251	8,374	8,435	10,963	11,003	0	0	31,007	31,689
Virginia	18,737	19,825	21,230	20,524	6,595	6,873	84	80	46,645	47,302
West Virginia	4,825	5,237	3,072	3,185	6,027	5,840	0	0	13,924	14,262
East South Central	46,126	49,313	35,351	36,181	39,393	38,908	0	0	120,871	124,402
Alabama	12,048	12,638	8,632	8,875	13,489	13,835	0	0	34,169	35,348
Kentucky	10,644	11,441	7,625	7,730	11,416	10,822	0	0	29,685	29,993
Mississippi	6,897	7,329	5,115	5,282	6,734	6,854	0	0	18,746	19,465
Tennessee	16,537	17,906	13,979	14,293	7,755	7,397	0	0	38,271	39,596
West South Central	81,137	84,278	76,159	76,277	75,624	72,036	78	77	232,999	232,668
Arkansas	7,193	7,498	4,485	4,604	6,899	7,028	0	0	18,577	19,130
Louisiana	11,077	11,780	9,266	9,528	14,254	13,993	5	5	34,602	35,305
Oklahoma	8,778	9,214	7,578	8,145	8,006	7,289	0	0	24,363	24,648
Texas	54,089	55,787	54,829	54,000	46,465	43,726	73	72	155,456	153,585
Mountain	36,202	35,647	38,095	38,053	32,725	32,227	78	65	107,101	105,992
Arizona	11,170	11,200	10,936	11,139	5,388	5,459	4	3	27,498	27,801
Colorado	7,401	7,287	8,222	8,104	6,356	6,322	49	38	22,028	21,751
Idaho	3,694	3,541	2,582	2,574	2,919	2,962	0	0	9,196	9,077
Montana	2,457	2,397	2,095	2,098	1,896	1,729	0	0	6,448	6,224
Nevada	4,118	4,163	4,544	4,513	4,799	4,669	3	3	13,464	13,349
New Mexico	2,560	2,526	3,546	3,548	3,428	3,135	0	0	9,534	9,209
Utah	3,505	3,292	4,646	4,535	3,627	3,699	21	21	11,799	11,547
Wyoming	1,297	1,240	1,524	1,541	4,312	4,252	0	0	7,133	7,034
Pacific Contiguous	58,593	58,307	63,491	64,342	32,471	32,946	359	337	154,914	155,932
California	32,949	33,146	44,377	45,380	17,713	18,377	317	322	95,355	97,225
Oregon	8,628	8,527	6,768	6,594	4,770	4,572	12	11	20,178	19,704
Washington	17,016	16,634	12,346	12,369	9,988	9,998	30	3	39,380	39,003
Pacific Noncontiguous	1,885	1,971	2,288	2,357	1,876	1,957	0	0	6,049	6,284
Alaska	877	905	1,133	1,158	495	560	0	0	2,505	2,623
Hawaii	1,009	1,065	1,155	1,199	1,381	1,397	0	0	3,544	3,661
U.S. Total	552,325	567,823	535,714	540,025	384,548	381,520	3,253	3,218	1,475,840	1,492,587

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

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	675	650	638	648	165	174	4	3	1,483	1,475
Connecticut	190	180	160	167	33	40	2	2	385	388
Maine	66	54	44	37	25	20	0	0	135	111
Massachusetts	288	288	310	318	68	71	1	1	667	679
New Hampshire	63	60	53	57	20	22	0	0	136	140
Rhode Island	44	42	47	44	8	9	0	0	100	96
Vermont	25	26	24	24	12	11	0	0	61	62
Middle Atlantic	1,384	1,477	1,456	1,478	384	415	32	33	3,255	3,403
New Jersey	313	316	392	382	65	58	2	2	772	758
New York	590	641	767	790	64	89	26	27	1,448	1,548
Pennsylvania	481	520	296	305	255	268	4	4	1,035	1,097
East North Central	1,685	1,889	1,485	1,585	1,059	1,122	4	3	4,232	4,599
Illinois	407	458	355	374	226	233	3	3	991	1,068
Indiana	272	294	206	208	256	257	0	0	734	760
Michigan	349	402	344	372	173	197	0	0	867	971
Ohio	425	483	373	409	255	277	0	0	1,054	1,170
Wisconsin	232	251	206	222	149	158	0	0	587	630
West North Central	873	986	807	862	531	547	0	0	2,212	2,395
Iowa	129	128	97	94	117	112	0	0	343	333
Kansas	120	156	130	137	67	75	0	0	318	368
Minnesota	206	222	195	204	136	140	0	0	536	567
Missouri	271	327	235	271	68	75	0	0	573	673
Nebraska	73	79	66	72	63	66	0	0	202	217
North Dakota	35	35	48	47	64	61	0	0	146	143
South Dakota	40	40	36	37	17	17	0	0	93	94
South Atlantic	3,389	3,152	2,550	2,465	754	770	9	8	6,703	6,395
Delaware	43	43	35	34	11	14	0	0	90	90
District of Columbia	25	23	86	78	2	1	3	2	116	105
Florida	1,234	1,078	790	734	111	108	1	1	2,136	1,920
Georgia	550	495	401	387	160	153	1	1	1,112	1,036
Maryland	240	248	245	250	25	28	3	3	512	529
North Carolina	517	496	359	347	140	141	0	0	1,016	983
South Carolina	309	294	192	191	135	141	0	0	635	626
Virginia	392	384	386	380	95	105	1	1	875	870
West Virginia	79	90	57	64	75	81	0	0	211	235
East South Central	966	974	805	800	476	477	0	0	2,247	2,251
Alabama	319	302	226	220	177	179	0	0	723	701
Kentucky	199	214	163	158	128	125	0	0	490	497
Mississippi	152	152	117	121	84	86	0	0	354	359
Tennessee	295	306	299	301	87	87	0	0	681	694
West South Central	1,792	1,812	1,275	1,349	854	842	1	1	3,922	4,004
Arkansas	113	119	80	74	83	78	0	0	276	271
Louisiana	222	211	180	174	162	149	0	0	565	534
Oklahoma	161	190	120	149	85	81	0	0	366	419
Texas	1,295	1,291	895	952	524	535	1	1	2,715	2,779
Mountain	816	926	758	812	425	451	1	1	2,000	2,191
Arizona	313	384	252	288	71	80	0	0	637	752
Colorado	163	170	167	169	96	96	1	1	427	435
Idaho	56	57	39	42	48	59	0	0	143	158
Montana	40	40	40	41	17	16	0	0	98	97
Nevada	101	126	77	81	52	54	0	0	230	260
New Mexico	55	61	72	77	39	38	0	0	165	176
Utah	65	67	83	85	43	48	0	0	191	201
Wyoming	22	22	29	29	58	60	0	0	109	111
Pacific Contiguous	1,616	1,633	1,773	1,710	669	660	7	6	4,064	4,009
California	1,239	1,252	1,452	1,396	520	513	5	5	3,216	3,166
Oregon	143	147	120	113	58	56	0	0	321	316
Washington	235	234	200	201	91	92	1	0	527	527
Pacific Noncontiguous	105	100	119	114	97	94	0	0	320	308
Alaska	33	33	42	40	17	19	0	0	93	92
Hawaii	72	67	76	74	80	75	0	0	228	216
U.S. Total	13,300	13,600	11,666	11,821	5,415	5,553	58	56	30,439	31,029

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	4,029	3,949	3,426	3,385	835	844	25	23	8,315	8,200
Connecticut	1,128	1,084	839	817	169	175	12	10	2,148	2,086
Maine	316	321	206	199	99	101	0	0	621	622
Massachusetts	1,789	1,767	1,718	1,723	357	354	11	11	3,874	3,856
New Hampshire	381	371	282	279	104	107	0	0	766	757
Rhode Island	263	245	255	243	46	47	2	2	567	538
Vermont	152	160	127	123	61	59	0	0	339	342
Middle Atlantic	8,120	8,523	7,276	7,571	1,948	2,088	178	182	17,522	18,364
New Jersey	1,642	1,646	1,838	1,843	284	286	11	11	3,775	3,786
New York	3,385	3,578	3,902	4,124	370	423	144	148	7,801	8,273
Pennsylvania	3,093	3,299	1,536	1,604	1,294	1,379	23	23	5,946	6,305
East North Central	9,788	10,095	7,400	7,527	5,233	5,334	22	18	22,443	22,973
Illinois	2,250	2,298	1,797	1,824	1,131	1,147	19	15	5,197	5,285
Indiana	1,628	1,626	1,019	994	1,260	1,207	1	1	3,908	3,828
Michigan	2,026	2,133	1,718	1,753	866	907	0	0	4,609	4,793
Ohio	2,565	2,716	1,833	1,893	1,242	1,331	1	1	5,640	5,941
Wisconsin	1,320	1,321	1,034	1,063	735	742	0	0	3,089	3,126
West North Central	4,874	5,049	3,815	3,925	2,535	2,497	2	2	11,225	11,473
Iowa	732	723	480	468	573	549	0	0	1,785	1,740
Kansas	614	681	601	638	325	327	0	0	1,540	1,646
Minnesota	1,213	1,201	944	946	654	636	1	1	2,812	2,784
Missouri	1,392	1,528	1,012	1,098	287	307	1	1	2,691	2,934
Nebraska	442	440	334	336	300	305	0	0	1,077	1,081
North Dakota	233	230	254	248	313	288	0	0	800	766
South Dakota	247	245	190	191	83	85	0	0	521	521
South Atlantic	16,568	16,885	11,629	11,652	3,486	3,621	44	40	31,727	32,198
Delaware	253	262	174	166	57	65	0	0	484	493
District of Columbia	134	131	393	385	7	6	14	12	547	533
Florida	5,362	5,300	3,544	3,502	505	515	3	3	9,414	9,320
Georgia	2,455	2,489	1,767	1,797	708	729	3	4	4,932	5,018
Maryland	1,502	1,541	1,194	1,241	119	127	17	15	2,832	2,925
North Carolina	2,672	2,707	1,664	1,645	642	649	1	0	4,978	5,001
South Carolina	1,459	1,572	850	897	631	675	0	0	2,941	3,144
Virginia	2,213	2,288	1,765	1,713	458	470	7	7	4,443	4,478
West Virginia	518	595	279	305	359	386	0	0	1,156	1,286
East South Central	5,225	5,453	3,781	3,799	2,263	2,246	0	0	11,269	11,498
Alabama	1,522	1,549	998	1,007	794	819	0	0	3,315	3,375
Kentucky	1,119	1,181	755	739	611	595	0	0	2,486	2,514
Mississippi	790	836	547	571	412	410	0	0	1,749	1,817
Tennessee	1,793	1,887	1,480	1,483	446	422	0	0	3,719	3,792
West South Central	8,955	9,034	6,208	6,314	3,961	3,869	5	7	19,130	19,224
Arkansas	692	738	388	375	400	389	0	0	1,479	1,502
Louisiana	1,040	1,090	827	859	747	738	0	1	2,613	2,688
Oklahoma	857	917	561	623	389	370	0	0	1,807	1,909
Texas	6,366	6,289	4,432	4,457	2,426	2,373	5	6	13,229	13,125
Mountain	4,244	4,213	3,548	3,602	1,999	1,989	7	6	9,798	9,810
Arizona	1,407	1,423	1,110	1,167	331	338	0	0	2,848	2,928
Colorado	890	859	813	788	456	451	4	3	2,163	2,101
Idaho	363	361	198	205	167	185	0	0	728	752
Montana	270	261	214	211	112	83	0	0	596	556
Nevada	499	515	350	359	244	250	0	0	1,093	1,123
New Mexico	317	310	340	345	191	181	0	0	848	837
Utah	358	345	377	378	211	210	2	2	948	936
Wyoming	141	138	146	148	287	290	0	0	574	577
Pacific Contiguous	8,771	8,623	8,359	8,423	2,849	2,878	31	29	20,009	19,953
California	6,220	6,105	6,673	6,752	2,066	2,144	27	28	14,986	15,028
Oregon	934	919	606	591	301	275	1	1	1,842	1,787
Washington	1,617	1,599	1,079	1,080	482	458	3	0	3,181	3,137
Pacific Noncontiguous	533	532	577	566	452	451	0	0	1,562	1,549
Alaska	195	195	225	216	85	97	0	0	505	509
Hawaii	337	337	352	349	367	354	0	0	1,057	1,040
U.S. Total	71,105	72,354	56,018	56,765	25,563	25,816	314	307	153,000	155,242

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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, May 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	21.61	20.61	16.12	15.89	12.50	12.58	8.38	7.62	17.54	17.04
Connecticut	23.35	21.54	17.21	16.56	13.20	12.45	11.66	11.08	19.14	17.83
Maine	18.14	16.27	12.92	12.20	9.22	8.95	--	--	13.84	12.89
Massachusetts	22.27	21.64	16.14	16.13	13.93	14.30	4.97	4.82	17.89	17.73
New Hampshire	20.72	19.76	15.77	16.37	12.81	13.54	--	--	17.06	17.06
Rhode Island	20.95	20.03	16.68	15.59	15.83	14.54	18.81	16.87	18.25	17.17
Vermont	17.39	18.35	16.13	15.29	10.64	10.21	--	--	15.10	14.98
Middle Atlantic	16.02	16.26	12.01	12.06	6.65	6.89	11.25	11.09	12.14	12.30
New Jersey	16.80	15.88	12.92	12.24	10.53	9.62	8.77	8.61	13.94	13.21
New York	17.38	18.52	13.43	13.71	5.74	6.55	12.36	12.27	13.87	14.32
Pennsylvania	14.24	14.32	8.77	9.06	6.31	6.60	7.48	7.51	9.55	9.87
East North Central	14.07	13.68	10.28	10.20	6.85	6.94	7.39	6.77	10.10	10.09
Illinois	14.14	13.21	9.17	8.84	6.51	6.45	7.21	6.51	9.65	9.41
Indiana	13.06	12.30	10.86	10.20	7.29	7.06	11.15	10.68	9.80	9.41
Michigan	15.74	15.92	11.40	11.44	7.05	7.28	10.60	11.31	11.27	11.45
Ohio	12.93	12.81	9.83	10.09	6.35	6.66	7.46	7.64	9.49	9.76
Wisconsin	15.34	15.21	11.07	11.30	7.47	7.71	14.21	13.86	10.94	11.14
West North Central	12.91	12.83	10.01	10.01	7.17	7.28	8.24	8.60	9.95	10.06
Iowa	14.02	13.28	10.46	9.68	6.05	5.70	--	--	9.07	8.56
Kansas	13.58	13.51	10.65	10.45	7.15	7.92	--	--	10.42	10.77
Minnesota	13.86	13.77	10.85	10.60	7.98	8.00	9.43	9.33	10.77	10.70
Missouri	12.20	12.45	9.51	10.05	6.90	7.55	7.03	7.82	10.11	10.65
Nebraska	11.69	11.42	8.96	8.98	7.17	7.33	--	--	9.02	9.06
North Dakota	11.41	11.26	9.06	9.20	8.45	8.46	--	--	9.22	9.28
South Dakota	12.17	12.10	9.47	9.40	7.77	7.66	--	--	10.02	9.92
South Atlantic	11.99	11.90	9.27	9.24	6.29	6.26	8.10	7.75	9.88	9.76
Delaware	14.00	13.73	9.80	9.67	7.44	7.09	--	--	10.92	10.55
District of Columbia	13.87	13.73	12.46	11.59	8.25	7.98	10.47	9.10	12.58	11.86
Florida	11.73	11.54	9.40	9.29	7.65	7.60	7.79	7.86	10.48	10.29
Georgia	11.75	11.62	9.72	9.62	5.82	5.54	5.12	4.96	9.60	9.37
Maryland	13.45	13.33	9.92	10.28	7.67	8.15	7.44	7.61	11.10	11.32
North Carolina	11.54	11.41	8.46	8.33	5.86	5.77	8.11	8.26	9.15	8.98
South Carolina	12.38	12.85	9.90	10.09	5.86	5.89	--	--	9.44	9.53
Virginia	12.46	12.28	8.29	8.33	7.15	6.85	8.35	8.32	9.56	9.43
West Virginia	11.98	11.78	9.10	9.59	5.96	6.63	--	--	8.30	8.86
East South Central	11.76	11.46	10.64	10.41	5.84	5.92	--	--	9.39	9.29
Alabama	12.90	12.49	11.66	11.23	6.33	6.24	--	--	10.01	9.67
Kentucky	11.18	10.66	10.16	9.49	5.43	5.66	--	--	8.54	8.45
Mississippi	11.94	12.07	10.58	10.83	6.08	6.02	--	--	9.39	9.44
Tennessee	10.99	10.87	10.25	10.22	5.38	5.63	--	--	9.43	9.50
West South Central	11.50	11.02	8.00	8.10	5.29	5.41	6.69	8.53	8.22	8.23
Arkansas	10.19	9.89	8.68	7.54	5.82	5.23	13.38	11.81	7.98	7.38
Louisiana	10.19	9.53	9.14	8.65	5.65	5.15	9.51	9.23	8.04	7.51
Oklahoma	10.42	10.09	7.53	7.52	4.82	5.14	--	--	7.46	7.72
Texas	12.06	11.60	7.82	8.16	5.19	5.56	6.46	8.46	8.41	8.57
Mountain	12.20	12.28	9.64	9.94	6.11	6.44	8.99	9.28	9.29	9.64
Arizona	13.25	13.30	10.87	11.35	6.38	6.90	9.99	10.45	10.98	11.42
Colorado	12.02	11.96	10.05	10.10	7.13	7.24	8.13	8.56	9.76	9.84
Idaho	10.37	10.55	7.81	8.16	6.09	6.95	--	--	7.82	8.30
Montana	11.66	11.43	10.62	10.36	4.50	4.70	--	--	8.83	8.94
Nevada	12.34	12.05	7.46	7.80	5.27	5.37	7.88	7.47	8.10	8.46
New Mexico	12.21	12.14	9.53	9.72	5.45	5.62	--	--	8.63	8.94
Utah	10.50	10.79	8.88	9.12	5.69	6.13	10.59	10.66	8.27	8.56
Wyoming	11.57	11.98	9.92	9.96	6.77	6.95	--	--	8.13	8.29
Pacific Contiguous	15.82	15.79	13.73	13.69	9.42	9.36	8.12	8.32	13.41	13.38
California	18.89	18.91	15.64	15.64	12.75	12.65	7.88	8.28	16.09	16.10
Oregon	11.25	11.20	8.98	9.17	5.94	6.21	9.21	9.20	8.95	9.18
Washington	9.81	9.70	8.74	8.62	4.44	4.37	9.32	9.00	7.82	7.69
Pacific Noncontiguous	29.07	27.92	25.67	24.49	23.99	23.44	--	--	26.11	25.15
Alaska	22.65	22.14	20.12	18.78	16.56	17.51	--	--	20.12	19.54
Hawaii	33.43	32.03	30.32	29.35	26.56	25.70	--	--	29.71	28.68
U.S. Total	13.32	13.15	10.53	10.50	6.71	6.82	9.51	9.46	10.43	10.41

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 May 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD	May 2019 YTD	May 2018 YTD
New England	21.27	20.61	16.52	16.33	13.11	13.13	10.74	9.61	17.97	17.62
Connecticut	22.60	21.01	17.50	16.76	13.99	13.76	16.93	13.39	19.42	18.33
Maine	15.03	15.96	12.12	12.39	8.99	9.24	--	--	12.67	13.18
Massachusetts	22.61	22.00	16.70	16.88	14.59	14.73	7.07	7.19	18.63	18.54
New Hampshire	20.28	19.66	16.29	15.91	13.47	13.67	--	--	17.51	17.12
Rhode Island	22.71	20.99	17.74	16.63	16.55	15.47	19.20	16.96	19.62	18.24
Vermont	16.97	17.80	15.88	15.14	10.72	10.49	--	--	15.02	15.04
Middle Atlantic	15.45	15.76	11.69	12.01	6.68	7.07	10.93	10.77	12.04	12.38
New Jersey	16.19	15.65	12.24	12.03	10.25	10.07	8.63	8.57	13.45	13.14
New York	17.34	17.98	13.10	13.71	5.60	6.14	12.02	11.77	13.66	14.23
Pennsylvania	13.52	13.95	8.80	9.11	6.55	6.96	7.61	7.60	9.84	10.27
East North Central	13.25	13.17	10.20	10.13	6.98	7.04	7.18	6.80	10.12	10.12
Illinois	13.01	12.71	9.01	8.93	6.67	6.70	7.01	6.57	9.54	9.46
Indiana	12.35	11.78	10.83	10.30	7.40	7.13	11.04	10.58	9.86	9.48
Michigan	15.26	15.58	11.28	11.27	7.26	7.36	10.35	10.99	11.40	11.53
Ohio	12.22	12.37	9.91	10.00	6.40	6.78	7.12	7.12	9.58	9.81
Wisconsin	14.47	14.48	10.90	10.93	7.58	7.61	13.70	13.79	10.91	10.93
West North Central	11.25	11.35	9.24	9.37	7.09	7.05	8.09	8.20	9.33	9.42
Iowa	12.15	11.90	9.59	9.28	6.03	5.87	--	--	8.69	8.50
Kansas	12.37	12.99	9.94	10.36	7.30	7.41	--	--	9.96	10.41
Minnesota	13.02	12.82	10.27	10.03	7.77	7.52	9.64	9.22	10.44	10.21
Missouri	9.93	10.31	8.29	8.79	6.26	6.66	6.45	7.07	8.73	9.19
Nebraska	10.20	10.09	8.69	8.66	7.51	7.44	--	--	8.84	8.76
North Dakota	9.71	9.64	8.75	8.80	8.40	8.47	--	--	8.86	8.90
South Dakota	10.95	11.05	9.16	9.26	7.67	7.70	--	--	9.61	9.68
South Atlantic	11.86	11.73	9.42	9.48	6.21	6.43	8.00	7.64	9.92	9.95
Delaware	12.69	12.58	10.09	9.68	7.72	7.71	--	--	10.86	10.62
District of Columbia	13.51	12.97	12.37	11.77	8.41	8.17	10.42	9.25	12.50	11.91
Florida	11.86	11.77	9.57	9.59	7.67	7.82	8.25	8.10	10.59	10.57
Georgia	11.19	11.08	9.66	9.75	5.48	5.66	4.81	5.29	9.27	9.32
Maryland	13.45	13.18	10.34	10.55	7.86	8.55	7.49	7.11	11.58	11.62
North Carolina	11.52	11.10	8.72	8.64	5.97	6.04	8.26	8.35	9.39	9.23
South Carolina	12.50	12.84	10.15	10.64	5.76	6.13	--	--	9.48	9.92
Virginia	11.81	11.54	8.32	8.35	6.95	6.84	8.13	8.33	9.53	9.47
West Virginia	10.73	11.36	9.08	9.58	5.96	6.61	--	--	8.30	9.02
East South Central	11.33	11.06	10.69	10.50	5.75	5.77	--	--	9.32	9.24
Alabama	12.63	12.26	11.57	11.34	5.89	5.92	--	--	9.70	9.55
Kentucky	10.52	10.32	9.90	9.56	5.36	5.49	--	--	8.37	8.38
Mississippi	11.46	11.41	10.69	10.81	6.11	5.98	--	--	9.33	9.33
Tennessee	10.84	10.54	10.59	10.37	5.76	5.71	--	--	9.72	9.58
West South Central	11.04	10.72	8.15	8.28	5.24	5.37	6.71	8.55	8.21	8.26
Arkansas	9.62	9.84	8.65	8.15	5.79	5.53	11.77	11.52	7.96	7.85
Louisiana	9.38	9.26	8.92	9.02	5.24	5.27	9.25	9.95	7.55	7.61
Oklahoma	9.77	9.95	7.40	7.64	4.86	5.07	--	--	7.42	7.75
Texas	11.77	11.27	8.08	8.25	5.22	5.43	6.52	8.45	8.51	8.55
Mountain	11.72	11.82	9.31	9.47	6.11	6.17	9.33	9.44	9.15	9.26
Arizona	12.60	12.70	10.15	10.48	6.14	6.19	9.23	9.38	10.36	10.53
Colorado	12.02	11.79	9.88	9.72	7.18	7.13	8.92	8.89	9.82	9.66
Idaho	9.82	10.21	7.66	7.98	5.72	6.24	--	--	7.91	8.28
Montana	10.98	10.89	10.21	10.07	5.93	4.83	--	--	9.25	8.93
Nevada	12.11	12.36	7.71	7.95	5.09	5.35	7.51	7.83	8.12	8.42
New Mexico	12.37	12.27	9.59	9.73	5.57	5.78	--	--	8.89	9.08
Utah	10.21	10.49	8.12	8.34	5.82	5.69	10.57	10.68	8.04	8.11
Wyoming	10.88	11.13	9.57	9.62	6.65	6.83	--	--	8.04	8.20
Pacific Contiguous	14.97	14.79	13.16	13.09	8.77	8.74	8.56	8.60	12.92	12.80
California	18.88	18.42	15.04	14.88	11.66	11.67	8.46	8.57	15.72	15.46
Oregon	10.82	10.78	8.96	8.97	6.30	6.02	9.11	9.23	9.13	9.07
Washington	9.50	9.61	8.74	8.73	4.83	4.58	9.42	9.58	8.08	8.04
Pacific Noncontiguous	28.26	26.98	25.23	24.00	24.10	23.06	--	--	25.82	24.64
Alaska	22.28	21.56	19.88	18.68	17.08	17.37	--	--	20.17	19.39
Hawaii	33.45	31.59	30.48	29.13	26.62	25.34	--	--	29.82	28.40
U.S. Total	12.87	12.74	10.46	10.51	6.65	6.77	9.65	9.53	10.37	10.40

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 - May 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
Rolling 12 Months Ending in May					
2018	133,176,273	18,442,415	823,272	84	152,442,045
2019	134,511,115	18,594,244	843,456	85	153,948,899

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: May 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	6,419,888	6,423,968	900,043	897,910	19,944	20,224	6	6	7,339,881	7,342,108
Connecticut	1,510,442	1,505,027	154,390	153,981	4,171	4,286	3	3	1,669,006	1,663,297
Maine	725,183	702,414	99,877	98,444	3,031	3,015	0	0	828,091	803,873
Massachusetts	2,795,759	2,829,590	419,365	419,754	7,699	7,841	2	2	3,222,825	3,257,187
New Hampshire	627,416	622,961	108,509	107,968	3,144	3,158	0	0	739,069	734,087
Rhode Island	443,899	448,202	60,384	60,682	1,758	1,789	1	1	506,042	510,674
Vermont	317,189	315,774	57,518	57,081	141	135	0	0	374,848	372,990
Middle Atlantic	16,259,536	16,158,251	2,362,870	2,342,421	29,059	29,952	19	20	18,651,484	18,530,644
New Jersey	3,597,378	3,570,300	523,620	521,607	11,738	11,965	6	6	4,132,742	4,103,878
New York	7,235,449	7,188,059	1,118,979	1,106,901	6,569	6,690	8	8	8,361,005	8,301,658
Pennsylvania	5,426,709	5,399,892	720,271	713,913	10,752	11,297	5	6	6,157,737	6,125,108
East North Central	20,371,019	20,254,868	2,519,666	2,504,868	46,843	46,770	10	9	22,937,538	22,806,515
Illinois	5,328,234	5,306,833	618,976	614,908	3,980	3,985	3	3	5,951,193	5,925,729
Indiana	2,882,508	2,854,415	357,799	352,617	15,197	15,199	1	1	3,255,505	3,222,232
Michigan	4,410,373	4,393,994	550,982	551,925	NM	NM	2	2	4,966,971	4,951,588
Ohio	5,004,521	4,982,069	631,383	628,381	17,021	17,019	2	2	5,652,927	5,627,471
Wisconsin	2,745,383	2,717,557	360,526	357,037	NM	NM	2	1	3,110,942	3,079,495
West North Central	9,634,857	9,541,204	1,476,620	1,465,889	116,027	114,639	3	3	11,227,507	11,121,735
Iowa	1,408,804	1,394,947	247,910	245,477	NM	NM	0	0	1,663,667	1,647,346
Kansas	1,286,693	1,276,967	235,857	235,896	25,529	25,962	0	0	1,548,079	1,538,825
Minnesota	2,438,682	2,410,730	294,759	291,378	NM	NM	1	1	2,741,909	2,710,367
Missouri	2,836,418	2,815,374	384,313	383,098	6,586	6,797	2	2	3,227,319	3,205,271
Nebraska	870,096	860,028	163,159	162,098	56,506	55,569	0	0	1,089,761	1,077,695
North Dakota	386,696	380,055	75,205	73,865	8,886	8,065	0	0	470,787	461,985
South Dakota	407,468	403,103	75,417	74,077	NM	NM	0	0	485,985	480,246
South Atlantic	28,320,016	27,916,795	3,825,927	3,801,144	79,005	79,087	13	13	32,224,961	31,797,039
Delaware	434,638	428,650	55,419	54,677	565	596	0	0	490,622	483,923
District of Columbia	281,399	273,488	26,438	26,275	1	1	3	3	307,841	299,767
Florida	9,510,383	9,360,716	1,247,251	1,235,383	20,526	20,524	2	2	10,778,162	10,616,625
Georgia	4,447,011	4,381,124	587,658	585,227	19,753	19,859	1	1	5,054,423	4,986,211
Maryland	2,352,099	2,331,587	255,510	253,797	8,798	8,753	5	5	2,616,412	2,594,142
North Carolina	4,633,269	4,557,015	704,725	704,077	9,818	9,904	1	1	5,347,813	5,270,997
South Carolina	2,334,992	2,292,743	371,162	367,573	4,221	4,306	0	0	2,710,375	2,664,622
Virginia	3,469,327	3,433,624	432,547	430,347	3,824	3,747	1	1	3,905,699	3,867,719
West Virginia	856,898	857,848	145,217	143,788	11,499	11,397	0	0	1,013,614	1,013,033
East South Central	8,548,089	8,465,538	1,410,593	1,401,710	22,264	23,000	0	0	9,980,946	9,890,248
Alabama	2,277,973	2,255,901	371,127	370,953	8,227	8,289	0	0	2,657,327	2,635,143
Kentucky	2,015,102	1,997,052	306,416	302,779	5,470	6,102	0	0	2,326,988	2,305,933
Mississippi	1,327,565	1,316,771	239,896	239,991	7,720	7,770	0	0	1,575,181	1,564,532
Tennessee	2,927,449	2,895,814	493,154	487,987	847	839	0	0	3,421,450	3,384,640
West South Central	16,414,988	16,221,203	2,261,596	2,287,322	300,333	195,427	6	6	18,976,923	18,703,958
Arkansas	1,407,633	1,394,168	193,905	192,392	30,348	32,421	2	2	1,631,888	1,618,983
Louisiana	2,130,588	2,097,812	293,978	293,594	19,139	18,741	1	1	2,443,706	2,410,148
Oklahoma	1,802,582	1,785,335	286,043	285,468	19,624	17,988	0	0	2,108,249	2,088,791
Texas	11,074,185	10,943,888	1,487,670	1,515,868	231,222	126,277	3	3	12,793,080	12,586,036
Mountain	9,948,995	9,785,253	1,411,712	1,393,908	89,388	88,727	5	5	11,450,100	11,267,893
Arizona	2,827,331	2,785,298	326,982	321,178	6,433	6,419	2	2	3,160,748	3,112,897
Colorado	2,360,274	2,321,349	367,538	364,634	14,667	14,636	1	1	2,742,480	2,700,620
Idaho	758,378	739,779	112,157	110,270	28,953	28,686	0	0	899,488	878,735
Montana	518,476	511,329	112,261	110,279	NM	NM	0	0	638,426	629,181
Nevada	1,202,092	1,178,856	166,323	164,660	NM	NM	1	1	1,371,903	1,346,988
New Mexico	910,149	901,687	140,811	139,387	8,607	8,548	0	0	1,059,567	1,049,622
Utah	1,095,692	1,072,962	126,544	124,690	9,654	9,586	1	1	1,231,891	1,207,239
Wyoming	276,603	273,993	59,096	58,810	9,898	9,808	0	0	345,597	342,611
Pacific Contiguous	18,847,410	18,733,438	2,384,144	2,356,929	209,425	208,257	19	21	21,440,998	21,298,645
California	13,950,681	13,891,750	1,739,771	1,713,866	153,153	153,238	12	13	15,843,617	15,758,867
Oregon	1,776,821	1,785,105	241,625	246,280	26,965	26,236	2	2	2,045,413	2,057,623
Washington	3,119,908	3,056,583	402,748	396,783	29,307	28,783	5	6	3,551,968	3,482,155
Pacific Noncontiguous	728,670	727,125	114,641	113,742	NM	NM	0	0	845,544	843,074
Alaska	290,947	290,801	54,773	53,929	NM	NM	0	0	347,144	346,145
Hawaii	437,723	436,324	59,868	59,813	809	792	0	0	498,400	496,929
U.S. Total	135,493,468	134,227,643	18,667,812	18,565,843	914,521	808,290	81	83	155,075,882	153,601,859

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), April 2019 to May 2019

		As of End of April 2019	Activity During May 2019 as Reported to EIA		As of End of May 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*	*96,609.1*	*231.5*	*0.0*	*96,840.6*	*231.5*	*2,574.6*	*8,142.3*	*1,185.4*	*12,336.1*	*0.0*	*75.0*	*1,185.4*	*12,261.1*	*98,026.0*	*109,101.7*
..... *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	96,638.4	231.5	0.0	96,869.9	231.5	2,574.6	8,142.3	1,185.4	12,336.1	0.0	75.0	1,185.4	12,261.1	98,055.3	109,131.0
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*31,234.8*	*100.6*	*102.1*	*31,233.3*	*-1.5*	*1,062.8*	*3,958.2*	*747.9*	*6,868.0*	*0.0*	*0.0*	*747.9*	*6,868.0*	*31,981.2*	*38,101.3*
..... *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	32,992.7	100.6	102.1	32,991.2	-1.5	1,062.8	3,958.2	747.9	6,868.0	0.0	0.0	747.9	6,868.0	33,739.1	39,859.2
..... Conventional Hydroelectric	Utility Scale Facilities	79,890.9	7.4	21.9	79,876.4	-14.5	-16.7	97.2	26.6	105.5	5.4	114.9	21.2	-9.4	79,897.6	79,867.0
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,589.8*	*2.4*	*33.5*	*8,558.7*	*-31.1*	*-196.0*	*-250.1*	*145.4*	*159.9*	*69.5*	*158.8*	*75.9*	*1.1*	*8,634.6*	*8,559.8*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,052.8*	*1.4*	*7.2*	*2,047.0*	*-5.8*	*-20.4*	*-25.2*	*1.0*	*7.6*	*15.2*	*32.6*	*-14.2*	*-25.0*	*2,032.8*	*2,022.0*
..... *Municipal Solid Waste*	*Utility Scale Facilities*	*2,199.3*	*0.0*	*0.0*	*2,199.3*	*0.0*	*-35.7*	*-45.7*	*0.0*	*0.0*	*10.0*	*10.0*	*-10.0*	*-10.0*	*2,189.3*	*2,189.3*
..... *Other Waste Biomass*	*Utility Scale Facilities*	*755.1*	*0.0*	*4.2*	*750.9*	*-4.2*	*-22.2*	*-38.2*	*2.0*	*48.0*	*0.0*	*6.5*	*2.0*	*41.5*	*752.9*	*792.4*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,597.0	3.8	44.9	13,555.9	-41.1	-274.3	-359.2	148.4	215.5	94.7	207.9	53.7	7.6	13,609.6	13,563.5
..... Geothermal	Utility Scale Facilities	2,439.6	0.0	0.0	2,439.6	0.0	-101.2	-59.7	0.0	0.0	0.0	0.0	0.0	0.0	2,439.6	2,439.6
... Renewable Sources Subtotal	***Utility Scale Facilities***	***225,558.6***	***343.3***	***168.9***	***225,733.0***	***174.4***	***3,245.2***	***11,778.8***	***2,108.3***	***19,525.1***	***100.1***	***397.8***	***2,008.2***	***19,127.3***	***227,741.2***	***244,860.3***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*267,683.3*	*1,703.9*	*26.6*	*269,360.6*	*1,677.3*	*5,600.0*	*15,126.5*	*1,072.0*	*6,423.3*	*0.0*	*690.0*	*1,072.0*	*5,733.3*	*270,432.6*	*275,093.9*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*128,194.1*	*221.6*	*25.8*	*128,389.9*	*195.8*	*569.6*	*1,413.4*	*496.1*	*1,331.8*	*100.0*	*590.5*	*396.1*	*741.3*	*128,786.0*	*129,131.2*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*72,550.9*	*1,037.4*	*29.1*	*73,559.2*	*1,008.3*	*-1,180.0*	*-3,521.4*	*0.0*	*0.0*	*294.7*	*2,239.6*	*-294.7*	*-2,239.6*	*73,264.5*	*71,319.6*
..... *Natural Gas Internal Combustion Engine*	*Utility Scale Facilities*	*4,864.6*	*6.2*	*0.0*	*4,870.8*	*6.2*	*236.6*	*476.5*	*29.7*	*255.3*	*0.0*	*15.4*	*29.7*	*239.9*	*4,900.5*	*5,110.7*
..... *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*	*146.7*	*25.5*	*0.0*	*172.2*	*25.5*	*50.2*	*50.4*	*2.8*	*40.7*	*0.0*	*0.0*	*2.8*	*40.7*	*175.0*	*212.9*
..... Natural Gas Subtotal	Utility Scale Facilities	473,549.6	2,994.6	81.5	476,462.7	2,913.1	5,276.4	13,545.4	1,600.6	8,051.1	394.7	3,535.5	1,205.9	4,515.6	477,668.6	480,978.3
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*237,787.3*	*9.0*	*1,873.1*	*235,923.2*	*-1,864.1*	*-6,794.6*	*-12,248.8*	*45.0*	*102.0*	*90.0*	*4,579.6*	*-45.0*	*-4,477.6*	*235,878.2*	*231,445.6*
..... *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	238,543.3	9.0	1,873.1	236,679.2	-1,864.1	-6,794.6	-12,248.8	45.0	102.0	90.0	4,579.6	-45.0	-4,477.6	236,634.2	232,201.6
..... 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	32,133.3	7.9	7.1	32,134.1	0.8	607.8	401.5	3.5	27.4	163.3	220.2	-159.8	-192.8	31,974.3	31,941.3
..... Other Gases	Utility Scale Facilities	2,372.8	20.5	0.0	2,393.3	20.5	17.5	17.5	0.0	5.0	0.0	0.0	0.0	5.0	2,393.3	2,398.3
... Fossil Fuels Subtotal	***Utility Scale Facilities***	***748,131.2***	***3,032.0***	***1,961.7***	***749,201.5***	***1,070.3***	***-888.6***	***1,719.9***	***1,649.1***	***8,185.5***	***648.0***	***8,402.3***	***1,001.1***	***-216.8***	***750,202.6***	***748,984.7***
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,852.2	0.0	0.0	22,852.2	0.0	-3.2	-3.2	57.0	150.6	0.0	0.0	57.0	150.6	22,909.2	23,002.8
..... 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	907.0	15.0	0.0	922.0	15.0	80.0	204.2	41.8	118.7	0.0	0.0	41.8	118.7	963.8	1,040.7
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,806.2***	***15.0***	***0.0***	***23,821.2***	***15.0***	***76.8***	***201.0***	***98.8***	***269.3***	***0.0***	***0.0***	***98.8***	***269.3***	***23,920.0***	***24,090.5***
... Nuclear	***Utility Scale Facilities***	***99,586.1***	***0.0***	***677.2***	***98,908.9***	***-677.2***	***-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***	***0.0***	***0.0***	***1,453.5***	***0.0***	***-727.8***	***-726.9***	***47.9***	***47.9***	***0.0***	***0.0***	***47.9***	***47.9***	***1,501.4***	***1,501.4***
TOTAL	**UTILITY SCALE FACILITIES**	**1,098,535.6**	**3,390.3**	**2,807.8**	**1,099,118.1**	**582.5**	**1,259.6**	**12,229.1**	**3,904.1**	**28,027.8**	**748.1**	**11,515.4**	**3,156.0**	**16,512.4**	**1,102,274.1**	**1,115,630.5**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*20,884.6*			*21,018.7*	*134.1*	*1,497.3*	*3,418.0*								
..... Estimated Total Solar Photovoltaic	All Facilities	52,119.4			52,252.0	132.6	2,560.1	7,376.2								
... Estimated Total Solar	***All Facilities***	***53,877.3***			***54,009.9***	***132.6***	***2,560.1***	***7,376.2***								

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 - May 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

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 - May 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

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, May 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	5,891.5	5,721.7	23,275.6	22,832.2	1,797.4	1,797.4	42.8	25.7	3,324.5	4,018.2	48.0	320.9	34,379.8	34,716.1
Connecticut	412.6	389.2	7,294.3	6,998.4	29.4	29.4	1.6	1.6	2,073.1	2,087.8	26.0	298.9	9,837.0	9,805.3
Maine	2,347.1	2,345.6	2,478.8	2,536.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,864.1	4,920.3
Massachusetts	1,397.3	1,314.8	9,282.6	9,105.4	1,768.0	1,768.0	22.0	5.9	0.0	679.0	0.0	0.0	12,469.9	12,873.1
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	656.2	629.9	97.9	97.9	0.0	0.0	3.0	2.0	0.0	0.0	0.0	0.0	757.1	729.8
Middle Atlantic	11,206.3	10,870.9	73,011.0	68,826.2	3,411.6	3,409.8	141.5	72.9	18,700.2	19,310.2	11.2	420.9	106,481.8	102,910.9
New Jersey	991.0	927.2	12,140.1	12,047.0	420.0	420.0	42.1	1.5	3,500.2	4,107.9	11.2	11.2	17,104.6	17,514.8
New York	7,357.9	7,091.9	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	41,184.0	40,844.1
Pennsylvania	2,857.4	2,851.8	33,907.4	30,081.8	1,583.0	1,583.0	48.4	50.4	9,797.0	9,797.0	0.0	188.0	48,193.2	44,552.0
East North Central	12,892.4	11,681.1	111,427.4	115,141.2	2,174.0	2,179.0	169.7	167.7	19,034.4	19,029.4	187.1	188.1	145,885.0	148,386.5
Illinois	4,967.2	4,430.9	29,059.2	29,003.9	0.0	0.0	112.7	112.7	11,582.4	11,577.4	78.0	78.0	45,799.5	45,202.9
Indiana	2,657.2	2,442.8	23,921.4	24,508.4	0.0	0.0	23.0	22.0	0.0	0.0	88.0	89.0	26,689.6	27,062.2
Michigan	2,991.9	2,636.1	20,215.1	20,782.1	2,174.0	2,179.0	1.0	0.0	4,122.2	4,122.2	0.0	0.0	29,504.2	29,719.4
Ohio	1,053.7	931.4	25,170.9	27,507.4	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	28,391.6	30,605.8
Wisconsin	1,222.4	1,239.9	13,060.8	13,339.4	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,500.1	15,796.2
West North Central	30,228.5	26,810.1	59,151.1	60,873.1	657.0	657.0	5.1	3.2	5,443.4	5,443.4	24.5	24.5	95,509.6	93,811.3
Iowa	8,972.3	7,320.8	9,801.3	9,927.0	0.0	0.0	1.1	0.0	601.4	601.4	0.0	0.0	19,376.1	17,849.2
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	5,250.9	5,031.0	10,147.5	10,305.6	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,074.8	17,013.0
Missouri	1,579.0	1,567.9	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	21,804.3
Nebraska	2,329.9	1,724.6	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	8,643.0
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	20,588.0	19,066.1	164,997.8	160,315.3	7,905.2	7,905.2	92.5	94.5	24,706.6	24,602.6	408.7	452.7	218,698.8	212,436.4
Delaware	47.5	46.1	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	3,377.5
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	2,468.5	55,569.7	51,921.9	0.0	0.0	14.0	14.0	3,626.0	3,572.0	348.7	348.7	62,712.1	58,325.1
Georgia	4,010.5	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	36,985.3	36,896.7
Maryland	1,198.9	1,151.0	11,828.1	11,481.3	0.0	0.0	7.0	13.0	1,725.8	1,707.8	6.0	6.0	14,765.8	14,359.1
North Carolina	6,806.7	6,153.1	22,127.1	21,644.3	86.0	86.0	1.0	1.0	5,149.6	5,117.6	54.0	54.0	34,224.4	33,056.0
South Carolina	2,244.5	2,121.7	12,164.3	12,137.2	2,716.0	2,716.0	4.0	0.0	6,576.2	6,576.2	0.0	0.0	23,705.0	23,551.1
Virginia	2,069.2	2,111.1	19,140.7	19,044.9	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	28,018.9	27,965.0
West Virginia	1,027.1	1,027.1	13,777.9	13,781.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	14,870.5	14,873.9
East South Central	8,886.8	8,769.6	62,900.3	65,429.9	1,616.3	1,616.3	1.0	1.0	11,449.1	10,984.1	1.4	1.4	84,854.9	86,802.3
Alabama	4,163.3	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	29,241.7	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	12,867.7	13,882.9	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	14,733.1	15,720.6
Tennessee	3,015.1	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	21,344.4	21,262.2
West South Central	39,209.2	36,337.2	140,021.2	139,504.0	286.0	286.0	99.8	98.3	8,910.7	8,910.7	512.5	512.7	189,039.4	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	27,855.6	25,496.6	89,677.1	89,137.3	0.0	0.0	99.3	97.8	4,960.0	4,960.0	224.0	224.0	122,816.0	119,915.7
Mountain	27,398.5	26,253.9	62,596.2	62,292.8	778.8	778.8	50.6	33.6	3,937.0	3,937.0	127.2	126.3	94,888.3	93,422.4
Arizona	5,091.1	5,035.8	19,698.8	19,407.3	216.3	216.3	42.0	30.0	3,937.0	3,937.0	0.0	0.0	28,985.2	28,626.4
Colorado	4,964.2	4,364.1	11,107.2	11,119.2	562.5	562.5	5.0	1.0	0.0	0.0	9.3	9.3	16,648.2	16,056.1
Idaho	4,071.3	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	5,213.2	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	44.0	44.0	6,363.5	6,258.7
Nevada	3,726.7	3,575.6	7,821.6	7,791.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,554.8	11,373.7
New Mexico	2,483.7	2,398.8	5,962.1	5,966.8	0.0	0.0	3.6	2.6	0.0	0.0	0.0	0.0	8,449.4	8,368.2
Utah	1,600.5	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	9,000.9	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	68,221.6	67,312.4	47,594.2	48,045.1	4,225.9	4,225.9	258.8	180.7	3,403.0	3,417.0	106.3	106.3	123,809.8	123,287.4
California	31,202.2	30,391.2	38,526.3	38,967.2	3,911.9	3,911.9	247.6	168.3	2,240.0	2,240.0	106.3	106.3	76,234.3	75,784.9
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	24,701.5	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	30,959.7
Pacific Noncontiguous	1,210.2	1,131.2	4,226.7	4,221.8	0.0	0.0	107.2	87.2	0.0	0.0	26.6	26.6	5,570.7	5,466.8
Alaska	538.2	538.2	2,168.4	2,163.5	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,752.8	2,747.9
Hawaii	672.0	593.0	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	2,718.9
U.S. Total	225,733.0	213,954.2	749,201.5	747,481.6	22,852.2	22,855.4	969.0	764.8	98,908.9	99,652.6	1,453.5	2,180.4	1,099,118.1	1,086,889.0

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, May 2019 and 2018 (Megawatts)

	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
Census Division and State	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	1,424.8	1,402.1	976.4	828.7	0.0	0.0	1,960.1	1,960.7	1,530.2	1,530.2	0.0	0.0	5,891.5	5,721.7	2,461.7	1,945.3	3,438.1	2,774.0	3,438.1	2,774.0
Connecticut	1.0	1.0	86.8	62.5	0.0	0.0	122.2	122.2	202.6	203.5	0.0	0.0	412.6	389.2	447.3	359.0	534.1	421.5	534.1	421.5
Maine	921.6	921.6	5.6	5.6	0.0	0.0	733.0	732.4	686.9	686.0	0.0	0.0	2,347.1	2,345.6	51.4	36.6	57.0	42.2	57.0	42.2
Massachusetts	96.1	94.4	748.9	667.7	0.0	0.0	267.0	267.4	285.3	285.3	0.0	0.0	1,397.3	1,314.8	1,652.9	1,323.2	2,401.8	1,990.9	2,401.8	1,990.9
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	88.9	75.2	88.9	75.2	88.9	75.2
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	112.4	57.5	147.0	76.2	147.0	76.2
Vermont	150.2	150.2	100.5	74.2	0.0	0.0	331.2	331.2	74.3	74.3	0.0	0.0	656.2	629.9	108.8	93.8	209.3	168.0	209.3	168.0
Middle Atlantic	3,363.3	3,205.6	1,091.4	916.1	0.0	0.0	5,473.2	5,469.2	1,278.4	1,280.0	0.0	0.0	11,206.3	10,870.9	3,214.5	2,714.8	4,305.9	3,630.9	4,305.9	3,630.9
New Jersey	7.6	7.6	743.8	680.0	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	991.0	927.2	1,539.7	1,347.9	2,283.5	2,027.9	2,283.5	2,027.9
New York	1,985.7	1,826.2	286.8	184.3	0.0	0.0	4,561.3	4,557.3	524.1	524.1	0.0	0.0	7,357.9	7,091.9	1,332.7	1,074.0	1,619.5	1,258.3	1,619.5	1,258.3
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	342.1	292.9	402.9	344.7	402.9	344.7
East North Central	10,332.1	9,152.2	462.5	403.0	0.0	0.0	859.9	857.3	1,237.9	1,268.6	0.0	0.0	12,892.4	11,681.1	471.8	334.0	934.3	737.0	934.3	737.0
Illinois	4,803.7	4,261.9	40.6	34.9	0.0	0.0	34.1	34.1	88.8	100.0	0.0	0.0	4,967.2	4,430.9	108.3	59.5	148.9	94.4	148.9	94.4
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	82.5	63.9	298.7	260.6	298.7	260.6
Michigan	2,061.8	1,735.8	98.2	74.3	0.0	0.0	269.9	266.9	562.0	559.1	0.0	0.0	2,991.9	2,636.1	69.0	53.5	167.2	127.8	167.2	127.8
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	145.6	107.4	229.2	183.6	229.2	183.6
Wisconsin	438.4	439.2	23.9	20.9	0.0	0.0	393.6	394.0	366.5	385.8	0.0	0.0	1,222.4	1,239.9	66.4	49.7	90.3	70.6	90.3	70.6
West North Central	25,574.5	22,250.2	895.9	710.8	0.0	0.0	3,293.7	3,291.7	464.4	557.4	0.0	0.0	30,228.5	26,810.1	359.6	296.6	1,255.5	1,007.4	1,255.5	1,007.4
Iowa	8,794.0	7,143.8	10.5	9.2	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,972.3	7,320.8	99.1	79.3	109.6	88.5	109.6	88.5
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	20.4	15.6	24.6	19.8	24.6	19.8
Minnesota	3,850.5	3,707.9	800.1	632.2	0.0	0.0	205.9	205.9	394.4	485.0	0.0	0.0	5,250.9	5,031.0	66.0	54.2	866.1	686.4	866.1	686.4
Missouri	954.3	954.3	62.1	48.6	0.0	0.0	548.5	548.5	14.1	16.5	0.0	0.0	1,579.0	1,567.9	164.9	140.9	227.0	189.5	227.0	189.5
Nebraska	2,018.3	1,417.4	18.0	15.6	0.0	0.0	277.9	275.9	15.7	15.7	0.0	0.0	2,329.9	1,724.6	8.0	5.8	26.0	21.4	26.0	21.4
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	0.6	0.6	1.6	1.6	1.6	1.6
South Atlantic	1,086.3	1,086.3	8,074.2	6,384.0	0.0	0.0	7,226.4	7,229.2	4,201.1	4,366.6	0.0	0.0	20,588.0	19,066.1	1,879.6	1,504.9	9,953.8	7,888.9	9,953.8	7,888.9
Delaware	2.0	2.0	33.3	31.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	47.5	46.1	82.0	73.0	115.3	104.9	115.3	104.9
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	51.2	44.0	58.1	44.0	58.1	44.0
Florida	0.0	0.0	1,918.4	1,117.2	0.0	0.0	54.5	54.5	1,180.8	1,296.8	0.0	0.0	3,153.7	2,468.5	366.9	230.9	2,285.3	1,348.1	2,285.3	1,348.1
Georgia	0.0	0.0	1,013.9	1,011.9	0.0	0.0	2,047.2	2,047.2	949.4	905.4	0.0	0.0	4,010.5	3,964.5	NM	156.3	NM	1,168.2	NM	1,168.2
Maryland	190.0	190.0	278.0	229.0	0.0	0.0	590.0	590.0	140.9	142.0	0.0	0.0	1,198.9	1,151.0	752.0	662.2	1,030.0	891.2	1,030.0	891.2
North Carolina	208.0	208.0	4,035.8	3,374.8	0.0	0.0	2,004.0	2,002.0	558.9	568.3	0.0	0.0	6,806.7	6,153.1	156.5	121.3	4,192.3	3,496.1	4,192.3	3,496.1
South Carolina	0.0	0.0	394.1	266.5	0.0	0.0	1,323.9	1,328.7	526.5	526.5	0.0	0.0	2,244.5	2,121.7	211.0	157.7	605.1	424.2	605.1	424.2
Virginia	0.0	0.0	393.8	352.7	0.0	0.0	866.0	866.0	809.4	892.4	0.0	0.0	2,069.2	2,111.1	73.7	53.3	467.5	406.0	467.5	406.0
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	7,050.5	7,056.3	1,248.0	1,229.0	0.0	0.0	8,886.8	8,769.6	97.6	89.3	656.8	544.5	656.8	544.5
Alabama	0.0	0.0	194.1	179.3	0.0	0.0	3,292.0	3,290.8	677.2	685.9	0.0	0.0	4,163.3	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	24.7	20.0	51.0	46.3	51.0	46.3
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	7.5	6.8	168.1	167.4	168.1	167.4
Tennessee	29.1	29.1	178.2	89.0	0.0	0.0	2,611.6	2,618.6	196.2	196.2	0.0	0.0	3,015.1	2,932.9	57.6	56.0	235.8	145.0	235.8	145.0
West South Central	32,887.0	30,281.9	2,092.1	1,756.4	0.0	0.0	2,991.4	2,987.5	1,238.7	1,311.4	0.0	0.0	39,209.2	36,337.2	723.0	550.8	2,815.1	2,307.2	2,815.1	2,307.2
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	18.5	12.8	118.5	112.8	118.5	112.8
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	422.4	490.1	0.0	0.0	615.5	683.2	153.7	132.9	154.8	134.0	154.8	134.0
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	6.3	38.9	36.8	38.9	36.8
Texas	24,816.3	22,787.1	1,960.5	1,624.8	0.0	0.0	670.0	670.0	408.8	414.7	0.0	0.0	27,855.6	25,496.6	542.4	398.8	2,502.9	2,023.6	2,502.9	2,023.6
Mountain	9,565.8	8,914.0	5,921.4	5,533.0	473.9	473.9	10,654.8	10,575.9	175.7	174.3	606.9	582.8	27,398.5	26,253.9	2,489.0	2,158.5	8,410.4	7,691.5	8,884.3	8,165.4
Arizona	267.3	267.3	1,776.8	1,721.5	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,091.1	5,035.8	1,323.7	1,186.8	3,100.5	2,908.3	3,395.9	3,203.7
Colorado	3,703.7	3,182.7	545.4	465.3	0.0	0.0	686.4	687.4	28.7	28.7	0.0	0.0	4,964.2	4,364.1	366.8	339.6	912.2	804.9	912.2	804.9
Idaho	970.4	970.5	240.0	240.0	0.0	0.0	2,765.6	2,707.5	85.3	83.9	10.0	10.0	4,071.3	4,011.9	32.6	18.3	272.6	258.3	272.6	258.3
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	15.0	12.2	32.0	29.2	32.0	29.2
Nevada	150.0	150.0	1,821.7	1,687.7	178.5	178.5	1,051.4	1,051.4	9.8	9.8	515.3	498.2	3,726.7	3,575.6	347.8	253.0	2,169.5	1,940.7	2,348.0	2,119.2
New Mexico	1,815.4	1,764.5	571.4	544.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,483.7	2,398.8	148.5	130.3	719.9	674.7	719.9	674.7
Utah	388.2	388.2	857.1	857.1	0.0	0.0	269.4	269.4	12.8	12.8	73.0	73.0	1,600.5	1,600.5	249.5	214.6	1,106.6	1,071.7	1,106.6	1,071.7
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	5.1	3.7	97.1	3.7	97.1	3.7
Pacific Contiguous	12,340.8	12,140.0	11,036.1	10,186.7	1,284.0	1,284.0	39,863.4	39,854.9	1,907.6	1,973.3	1,789.7	1,873.5	68,221.6	67,312.4	8,700.7	7,412.6	19,736.8	17,599.3	21,020.8	18,883.3
California	6,057.5	5,856.7	10,696.1	9,934.1	1,284.0	1,284.0	10,185.9	10,198.2	1,208.5	1,264.2	1,770.2	1,854.0	31,202.2	30,391.2	8,369.4	7,160.2	19,065.5	17,094.3	20,349.5	18,378.3
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	181.6	143.8	501.9	395.9	501.9	395.9
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,297.1	21,233.5	384.4	394.4	0.0	0.0	24,774.3	24,701.5	149.7	108.6	169.4	109.1	169.4	109.1
Pacific Noncontiguous	266.2	266.2	124.1	101.2	0.0	0.0	503.0	496.5	273.9	224.3	43.0	43.0	1,210.2	1,131.2	621.2	593.8	745.3	695.0	745.3	695.0
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	3.5	2.5	3.5	2.5	3.5	2.5
Hawaii	205.6	205.6	124.1	101.2	0.0	0.0	32.4	25.9	266.9	217.3	43.0	43.0	672.0	593.0	617.7	591.3	741.8	692.5	741.8	692.5
U.S. Total	96,869.9	88,727.6	31,233.3	27,275.1	1,757.9	1,757.9	79,876.4	79,779.2	13,555.9	13,915.1	2,439.6	2,499.3	225,733.0	213,954.2	21,018.7	17,600.7	52,252.0	44,875.8	54,009.9	46,633.7

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, May 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	
	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018	May 2019	May 2018
New England	13,728.0	13,394.1	1,251.4	1,206.9	1,116.3	1,605.4	917.3	917.3	0.0	0.0	6,262.6	5,708.5	0.0	0.0	23,275.6	22,832.2
Connecticut	3,442.7	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	7,294.3	6,998.4
Maine	1,284.3	1,250.0	144.3	297.1	12.5	108.5	0.0	0.0	0.0	0.0	1,037.7	880.9	0.0	0.0	2,478.8	2,536.5
Massachusetts	5,955.8	5,985.7	527.9	331.6	199.7	199.7	0.0	0.0	0.0	0.0	2,599.2	2,588.4	0.0	0.0	9,282.6	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	27,244.9	7,908.6	7,809.6	14,434.8	14,675.5	11,959.7	13,529.8	78.6	78.6	5,353.1	5,358.6	125.1	129.2	73,011.0	68,826.2
New Jersey	8,529.9	8,157.9	2,826.3	2,964.0	46.9	47.1	463.0	609.0	11.6	11.6	239.0	234.0	23.4	23.4	12,140.1	12,047.0
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	10,395.6	1,909.3	1,681.2	4,726.3	4,942.9	9,865.2	11,280.6	67.0	67.0	1,555.3	1,608.7	101.7	105.8	33,907.4	30,081.8
East North Central	21,674.3	20,747.0	26,633.6	26,705.6	5,433.7	4,212.5	53,889.9	59,496.3	247.6	247.6	2,455.4	2,639.3	1,092.9	1,092.9	111,427.4	115,141.2
Illinois	3,580.2	3,580.2	10,504.8	10,449.1	1,320.7	289.9	12,940.0	13,974.0	0.0	0.0	677.0	674.2	36.5	36.5	29,059.2	29,003.9
Indiana	3,849.0	3,807.0	3,333.4	3,355.8	730.0	729.1	15,291.4	15,759.4	0.0	0.0	98.3	237.8	619.3	619.3	23,921.4	24,508.4
Michigan	4,413.6	4,421.0	3,874.0	3,969.2	2,558.5	2,389.6	8,608.3	9,216.7	47.2	47.2	463.5	488.4	250.0	250.0	20,215.1	20,782.1
Ohio	7,020.4	6,188.0	5,559.2	5,559.2	185.1	189.2	11,496.0	14,605.4	142.0	142.0	581.1	636.5	187.1	187.1	25,170.9	27,507.4
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	6,644.7	6,633.1	11,733.7	11,743.9	3,762.8	4,464.0	33,091.5	34,116.0	39.5	32.0	3,870.5	3,875.7	8.4	8.4	59,151.1	60,873.1
Iowa	1,783.6	1,772.6	1,256.8	1,271.2	545.5	533.0	5,358.4	5,497.9	39.5	32.0	817.5	820.3	0.0	0.0	9,801.3	9,927.0
Kansas	266.0	266.0	2,156.8	2,148.3	1,369.2	2,096.7	4,670.2	4,714.2	0.0	0.0	563.2	554.8	0.0	0.0	9,025.4	9,780.0
Minnesota	2,172.0	2,172.0	2,667.9	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	10,147.5	10,305.6
Missouri	1,794.9	1,789.9	3,400.6	3,399.6	820.4	836.4	10,521.6	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	62,189.7	55,045.2	31,917.1	32,061.1	6,866.2	7,387.0	53,273.3	55,137.3	142.8	142.8	10,473.7	10,406.9	135.0	135.0	164,997.8	160,315.3
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	32,510.2	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	4,950.6	4,970.0	0.0	0.0	55,569.7	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	1,494.2	1,494.2	4,327.0	4,712.0	0.0	0.0	1,257.9	1,219.9	0.0	0.0	11,828.1	11,481.3
North Carolina	5,179.0	4,724.8	6,050.7	6,045.1	1.0	0.0	10,504.8	10,536.8	0.0	0.0	391.6	337.6	0.0	0.0	22,127.1	21,644.3
South Carolina	3,185.0	3,152.0	2,757.9	2,763.8	546.0	546.0	5,212.0	5,212.0	0.0	0.0	463.4	463.4	0.0	0.0	12,164.3	12,137.2
Virginia	8,966.4	7,658.9	4,245.3	4,194.3	530.3	1,068.2	3,059.0	3,778.0	0.0	0.0	2,339.7	2,345.5	0.0	0.0	19,140.7	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	12,646.9	4,503.5	5,921.8	23,844.1	25,015.2	0.0	0.0	117.0	142.0	19.8	19.8	62,900.3	65,429.9
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	1,357.6	2,238.5	2,829.3	1,444.0	1,804.0	0.0	0.0	19.3	44.3	0.0	0.0	12,867.7	13,882.9
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	61,356.5	60,492.3	14,423.7	13,977.4	31,848.9	31,660.5	30,583.1	31,585.8	954.7	957.9	173.5	174.8	680.8	655.3	140,021.2	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	41,058.9	41,145.7	9,684.4	9,231.8	19,231.2	19,094.6	19,321.6	19,308.6	63.8	63.8	43.8	44.9	273.4	247.9	89,677.1	89,137.3
Mountain	22,510.8	22,483.8	9,159.1	8,638.9	3,615.4	3,838.9	26,805.5	26,815.5	52.0	52.0	349.9	356.3	103.5	107.4	62,596.2	62,292.8
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	2,572.3	2,572.3	639.0	639.0	4,480.0	4,499.0	0.0	0.0	166.4	168.4	0.0	0.0	11,107.2	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	5,415.0	1,185.6	1,185.6	444.6	444.6	740.4	740.4	0.0	0.0	6.0	6.0	0.0	0.0	7,821.6	7,791.6
New Mexico	1,465.0	1,465.0	962.7	966.0	846.4	849.4	2,640.0	2,634.0	0.0	0.0	48.0	52.4	0.0	0.0	5,962.1	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	6,955.6	7,766.1	1,982.0	1,982.0	17.0	17.0	471.4	468.4	221.4	221.4	47,594.2	48,045.1
California	19,861.6	20,001.8	11,213.5	10,706.7	6,699.6	7,510.1	57.0	57.0	17.0	17.0	456.2	453.2	221.4	221.4	38,526.3	38,967.2
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	2,607.0	2,602.1	6.4	6.4	4,226.7	4,221.8
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	735.1	730.2	0.0	0.0	2,168.4	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	269,360.6	254,234.1	128,389.9	126,976.5	78,712.2	81,706.7	236,679.2	248,928.0	1,532.2	1,527.9	32,134.1	31,732.6	2,393.3	2,375.8	749,201.5	747,481.6

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 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

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Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	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

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

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

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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	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	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	2.5
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	CHPP	3.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	3.5
2019	6	57449	Borrego Solar Systems Inc	Industrial	Clif Bar Bakery of Twin Falls	ID	62151	PV1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	6	62662	Butter Solar, LLC	IPP	Arcadia Solar	WI	62744	A1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	6	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	6	62634	Chester Woods Point Solar, LLC	IPP	Chester Woods Point Solar, LLC	MD	62720	5540	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	6	58871	Citizens Enterprises Corporation	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	16.2
2019	6	16604	City of San Antonio - (TX)	Electric Utility	Commerce ESS	TX	62609	BA1	10.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	10.0
2019	6	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	6	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	6	3265	Cleco Power LLC	Electric Utility	St. Mary Clean Energy Center	LA	60610	1	47.9	All Other	WH	OT	(V) Under construction, more than 50 percent complete	58.2
2019	6	61060	Cypress Creek Renewables	IPP	Palmetto Plains	SC	62679	1405	75.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	75.0
2019	6	61567	DP-C2 Episode 1 LLC	IPP	Diamond Solar II	SC	61974	C2BV	8.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	8.2
2019	6	61567	DP-C2 Episode 1 LLC	IPP	Edison Solar II	SC	61975	C2BV	4.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.8
2019	6	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	6	61610	Delaware River Solar, 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	6	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
2019	6	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
2019	6	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
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Felton CSG PV1-5	MN	62210	FELT5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	58970	Ecoplexus, Inc	IPP	Randolph CSG PV1-5	MN	62209	RAND5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	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	6	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	6	62062	GD Richmond Buttonwoods I, LLC	IPP	GD Richmond Buttonwoods I, LLC	RI	62567	GDBUT	1.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.3
2019	6	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	6	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	6	61872	Gavilan District College Solar Project	IPP	Gavilan District College Solar Project	CA	61993	GDCBA	0.5	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	0.5
2019	6	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	6	7140	Georgia Power Co	Electric Utility	Waynesboro Community Solar	GA	62409	1	2.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.4
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	(TS) Construction complete, but not yet in commercial operation	40.3
2019	6	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	6	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	6	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	6	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	6	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	6	60025	Greenbacker Renewable Energy Corporation	IPP	Oak Leaf Solar XXVIII LLC	CO	62255	53973	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	6	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	6	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	478.0
2019	6	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	6	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	6	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2019	6	9234	Indiana Municipal Power Agency	Electric Utility	Tipton Solar Park	IN	62305	STIP	5.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.3
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	302.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	302.4
2019	6	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	22.0
2019	6	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	6	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	6	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	6	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	6	56990	NJR Clean Energy Ventures Corporation	IPP	IFF Union Beach Project	NJ	62306	IFFUB	5.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.5
2019	6	56990	NJR Clean Energy Ventures Corporation	IPP	McCullough Road Solar Farm	NJ	62638	WASHG	7.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	7.6
2019	6	61708	NRG Canal 3 Development LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	330.0
2019	6	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	6	61943	North Rosamond Solar, LLC	IPP	North Rosamond Solar LLC	CA	59879	GEN01	160.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	160.0
2019	6	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	6	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	6	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	6	59300	PNM Resources	Electric Utility	Rio De Oro Solar Energy Center	NM	62597	RDO	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	501	375.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	375.7
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	502	200.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	200.6
2019	6	61663	Panda Solar NC 10, LLC	IPP	Panda Solar NC 10, LLC	NC	62128	20031	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	6	61664	Panda Solar NC 11, LLC	IPP	Panda Solar NC 11, LLC	NC	62129	20032	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	6	61656	Panda Solar NC 3, LLC	IPP	Panda Solar NC 3, LLC	NC	62121	20011	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	6	61657	Panda Solar NC 4, LLC	IPP	Panda Solar NC 4, LLC	NC	62122	20009	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	6	61658	Panda Solar NC 5, LLC	IPP	Panda Solar NC 5, LLC	NC	62123	20007	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61660	Panda Solar NC 6, LLC	IPP	Panda Solar NC 6, LLC	NC	62124	20028	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61662	Panda Solar NC 9, LLC	IPP	Panda Solar NC 9, LLC	NC	62127	20022	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	6	60389	Rabbit Hill Energy Storage Project	IPP	Rabbit Hill Energy Storage Project	TX	60649	1	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2019	6	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	237.6
2019	6	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	20.0

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	6	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	6	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	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	174.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	210.0
2019	6	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	6	60947	Tesla Inc.	IPP	Estrella Mountain PV	AZ	60230	PV1	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2019	6	61882	USS Eggo Solar CSG	IPP	USS Eggo Solar CSG	MN	62359	USEGG	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	6	61839	USS Kost Trail Solar LLC	IPP	USS Kost Trail Solar CSG	MN	62339	USSKT	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	6	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.4
2019	6	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT2	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.4
2019	6	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	BAT1	9.9	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	9.9
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	6	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	4.4
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK1	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK2	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK3	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK4	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	6	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK5	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	7	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	7	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	7	62627	Alchemy Renewable Energy	IPP	TPE Pennsylvania Solar 1, LLC	PA	62686	PABOE	3.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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	7	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	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	(V) Under construction, more than 50 percent complete	3.0
2019	7	61610	Delaware River Solar, LLC	IPP	Boas Rd #4 Community Solar Farm	NY	62533	1023	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	7	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	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	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	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	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	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	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	7	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	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	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	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	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	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	(T) Regulatory approvals received. Not under construction	3.3
2019	7	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	7	60685	Novel Energy Solutions	IPP	Novel Solar One CSG LLC	MN	62665	HELD	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
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	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	61743	Patriot Wind Farm, LLC	IPP	Patriot Wind Farm	TX	58614	PAT1	226.1	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	226.1
2019	7	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	220.5
2019	7	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPA	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	7	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPB	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	7	62162	RP Napa Solar 1, LLC	IPP	American Canyon Solar	CA	62687	RPNPC	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
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	(U) Under construction, less than or equal to 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	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	7	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant	AR	62682	FAYE1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	7	61204	Today's Power, Inc.	Commercial	Noland Wastewater Treatment Plant	AR	62682	FAYEB	6.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	6.0
2019	7	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant	AR	62683	FAYW1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	7	61204	Today's Power, Inc.	Commercial	Westside Wastewater Treatment Plant	AR	62683	FAYWB	6.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	6.0
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	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	7	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	7	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC	(TS) Construction complete, but not yet in commercial operation	1.6
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	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	8	60877	Antelope DSR 3 LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 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	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	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	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	Big Tree Community Solar Farm	NY	62476	607	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	8	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

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	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	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	Washington St Community Solar Farm #1	NY	62472	617	2.2	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.2
2019	8	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
2019	8	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
2019	8	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	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	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	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	(T) Regulatory approvals received. 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	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	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARFS	1.4	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.4
2019	8	56990	NJR Clean Energy Ventures Corporation	IPP	Garfield Solar	NJ	62680	GARMS	1.6	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	(V) Under construction, more than 50 percent complete	7.5
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	(U) Under construction, less than or equal to 50 percent complete	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	60193	Tamworth Holdings, LLC	IPP	Tamworth Holdings	NC	60394	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	8	60410	Tanager Holdings, LLC	IPP	Tanager Holdings	NC	60691	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	3.0
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	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	9	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	9	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	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	(L) Regulatory approvals pending. 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	57280	Eagle Creek RE LLC	IPP	Swinging Bridge 2	NY	2634	SWI3	1.2	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	1.2
2019	9	62141	Ennis Solar, LLC	IPP	Ennis Solar, LLC	NC	62662	22503	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	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	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	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	(U) Under construction, less than or equal to 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	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	9	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	9	61841	USS Lake Patterson Solar	IPP	USS Lake Patterson Solar CSG	MN	62337	USLP	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
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	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	(P) Planned for installation, but regulatory approvals not initiated	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	61060	Cypress Creek Renewables	IPP	Lampwick	TX	61872	GEN1	7.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	10	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	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	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	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	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	2770	Terra-Gen Operating Co-Wind	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	131.1
2019	11	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T1	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	11	61276	West Liberty Renewables LLC	IPP	West Liberty Wind Farm	IA	61057	T2	2.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	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	61118	Ameresco, Inc - Candlewood	IPP	Candlewood Solar	CT	61517	CANDL	25.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	25.0
2019	12	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	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	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	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
2019	12	61060	Cypress Creek Renewables	IPP	Crooked Run	NC	62678	299	70.1	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	70.1
2019	12	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
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	(U) Under construction, less than or equal to 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	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	(L) Regulatory approvals pending. Not under construction	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	Lake Perris Solar	CA	60973	LKPR	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	12	58135	Ecos Energy LLC	IPP	San Jacinto Solar	CA	60972	SJAC	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
2019	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	(L) Regulatory approvals pending. Not under construction	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	(U) Under construction, less than or equal to 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

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	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	56939	Lexington Chenoa Wind Farm II LLC	IPP	Bright Stalk Wind Farm II	IL	57622	GEN1	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	12	56940	Lexington Chenoa Wind Farm LLC	IPP	Bright Stalk Wind Farm I	IL	57623	GEN1	200.0	Onshore Wind Turbine	WND	WT	(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	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	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	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	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
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	(U) Under construction, less than or equal to 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 Wind, LLC	IPP	Skeleton Creek Wind, LLC	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	17650	Southern Power Co	IPP	Reading Wind Project	KS	60999	READW	200.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.9
2019	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
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	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	(L) Regulatory approvals pending. 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	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	(T) Regulatory approvals received. Not under construction	2.2
2020	2	7626	City of Greenfield - (IA)	Electric Utility	Greenfield	IA	1144	2	2.2	Petroleum Liquids	DFO	IC	(T) Regulatory approvals received. Not under construction	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

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	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	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	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	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	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	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
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	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	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	62113	Sage Draw Wind, LLC	IPP	Sage Draw Wind	TX	62620	SD	338.4	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	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	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	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	5	7140	Georgia Power Co	Electric Utility	Moody Air Force Base Solar	GA	62377	1	49.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	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	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	(P) Planned for installation, but regulatory approvals not initiated	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	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

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	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	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS1	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	60270	Clark Canyon Hydro, LLC	IPP	Clark Canyon Hydro-Electric Facility	MT	60483	FRNS2	2.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.4
2020	6	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	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	60688	FGE Goodnight, LLC	IPP	Goodnight	TX	59246	GOOD1	500.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	500.0
2020	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	56615	First Solar Project Development	IPP	Morada del Sol, LLC	TX	61049	PV1	239.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	247.0
2020	6	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	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	6	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	6	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	6	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	6	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	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	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN2	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
2020	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	177.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG1	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	CTG2	283.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	311.0
2020	6	60659	Hickory Run Energy, LLC	IPP	Hickory Run Energy Station	PA	61028	STG1	437.0	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	450.0
2020	6	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	60986	Imperial Valley Solar 2, LLC	IPP	Mount Signal Solar 2	CA	61353	IVS2	153.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	153.5
2020	6	56167	Imperial Valley Solar, LLC	IPP	Imperial Valley Solar, LLC	CA	56917	2	400.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	400.0
2020	6	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	61748	Ion Solar	IPP	Ion Solar	SC	62231	45	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
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
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	13402	Nevada Irrigation District	IPP	Loma Rica Hydroelectric Powerhouse	CA	60988	HY1	1.4	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.4
2020	6	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	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	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

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	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	60519	Williams Solar, LLC	IPP	Williams Solar, LLC	TX	60859	PV1	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	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	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	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	58146	Gaelectric LLC	IPP	Jawbone Wind Project	MT	58175	JWPI	80.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	80.0
2020	8	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
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	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	60952	Mt. Jackson Solar LLC	IPP	Mt. Jackson Solar	VA	61318	SOLAR	15.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.7
2020	9	56545	Pattern Operators LP	IPP	Solemio LLC	TX	62522	1	79.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	80.0
2020	9	61592	Pleinmont Solar 1 LLC	IPP	Pleinmont Solar 1	VA	62012	PLNM1	75.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	75.0
2020	9	62047	Roadrunner Solar, LLC	IPP	Roadrunner, LLC	TX	62561	RODR2	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
2020	9	58798	Shell Chemical Appalachia LLC	Industrial	Shell Chemical Appalachia LLC	PA	58933	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	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	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

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	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	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	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
2020	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Gaston Solar Power Plant	NC	62669	PV1	25.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	25.0
2020	12	5416	Duke Energy Carolinas, LLC	Electric Utility	Maiden Creek Solar Power Plant	NC	62668	PV1	69.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	69.3
2020	12	61785	EDP Renewables North America LLC	IPP	Crossing Trails Wind Farm	CO	62489	GEN1	104.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	104.0
2020	12	61785	EDP Renewables North America LLC	IPP	Headwaters Wind Farm II LLC	IN	62592	HWII	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
2020	12	56987	East Blackland Solar Project 1 LLC	IPP	Pflugerville Solar Farm	TX	57659	PSF	144.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	144.0
2020	12	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	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	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	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

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	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	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	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
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	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	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	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

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	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT1	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	59965	ESC Tioga County Power	IPP	ESC Tioga County Power	PA	60205	TCCT2	253.1	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	280.5
2021	6	58597	Enivromission, Inc	IPP	La Paz Solar Tower	AZ	58652	1	200.0	Solar Thermal without Energy Storage	SUN	OT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	250.0
2021	6	55937	Entergy Texas Inc.	Electric Utility	Montgomery County	TX	60925	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	500.0
2021	6	56615	First Solar Project Development	IPP	Muscle Shoals	AL	62462	GEN01	227.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	227.0
2021	6	56615	First Solar Project Development	IPP	Portal Ridge Solar A, LLC	CA	60309	GEN01	18.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	18.5
2021	6	58880	Gallegos Wind Farm LLC	IPP	Gallegos Wind Farm, Phase 1	NM	59047	GEN 1	180.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	180.0
2021	6	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	232.0
2021	6	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	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	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	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	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	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	62686	Blackjack Creek Wind Farm, 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	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	CT1	235.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	242.0
2021	12	56606	Calpine New Jersey Generation LLC	IPP	Deepwater	NJ	2384	ST1	198.5	Natural Gas Steam Turbine	NG	ST	(L) Regulatory approvals pending. Not under construction	214.0
2021	12	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC5	18.5	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	18.8
2021	12	61060	Cypress Creek Renewables	IPP	Battle Mountain Solar Project	NV	61098	BMSP	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	101.0
2021	12	54802	Dynegy -Moss Landing LLC	IPP	Dynegy Moss Landing Power Plant	CA	260	BAT1	300.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	300.0
2021	12	61785	EDP Renewables North America LLC	IPP	Saddle Mountain East Wind Farm	WA	62263	GEN1	126.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	126.0
2021	12	59380	Enel Green Power NA, Inc.	IPP	Pomerado Energy Storage, LLC	CA	61390	PMRDO	6.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	6.0
2021	12	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	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
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	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	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

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	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	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	7140	Georgia Power Co	Electric Utility	Vogtle	GA	649	4	1,100.0	Nuclear	NUC	ST	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2022	11	61906	Rye Development	IPP	Allegheny L&D2 Hydroelectric Project	PA	62401	NA2	2.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	4.5
2022	11	61906	Rye Development	IPP	Arkabutla Lake Hydroelectric Project	MS	62402	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Beverly L&D Hydroelectric Project	OH	62403	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Devola L&D Hydroelectric Project	OH	62435	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Emsworth BC Hydroelectric Project	PA	62434	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.5
2022	11	61906	Rye Development	IPP	Emsworth L&D Hydroelectric Project	PA	62433	NA2	6.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.5
2022	11	61906	Rye Development	IPP	Enid Lake Hydroelectric Project	MS	62432	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Grays Landing L&D Hydroelectric Project	PA	62388	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Grenada Lake Hydroelectric Project	MS	62430	NA2	4.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	5.0
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA2	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA3	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA4	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	KY No. 11 L&D Hydroelectric Project	KY	62390	NA5	0.3	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	0.5
2022	11	61906	Rye Development	IPP	Lowell L&D Hydroelectric Project	OH	62429	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA1	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Malta L&D Hydroelectric Project	OH	62428	NA2	1.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Maxwell L&D Hydroelectric Project	PA	62385	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Monongahela L&D4 Hydroelectric Project	PA	62404	NA2	4.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	6.0
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Montgomery L&D Hydroelectric Project	PA	62400	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	9.5
2022	11	61906	Rye Development	IPP	Morgantown L&D Hydroelectric Project	WV	62387	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Opekiska L&D Hydroelectric Project	WV	62386	NA2	2.0	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	3.0
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA3	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA4	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA5	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Overton Hydroelectric Project	LA	62391	NA6	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	8.1
2022	11	61906	Rye Development	IPP	Philo L&D Hydroelectric Project	OH	62427	NA2	1.2	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	1.5
2022	11	61906	Rye Development	IPP	Point Marion L&D Hydroelectric Project	PA	62384	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.5
2022	11	61906	Rye Development	IPP	Rokeby L&D Hydroelectric Project	OH	62426	NA2	1.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	2.0
2022	11	61906	Rye Development	IPP	Sardis Lake Hydroelectric Project	MS	62425	NA2	5.5	Conventional Hydroelectric	WAT	HY	(P) Planned for installation, but regulatory approvals not initiated	7.5
2022	12	61768	Arrow Canyon Solar LLC	IPP	Arrow Canyon Solar	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	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	62687	Pinckard Solar, LLC	IPP	Pinckard Solar	AL	62787	PCKND	79.7	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	85.1
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	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

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)
2023	6	60798	69SV 8me LLC	IPP	Eland 2 Solar Farm	CA	61169	69SV8	200.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	200.0
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
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	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	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0202	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0203	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0204	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0205	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0386	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0388	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0389	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0392	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0435	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0437	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0440	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0447	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0464	0.8	Landfill Gas	LFG	IC
2019	6	56355	LES Project Holdings LLC	IPP	Sumpter Energy Associates	MI	54536	0467	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	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2019	6	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	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	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2019	6	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2019	6	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2019	6	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2019	6	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2019	6	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2019	6	50097	Verso Luke LLC	Industrial	Luke Mill	MD	50282	GEN1	32.0	Conventional Steam Coal	BIT	ST
2019	6	50097	Verso Luke LLC	Industrial	Luke Mill	MD	50282	GEN2	28.0	Conventional Steam Coal	BIT	ST
2019	7	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN1	46.3	Conventional Steam Coal	BIT	ST
2019	7	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN2	46.3	Conventional Steam Coal	BIT	ST
2019	7	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	7	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
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	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	UNIT3	0.4	Petroleum Liquids	DFO	IC
2019	8	50158	Innovative Energy Systems Inc	IPP	SREC Bath LFGTE	NY	58295	GEN1	1.6	Landfill Gas	LFG	IC
2019	8	50158	Innovative Energy Systems Inc	IPP	SREC Bath LFGTE	NY	58295	GEN2	1.6	Landfill Gas	LFG	IC
2019	8	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	10	22484	AES Redondo Beach LLC	IPP	AES Redondo Beach LLC	CA	356	7	480.0	Natural Gas Steam Turbine	NG	ST
2019	10	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	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
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	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 CHP	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	4161	Constellation Power Source Gen	IPP	Notch Cliff	MD	1555	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
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	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN1	57.8	Conventional Steam Coal	BIT	ST
2020	10	55739	Edgecombe Operating Services LLC	Electric CHP	Edgecombe Genco LLC	NC	10384	GEN2	57.8	Conventional Steam Coal	BIT	ST
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	1	80.0	Conventional Steam Coal	BIT	ST
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	2	238.0	Conventional Steam Coal	BIT	ST
2020	10	189	PowerSouth Energy Cooperative	Electric Utility	Charles R Lowman	AL	56	3	238.0	Conventional Steam Coal	BIT	ST
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL00	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL01	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL02	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL03	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL04	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL05	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL06	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL07	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL08	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL09	0.1	Other Waste Biomass	OBG	FC
2020	11	56778	Bloom Energy 2009 PPA	IPP	Caltech Central	CA	57460	CL10	0.1	Other Waste Biomass	OBG	FC
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	3	332.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	4	335.0	Natural Gas Steam Turbine	NG	ST
2020	12	22148	AES Alamitos LLC	IPP	AES Alamitos LLC	CA	315	5	485.0	Natural Gas Steam Turbine	NG	ST
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

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Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	12	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	50161	FirstEnergy Nuclear Operating Company	IPP	Perry	OH	6020	1	1,240.0	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	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	58.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	3	80.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	Petroleum Liquids	DFO	IC
2021	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	ST
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	ST2	385.0	Conventional Steam Coal	BIT	ST
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	1575	1.6	Conventional Hydroelectric	WAT	HY
2021	8	7080	Aclara Meters LLC	Industrial	General Electric Great Falls Upper Hydro	NH	10059	500	0.5	Conventional Hydroelectric	WAT	HY
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	2	901.0	Nuclear	NUC	ST
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	1	2.6	Petroleum Liquids	DFO	IC
2021	12	18301	City of Sumner - (IA)	Electric Utility	Sumner	IA	1191	2	1.1	Petroleum Liquids	DFO	IC
2021	12	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	1	197.7	Conventional Steam Coal	SUB	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	1	29.5	Conventional Steam Coal	LIG	ST
2021	12	12199	Montana-Dakota Utilities Co	Electric Utility	R M Heskett	ND	2790	2	74.8	Conventional Steam Coal	LIG	ST
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	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

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	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY2	0.7	Conventional Hydroelectric	WAT	HY
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	1	1.1	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	2	0.8	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	3	1.0	Petroleum Liquids	DFO	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT2	1.8	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT3	1.8	Landfill Gas	LFG	IC
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTA	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTB	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTC	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	STM	24.0	Natural Gas Fired Combined Cycle	NG	CA
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0	Natural Gas Fired Combined Cycle	NG	CA
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	1A	127.5	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	1B	127.5	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	2A	130.0	Conventional Steam Coal	SUB	ST
2023	5	4254	Consumers Energy Co	Electric Utility	Dan E Karn	MI	1702	2B	130.0	Conventional Steam Coal	SUB	ST
2023	6	18488	City of Taunton	Electric Utility	Cleary Flood	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	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
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	1	18642	Tennessee Valley Authority	Electric Utility	Bull Run	TN	3396	1	870.0	Conventional Steam Coal	BIT	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

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Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	Natural Gas Steam Turbine	NG	ST
2025	1	17568	Cooperative Energy	Electric Utility	Moselle	MS	2070	3	59.0	Natural Gas Steam Turbine	NG	ST
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	1	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	2	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	4	7801	Gulf Power Co	Electric Utility	Pea Ridge	FL	7715	3	4.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	6	814	Entergy Arkansas LLC	Electric Utility	Lake Catherine	AR	170	4	522.0	Natural Gas Steam Turbine	NG	ST
2025	7	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	1	0.2	Conventional Hydroelectric	WAT	HY
2025	7	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	2	0.2	Conventional Hydroelectric	WAT	HY
2025	8	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	2	1,118.0	Nuclear	NUC	ST
2025	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	1	113.0	Natural Gas Steam Turbine	NG	ST
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	1	0.4	Conventional Hydroelectric	WAT	HY
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	2	0.3	Conventional Hydroelectric	WAT	HY
2025	12	9417	Interstate Power and Light Co	Electric Utility	Prairie Creek	IA	1073	1	3.6	Conventional Steam Coal	SUB	ST
2025	12	9417	Interstate Power and Light Co	Electric Utility	Prairie Creek	IA	1073	3	26.4	Conventional Steam Coal	SUB	ST
2025	12	56155	Lansing Board of Water and Light	Electric Utility	Erickson Station	MI	1832	1	154.5	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	2	51.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	3	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	5	52.0	Petroleum Liquids	DFO	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	6	48.0	Petroleum Liquids	DFO	GT
2025	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	2	335.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	2	268.0	Conventional Steam Coal	SUB	ST
2025	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	2	65.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	2	183.0	Natural Gas Steam Turbine	NG	ST
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	2	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	3	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	2	670.0	Conventional Steam Coal	RC	ST
2025	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Craig (CO)	CO	6021	1	427.0	Conventional Steam Coal	SUB	ST
2026	1	21622	The University of Texas at Dallas	Commercial	University of Texas at Dallas	TX	54607	GEN1	3.5	Natural Gas Internal Combustion Engine	NG	IC
2026	6	11241	Entergy Louisiana LLC	Electric Utility	Little Gypsy	LA	1402	2	416.0	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	3	410.7	Natural Gas Steam Turbine	NG	ST
2026	6	55937	Entergy Texas Inc.	Electric Utility	Sabine	TX	3459	4	533.4	Natural Gas Steam Turbine	NG	ST
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	12.7	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	11.9	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	9.4	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	1	420.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	3	97.0	Natural Gas Steam Turbine	NG	ST
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	4	83.0	Natural Gas Fired Combined Cycle	NG	CA
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT1	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	CT2	72.0	Natural Gas Fired Combined Cycle	NG	CT
2026	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	2	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	56997	Marina Energy LLC	IPP	L'Oreal Piscataway	NJ	57868	UNIT1	0.8	Solar Photovoltaic	SUN	PV
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	1	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	2	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	3	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2026	12	13781	Northern States Power Co - Minnesota	Electric Utility	Inver Hills	MN	1913	5	47.0	Natural Gas Fired Combustion Turbine	NG	GT
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

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	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	2	900.0	Conventional Steam Coal	BIT	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Red Wing	MN	1926	1	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Red Wing	MN	1926	2	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	1	1.8	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	2	1.8	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	3	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	4	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	5	2.0	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	6	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	7	2.0	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	St Croix Falls	WI	4011	8	1.9	Conventional Hydroelectric	WAT	HY
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wilmarth	MN	1934	1	9.0	Municipal Solid Waste	MSW	ST
2027	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wilmarth	MN	1934	2	9.0	Municipal Solid Waste	MSW	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Cherokee	CO	469	4	310.0	Natural Gas Steam Turbine	NG	ST
2027	12	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	2	0.6	Conventional Hydroelectric	WAT	HY
2027	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	4	190.0	Natural Gas Steam Turbine	NG	ST
2028	1	56997	Marina Energy LLC	IPP	Freeze Solar	NJ	60759	PV1	1.4	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	A	0.8	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	B	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller 400M	NJ	62438	C	0.2	Solar Photovoltaic	SUN	PV
2028	5	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HM	0.8	Solar Photovoltaic	SUN	PV
2028	12	16604	City of San Antonio - (TX)	Electric Utility	O W Sommers	TX	3611	2	410.0	Natural Gas Steam Turbine	NG	ST
2028	12	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	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	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-May 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

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

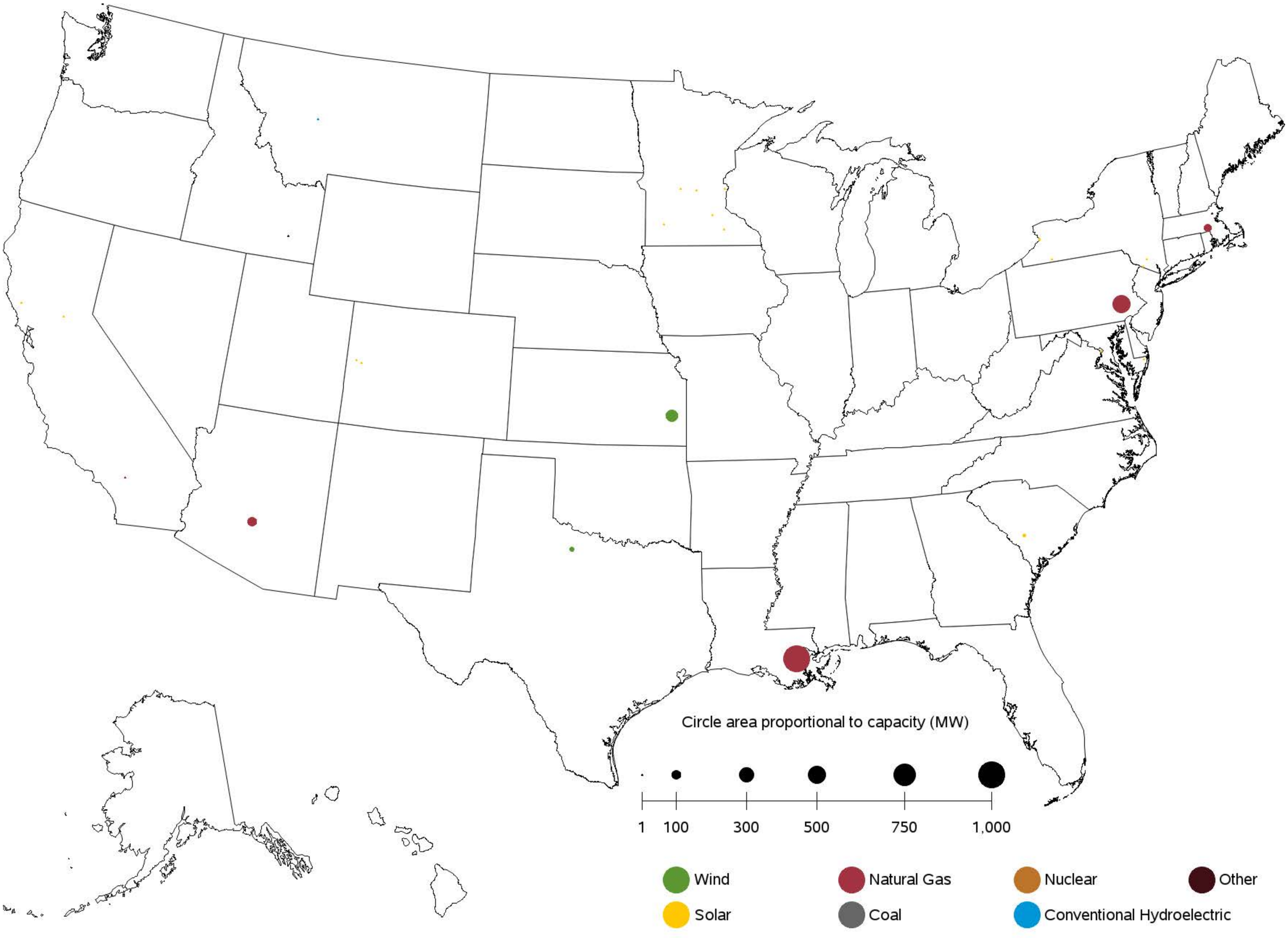
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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

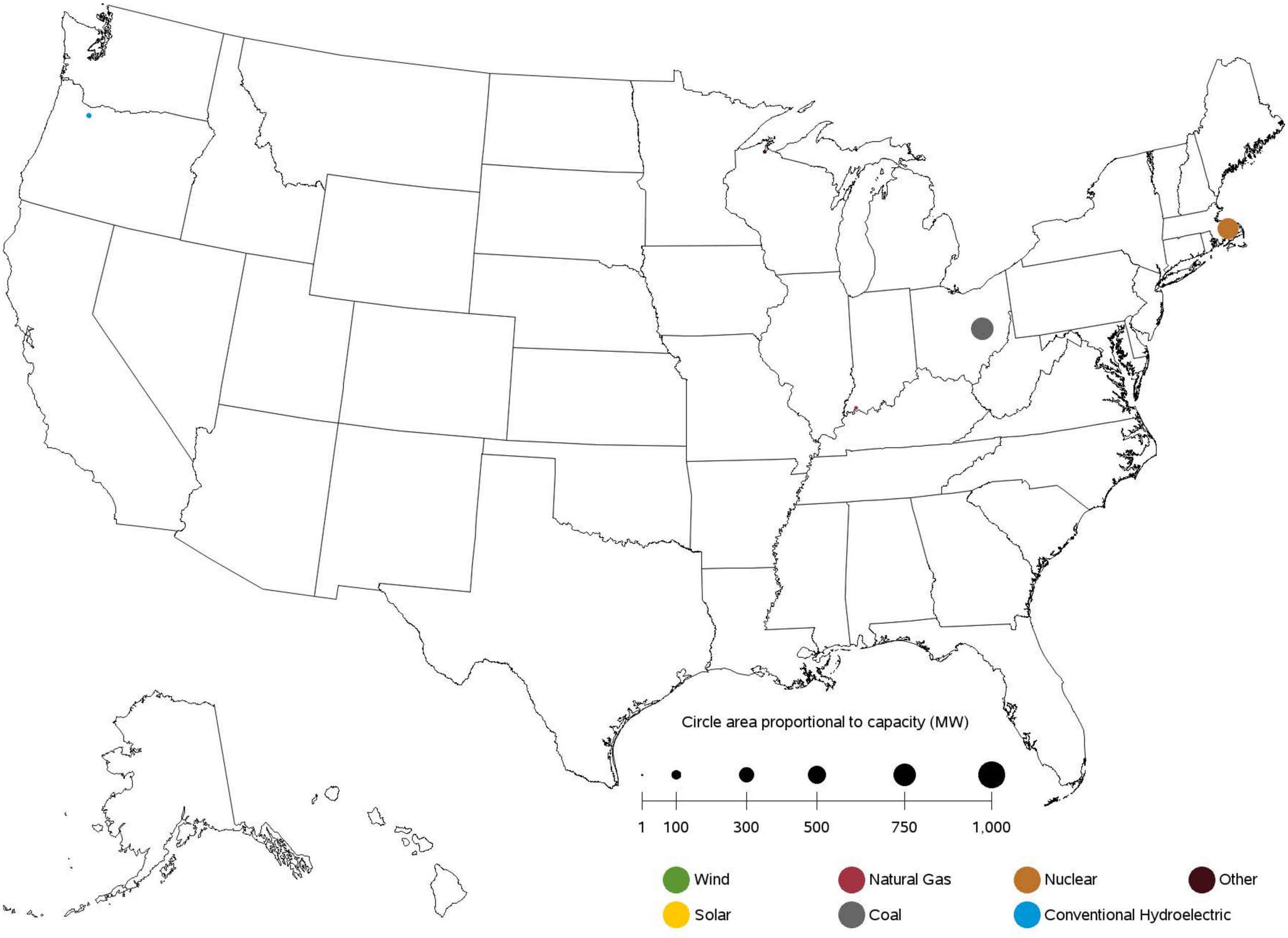
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations 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 May 2019



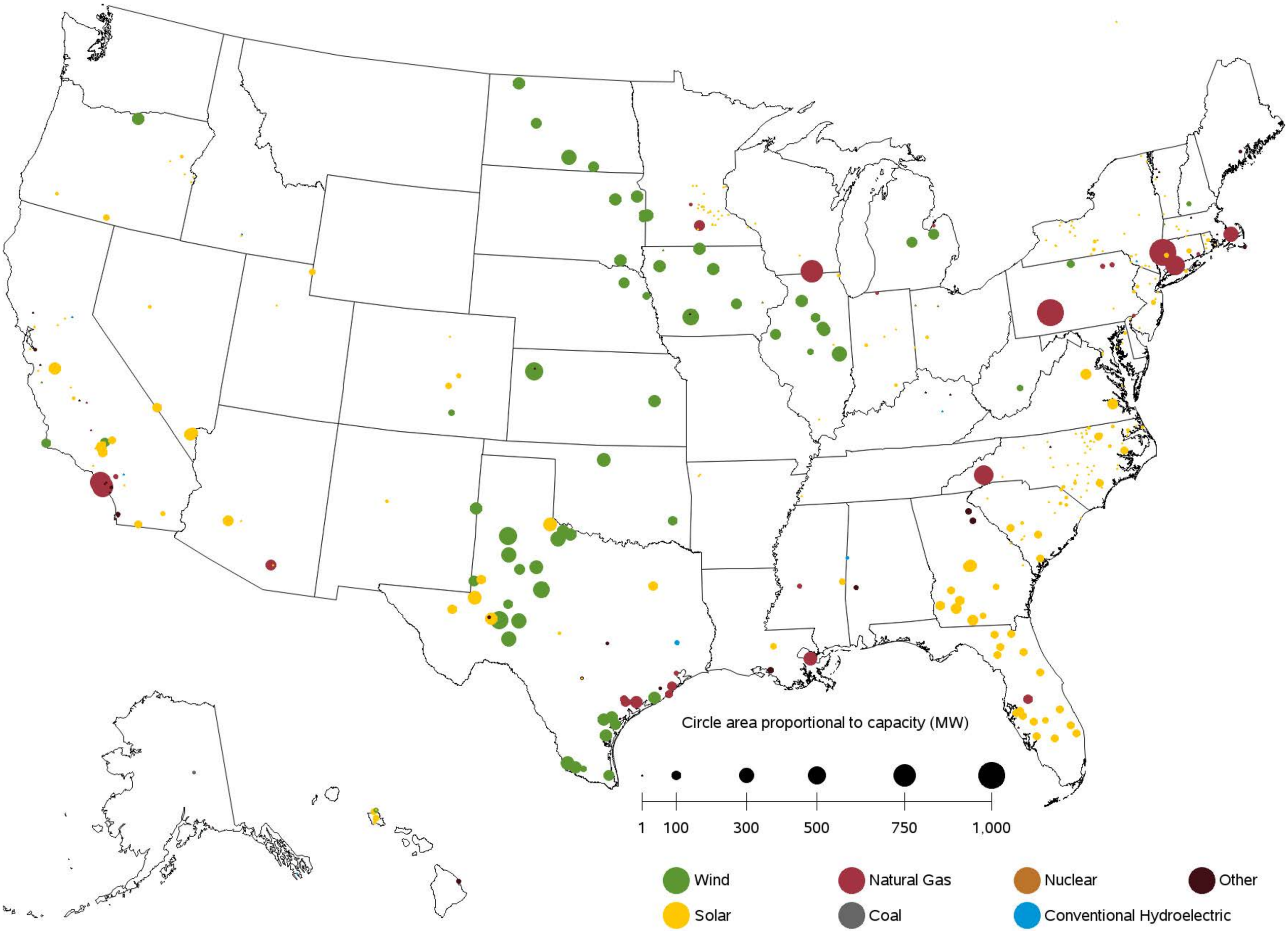
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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



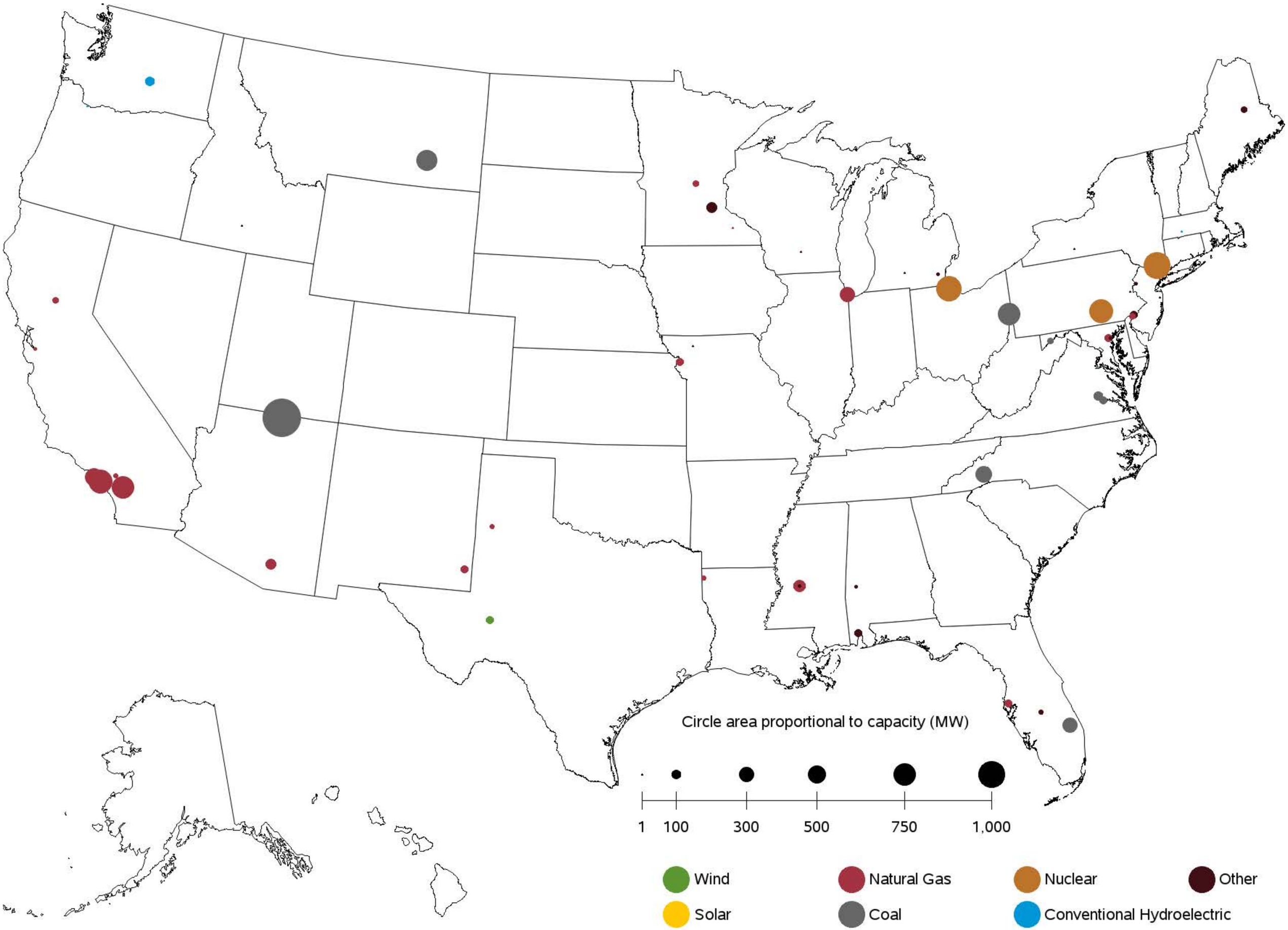
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from June 2019 to May 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 June 2019 to May 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 - May 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	NA	NA	NA	NA	NA
Year to Date					
2017	2,413	3,227	870	0	6,510
2018	2,264	3,435	854	0	6,553
2019	NA	NA	NA	NA	NA
Rolling 12 Months Ending in May					
2018	4,897	7,028	1,730	0	13,655
2019	NA	NA	NA	NA	NA

Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report. NA = Not Available
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 - May 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	NA	NA	NA	NA	NA
Year to Date					
2017	545	738	164	0	1,447
2018	460	805	163	0	1,428
2019	NA	NA	NA	NA	NA
Rolling 12 Months Ending in May					
2018	1,038	1,617	343	0	2,998
2019	NA	NA	NA	NA	NA

Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report. NA = Not Available
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 - May 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	NA	NA	NA	NA	NA
Rolling 12 Months Ending in May					
2018	1,338,635	126,735	613	0	1,465,984
2019	NA	NA	NA	NA	NA

Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report. NA = Not Available
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 - May 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	NA	NA	NA	NA	NA
Year to Date					
2017	22.59	22.86	18.83	--	22.22
2018	20.32	23.44	19.09	--	21.80
2019	NA	NA	NA	NA	NA
Rolling 12 Months Ending in May					
2018	21.20	23.01	19.84	--	21.96
2019	NA	NA	NA	NA	NA

Sources: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Industry Power Report. NA = Not Available
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-May 2019

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,346	0	3,043	0	0	4,941
2008	454	98	1,346	0	3,472	0	0	5,371
2009	454	98	1,346	0	3,592	0	0	5,491
2010	454	98	1,346	0	3,592	0	0	5,491
2011	454	98	1,346	0	3,592	5	0	5,496
2012	454	98	1,346	0	3,592	23	98	5,612
2013	454	98	1,346	0	3,592	26	98	5,615
2014	454	98	1,346	0	3,592	38	99	5,627
2015	454	98	1,346	9	3,596	70	99	5,672
2016	454	98	1,346	33	3,596	145	99	5,771
2017	454	98	1,346	33	3,596	145	99	5,771
2018	454	98	1,346	33	3,596	145	99	5,771
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

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, May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**40**	**48**	**0**	**3**	**0**	**0**	**8**
Connecticut	0	67	0	1	0	0	28
Maine	45	88	0	18	0	0	10
Massachusetts	0	91	0	6	0	0	18
New Hampshire	0	59	0	0	0	0	17
Rhode Island	0	201	0	9	0	0	0
Vermont	0	482	0	0	0	0	16
Middle Atlantic	**5**	**19**	**48**	**1**	**26**	**0**	**2**
New Jersey	0	128	0	2	0	0	0
New York	0	37	0	3	0	0	2
Pennsylvania	5	14	80	1	39	0	11
East North Central	**1**	**8**	**14**	**1**	**8**	**0**	**15**
Illinois	0	23	0	8	0	0	46
Indiana	4	5	0	2	16	0	33
Michigan	3	8	0	2	0	0	28
Ohio	1	18	30	1	23	0	39
Wisconsin	0	39	0	3	0	0	22
West North Central	**1**	**5**	**0**	**5**	**0**	**0**	**10**
Iowa	0	11	0	5	0	0	37
Kansas	0	3	0	19	0	0	0
Minnesota	3	24	0	8	0	0	32
Missouri	0	9	0	5	0	0	16
Nebraska	7	37	0	18	0	0	30
North Dakota	0	5	0	50	0	0	23
South Dakota	0	23	0	41	0	0	16
South Atlantic	**0**	**4**	**8**	**1**	**0**	**0**	**7**
Delaware	0	141	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	39
Georgia	0	22	61	3	0	0	14
Maryland	0	18	0	2	0	0	1
North Carolina	0	5	0	3	0	0	10
South Carolina	0	8	0	3	0	0	17
Virginia	0	15	0	3	0	0	18
West Virginia	1	0	0	6	0	0	14
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**4**
Alabama	0	24	0	2	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	5	0	2	0	0	0
Tennessee	0	0	0	1	0	0	7
West South Central	**2**	**6**	**0**	**1**	**5**	**0**	**8**
Arkansas	11	17	0	6	0	0	11
Louisiana	0	18	0	2	11	0	19
Oklahoma	0	1	0	4	0	0	13
Texas	0	4	10	1	3	0	18
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**6**
Arizona	0	2	0	2	0	0	8
Colorado	0	45	0	3	0	0	24
Idaho	115	0	0	38	0	0	12
Montana	8	20	0	29	0	0	11
Nevada	0	0	0	1	0	0	3
New Mexico	0	5	0	15	0	0	79
Utah	0	1	0	4	0	0	33
Wyoming	5	2	0	12	0	0	34
Pacific Contiguous	**0**	**32**	**0**	**3**	**2**	**0**	**2**
California	0	11	0	3	2	0	5
Oregon	0	3,114	0	14	0	0	5
Washington	0	126	0	16	0	0	1
Pacific Noncontiguous	**14**	**1**	**0**	**36**	**0**	**0**	**27**
Alaska	48	3	0	36	0	0	28
Hawaii	0	1	0	0	0	0	76
U.S. Total	**0**	**1**	**5**	**1**	**4**	**0**	**2**

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

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

Total (All Sectors) by Census Division and State, May 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**5**	**0**	**1**	**2**
Connecticut	0	0	0	24	11	0	0	1
Maine	0	0	0	94	6	0	0	5
Massachusetts	0	0	0	8	6	0	2	4
New Hampshire	0	0	0	0	15	0	0	3
Rhode Island	0	0	0	38	11	0	0	9
Vermont	0	0	0	20	13	0	0	11
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	12	4	0	2	1
Pennsylvania	0	0	0	24	4	0	0	1
East North Central	**0**	**0**	**0**	**9**	**2**	**0**	**3**	**1**
Illinois	0	0	0	24	2	0	0	1
Indiana	0	0	0	13	3	0	0	3
Michigan	0	0	0	21	5	0	13	1
Ohio	0	0	0	23	4	0	0	1
Wisconsin	0	0	0	46	7	0	34	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**6**	**1**
Iowa	0	0	0	66	2	0	0	1
Kansas	0	0	0	100	3	0	0	2
Minnesota	0	0	0	7	3	0	4	2
Missouri	0	0	0	25	4	0	0	1
Nebraska	0	0	0	48	3	0	0	3
North Dakota	0	0	0	0	3	0	42	2
South Dakota	0	0	0	120	7	0	0	9
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	28	34	0	0	1
District of Columbia	0	0	0	85	19	0	0	15
Florida	0	0	0	1	2	0	1	1
Georgia	0	0	0	3	3	0	0	1
Maryland	0	0	0	8	6	0	0	1
North Carolina	0	0	0	2	2	0	0	1
South Carolina	0	0	0	10	5	0	0	1
Virginia	0	0	0	8	6	0	0	1
West Virginia	0	0	0	0	6	0	0	1
East South Central	**0**	**0**	**0**	**5**	**3**	**0**	**5**	**1**
Alabama	0	0	0	9	4	0	0	1
Kentucky	0	0	0	37	18	0	0	1
Mississippi	0	0	0	3	4	0	0	1
Tennessee	0	0	0	12	7	0	61	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**1**
Arkansas	0	0	0	6	6	0	0	4
Louisiana	0	0	0	110	8	0	0	2
Oklahoma	0	0	0	39	2	0	0	2
Texas	0	0	0	2	2	0	8	1
Mountain	**0**	**11**	**0**	**1**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	3	0	0	2
Idaho	0	52	0	10	5	0	0	9
Montana	0	0	0	54	7	0	0	7
Nevada	0	11	0	2	5	0	0	2
New Mexico	0	0	0	5	3	0	0	5
Utah	0	24	0	4	5	0	10	2
Wyoming	0	0	0	0	5	0	0	4
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**2**	**1**
California	0	5	0	1	2	0	2	2
Oregon	0	35	0	10	3	0	0	4
Washington	0	0	0	50	4	0	0	1
Pacific Noncontiguous	**0**	**30**	**0**	**11**	**10**	**0**	**0**	**6**
Alaska	0	0	0	0	21	0	0	17
Hawaii	0	30	0	11	11	0	0	2
U.S. Total	**0**	**6**	**0**	**1**	**1**	**0**	**0**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**40**	**48**	**0**	**3**	**0**	**0**	**8**
Connecticut	0	67	0	1	0	0	28
Maine	45	88	0	18	0	0	10
Massachusetts	0	91	0	6	0	0	18
New Hampshire	0	59	0	0	0	0	17
Rhode Island	0	201	0	9	0	0	0
Vermont	0	482	0	0	0	0	16
Middle Atlantic	**5**	**19**	**48**	**1**	**26**	**0**	**2**
New Jersey	0	128	0	2	0	0	0
New York	0	37	0	3	0	0	2
Pennsylvania	5	14	80	1	39	0	11
East North Central	**1**	**8**	**14**	**1**	**8**	**0**	**15**
Illinois	0	23	0	8	0	0	46
Indiana	4	5	0	2	16	0	33
Michigan	3	8	0	2	0	0	28
Ohio	1	18	30	1	23	0	39
Wisconsin	0	39	0	3	0	0	22
West North Central	**1**	**5**	**0**	**5**	**0**	**0**	**10**
Iowa	0	11	0	5	0	0	37
Kansas	0	3	0	19	0	0	0
Minnesota	3	24	0	8	0	0	32
Missouri	0	9	0	5	0	0	16
Nebraska	7	37	0	18	0	0	30
North Dakota	0	5	0	50	0	0	23
South Dakota	0	23	0	41	0	0	16
South Atlantic	**0**	**4**	**8**	**1**	**0**	**0**	**7**
Delaware	0	141	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	3	0	1	0	0	39
Georgia	0	22	61	3	0	0	14
Maryland	0	18	0	2	0	0	1
North Carolina	0	5	0	3	0	0	10
South Carolina	0	8	0	3	0	0	17
Virginia	0	15	0	3	0	0	18
West Virginia	1	0	0	6	0	0	14
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**4**
Alabama	0	24	0	2	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	5	0	2	0	0	0
Tennessee	0	0	0	1	0	0	7
West South Central	**2**	**6**	**0**	**1**	**5**	**0**	**8**
Arkansas	11	17	0	6	0	0	11
Louisiana	0	18	0	2	11	0	19
Oklahoma	0	1	0	4	0	0	13
Texas	0	4	10	1	3	0	18
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**6**
Arizona	0	2	0	2	0	0	8
Colorado	0	45	0	3	0	0	24
Idaho	115	0	0	38	0	0	12
Montana	8	20	0	29	0	0	11
Nevada	0	0	0	1	0	0	3
New Mexico	0	5	0	15	0	0	79
Utah	0	1	0	4	0	0	33
Wyoming	5	2	0	12	0	0	34
Pacific Contiguous	**0**	**32**	**0**	**3**	**2**	**0**	**2**
California	0	11	0	3	2	0	5
Oregon	0	3,114	0	14	0	0	5
Washington	0	126	0	16	0	0	1
Pacific Noncontiguous	**14**	**1**	**0**	**36**	**0**	**0**	**27**
Alaska	48	3	0	36	0	0	28
Hawaii	0	1	0	0	0	0	76
U.S. Total	**0**	**1**	**5**	**1**	**4**	**0**	**2**

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

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**5**	**0**	**1**	**2**
Connecticut	0	0	0	24	11	0	0	1
Maine	0	0	0	94	6	0	0	5
Massachusetts	0	0	0	8	6	0	2	4
New Hampshire	0	0	0	0	15	0	0	3
Rhode Island	0	0	0	38	11	0	0	9
Vermont	0	0	0	20	13	0	0	11
Middle Atlantic	**0**	**0**	**0**	**6**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	12	4	0	2	1
Pennsylvania	0	0	0	24	4	0	0	1
East North Central	**0**	**0**	**0**	**9**	**2**	**0**	**3**	**1**
Illinois	0	0	0	24	2	0	0	1
Indiana	0	0	0	13	3	0	0	3
Michigan	0	0	0	21	5	0	13	1
Ohio	0	0	0	23	4	0	0	1
Wisconsin	0	0	0	46	7	0	34	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**6**	**1**
Iowa	0	0	0	66	2	0	0	1
Kansas	0	0	0	100	3	0	0	2
Minnesota	0	0	0	7	3	0	4	2
Missouri	0	0	0	25	4	0	0	1
Nebraska	0	0	0	48	3	0	0	3
North Dakota	0	0	0	0	3	0	42	2
South Dakota	0	0	0	120	7	0	0	9
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	28	34	0	0	1
District of Columbia	0	0	0	85	19	0	0	15
Florida	0	0	0	1	2	0	1	1
Georgia	0	0	0	3	3	0	0	1
Maryland	0	0	0	8	6	0	0	1
North Carolina	0	0	0	2	2	0	0	1
South Carolina	0	0	0	10	5	0	0	1
Virginia	0	0	0	8	6	0	0	1
West Virginia	0	0	0	0	6	0	0	1
East South Central	**0**	**0**	**0**	**5**	**3**	**0**	**5**	**1**
Alabama	0	0	0	9	4	0	0	1
Kentucky	0	0	0	37	18	0	0	1
Mississippi	0	0	0	3	4	0	0	1
Tennessee	0	0	0	12	7	0	61	1
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**3**	**1**
Arkansas	0	0	0	6	6	0	0	4
Louisiana	0	0	0	110	8	0	0	2
Oklahoma	0	0	0	39	2	0	0	2
Texas	0	0	0	2	2	0	8	1
Mountain	**0**	**11**	**0**	**1**	**2**	**0**	**3**	**1**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	3	0	0	2
Idaho	0	52	0	10	5	0	0	9
Montana	0	0	0	54	7	0	0	7
Nevada	0	11	0	2	5	0	0	2
New Mexico	0	0	0	5	3	0	0	5
Utah	0	24	0	4	5	0	10	2
Wyoming	0	0	0	0	5	0	0	4
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**2**	**1**
California	0	5	0	1	2	0	2	2
Oregon	0	35	0	10	3	0	0	4
Washington	0	0	0	50	4	0	0	1
Pacific Noncontiguous	**0**	**30**	**0**	**11**	**10**	**0**	**0**	**6**
Alaska	0	0	0	0	21	0	0	17
Hawaii	0	30	0	11	11	0	0	2
U.S. Total	**0**	**6**	**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, May 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**2**	**1**	**.**	**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	54	.	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	**3**	**3**	**14**	**.**	**2**
Illinois	6	8	0	.	5
Indiana	9	2	0	.	3
Michigan	5	17	195	.	8
Ohio	6	4	14	.	3
Wisconsin	12	9	29	.	8
West North Central	**2**	**2**	**5**	**.**	**1**
Iowa	6	3	33	.	3
Kansas	11	6	0	.	7
Minnesota	6	7	4	.	4
Missouri	2	1	0	.	1
Nebraska	14	38	31	.	13
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**2**	**.**	**1**
Delaware	6	4	14	.	4
District of Columbia	0	0	0	.	0
Florida	4	6	3	.	4
Georgia	141	74	0	.	80
Maryland	1	2	2	.	1
North Carolina	8	1	0	.	6
South Carolina	4	4	0	.	3
Virginia	11	6	5	.	7
West Virginia	0	0	0	.	0
East South Central	**3**	**6**	**0**	**.**	**3**
Alabama	0	0	0	.	0
Kentucky	4	7	0	.	3
Mississippi	6	17	0	.	9
Tennessee	0	0	0	.	0
West South Central	**3**	**4**	**0**	**.**	**2**
Arkansas	15	12	0	.	10
Louisiana	4	14	0	.	4
Oklahoma	13	9	0	.	10
Texas	4	4	0	.	3
Mountain	**1**	**1**	**3**	**.**	**0**
Arizona	0	1	13	.	0
Colorado	3	2	50	.	2
Idaho	3	9	0	.	3
Montana	12	12	0	.	9
Nevada	0	0	0	.	0
New Mexico	3	5	0	.	3
Utah	2	4	0	.	2
Wyoming	23	36	0	.	18
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	2	7	8	.	3
Washington	2	20	42	.	3
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	7	7	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, May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**140**	**0**	**107**	**0**	**0**	**17**
Connecticut	0	89	0	0	0	0	21
Maine	0	0	0	0	0	0	0
Massachusetts	0	210	0	379	0	0	37
New Hampshire	0	264	0	0	0	0	31
Rhode Island	0	0	0	0	0	0	0
Vermont	0	482	0	0	0	0	25
Middle Atlantic	**0**	**76**	**0**	**7**	**0**	**0**	**1**
New Jersey	0	0	0	164	0	0	0
New York	0	76	0	7	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**2**	**5**	**0**	**2**	**0**	**0**	**16**
Illinois	0	92	0	0	0	0	130
Indiana	5	6	0	4	0	0	33
Michigan	3	7	0	8	0	0	30
Ohio	9	13	0	2	0	0	35
Wisconsin	0	36	0	4	0	0	24
West North Central	**1**	**5**	**0**	**5**	**0**	**0**	**10**
Iowa	0	11	0	5	0	0	37
Kansas	0	3	0	20	0	0	0
Minnesota	3	20	0	7	0	0	39
Missouri	0	9	0	10	0	0	16
Nebraska	7	37	0	18	0	0	30
North Dakota	0	5	0	50	0	0	23
South Dakota	0	23	0	41	0	0	16
South Atlantic	**0**	**3**	**0**	**1**	**0**	**0**	**9**
Delaware	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	39
Georgia	0	11	0	3	0	0	14
Maryland	0	31	0	0	0	0	0
North Carolina	0	4	0	3	0	0	10
South Carolina	0	9	0	3	0	0	16
Virginia	0	43	0	4	0	0	18
West Virginia	0	0	0	0	0	0	21
East South Central	**0**	**0**	**0**	**2**	**0**	**0**	**4**
Alabama	0	3	0	4	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	6	0	2	0	0	0
Tennessee	0	0	0	1	0	0	7
West South Central	**3**	**9**	**0**	**3**	**0**	**0**	**9**
Arkansas	13	29	0	6	0	0	11
Louisiana	0	18	0	4	0	0	0
Oklahoma	0	1	0	6	0	0	13
Texas	0	7	0	5	0	0	19
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**6**
Arizona	0	2	0	2	0	0	8
Colorado	0	46	0	3	0	0	25
Idaho	0	0	0	45	0	0	12
Montana	0	392	0	28	0	0	11
Nevada	0	0	0	1	0	0	0
New Mexico	0	5	0	17	0	0	79
Utah	0	1	0	5	0	0	33
Wyoming	5	2	0	19	0	0	34
Pacific Contiguous	**0**	**13**	**0**	**8**	**0**	**0**	**2**
California	0	12	0	7	0	0	4
Oregon	0	0	0	28	0	0	5
Washington	0	226	0	25	0	0	1
Pacific Noncontiguous	**96**	**1**	**0**	**37**	**0**	**0**	**30**
Alaska	96	3	0	37	0	0	30
Hawaii	0	1	0	0	0	0	0
U.S. Total	**1**	**1**	**0**	**1**	**0**	**0**	**2**

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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, May 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**	**24**	**7**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	13
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	33	26	0	0	27
New Hampshire	0	0	0	0	0	0	0	17
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	27	12	0	0	16
Middle Atlantic	**0**	**0**	**0**	**20**	**20**	**0**	**0**	**2**
New Jersey	0	0	0	20	20	0	0	34
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**16**	**6**	**0**	**36**	**2**
Illinois	0	0	0	85	38	0	0	1
Indiana	0	0	0	22	21	0	0	4
Michigan	0	0	0	23	6	0	0	2
Ohio	0	0	0	61	58	0	0	4
Wisconsin	0	0	0	0	13	0	37	2
West North Central	**0**	**0**	**0**	**52**	**2**	**0**	**10**	**1**
Iowa	0	0	0	83	2	0	0	2
Kansas	0	0	0	223	10	0	0	3
Minnesota	0	0	0	112	6	0	0	2
Missouri	0	0	0	0	66	0	0	1
Nebraska	0	0	0	147	20	0	0	4
North Dakota	0	0	0	0	5	0	42	3
South Dakota	0	0	0	0	11	0	0	11
South Atlantic	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**
Delaware	0	0	0	69	69	0	0	27
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	6	6	0	0	1
Maryland	0	0	0	59	59	0	0	0
North Carolina	0	0	0	8	8	0	0	1
South Carolina	0	0	0	136	13	0	0	1
Virginia	0	0	0	19	16	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**31**	**31**	**0**	**0**	**1**
Alabama	0	0	0	53	53	0	0	1
Kentucky	0	0	0	37	37	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	176	176	0	0	1
West South Central	**0**	**0**	**0**	**36**	**10**	**0**	**0**	**2**
Arkansas	0	0	0	132	132	0	0	5
Louisiana	0	0	0	110	110	0	0	2
Oklahoma	0	0	0	39	10	0	0	4
Texas	0	0	0	129	35	0	0	2
Mountain	**0**	**33**	**0**	**6**	**4**	**0**	**26**	**1**
Arizona	0	0	0	7	7	0	0	1
Colorado	0	0	0	133	5	0	0	2
Idaho	0	0	0	0	26	0	0	12
Montana	0	0	0	0	21	0	0	11
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	12	12	0	0	7
Utah	0	33	0	0	33	0	39	2
Wyoming	0	0	0	0	8	0	0	5
Pacific Contiguous	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**1**
California	0	0	0	8	5	0	0	3
Oregon	0	0	0	71	4	0	0	5
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**10**
Alaska	0	0	0	0	33	0	0	19
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**10**	**0**	**2**	**2**	**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.2.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**140**	**0**	**107**	**0**	**0**	**17**
Connecticut	0	89	0	0	0	0	21
Maine	0	0	0	0	0	0	0
Massachusetts	0	210	0	379	0	0	37
New Hampshire	0	264	0	0	0	0	31
Rhode Island	0	0	0	0	0	0	0
Vermont	0	482	0	0	0	0	25
Middle Atlantic	**0**	**76**	**0**	**7**	**0**	**0**	**1**
New Jersey	0	0	0	164	0	0	0
New York	0	76	0	7	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**2**	**5**	**0**	**2**	**0**	**0**	**16**
Illinois	0	92	0	0	0	0	130
Indiana	5	6	0	4	0	0	33
Michigan	3	7	0	8	0	0	30
Ohio	9	13	0	2	0	0	35
Wisconsin	0	36	0	4	0	0	24
West North Central	**1**	**5**	**0**	**5**	**0**	**0**	**10**
Iowa	0	11	0	5	0	0	37
Kansas	0	3	0	20	0	0	0
Minnesota	3	20	0	7	0	0	39
Missouri	0	9	0	10	0	0	16
Nebraska	7	37	0	18	0	0	30
North Dakota	0	5	0	50	0	0	23
South Dakota	0	23	0	41	0	0	16
South Atlantic	**0**	**3**	**0**	**1**	**0**	**0**	**9**
Delaware	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	39
Georgia	0	11	0	3	0	0	14
Maryland	0	31	0	0	0	0	0
North Carolina	0	4	0	3	0	0	10
South Carolina	0	9	0	3	0	0	16
Virginia	0	43	0	4	0	0	18
West Virginia	0	0	0	0	0	0	21
East South Central	**0**	**0**	**0**	**2**	**0**	**0**	**4**
Alabama	0	3	0	4	0	0	6
Kentucky	0	0	0	3	0	0	8
Mississippi	0	6	0	2	0	0	0
Tennessee	0	0	0	1	0	0	7
West South Central	**3**	**9**	**0**	**3**	**0**	**0**	**9**
Arkansas	13	29	0	6	0	0	11
Louisiana	0	18	0	4	0	0	0
Oklahoma	0	1	0	6	0	0	13
Texas	0	7	0	5	0	0	19
Mountain	**1**	**2**	**0**	**2**	**0**	**0**	**6**
Arizona	0	2	0	2	0	0	8
Colorado	0	46	0	3	0	0	25
Idaho	0	0	0	45	0	0	12
Montana	0	392	0	28	0	0	11
Nevada	0	0	0	1	0	0	0
New Mexico	0	5	0	17	0	0	79
Utah	0	1	0	5	0	0	33
Wyoming	5	2	0	19	0	0	34
Pacific Contiguous	**0**	**13**	**0**	**8**	**0**	**0**	**2**
California	0	12	0	7	0	0	4
Oregon	0	0	0	28	0	0	5
Washington	0	226	0	25	0	0	1
Pacific Noncontiguous	**96**	**1**	**0**	**37**	**0**	**0**	**30**
Alaska	96	3	0	37	0	0	30
Hawaii	0	1	0	0	0	0	0
U.S. Total	**1**	**1**	**0**	**1**	**0**	**0**	**2**

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

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

Electric Utilities by Census Division and State, Year-to-Date through May 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**	**24**	**7**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	13
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	33	26	0	0	27
New Hampshire	0	0	0	0	0	0	0	17
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	27	12	0	0	16
Middle Atlantic	**0**	**0**	**0**	**20**	**20**	**0**	**0**	**2**
New Jersey	0	0	0	20	20	0	0	34
New York	0	0	0	0	0	0	0	2
Pennsylvania	0	0	0	0	0	0	0	0
East North Central	**0**	**0**	**0**	**16**	**6**	**0**	**36**	**2**
Illinois	0	0	0	85	38	0	0	1
Indiana	0	0	0	22	21	0	0	4
Michigan	0	0	0	23	6	0	0	2
Ohio	0	0	0	61	58	0	0	4
Wisconsin	0	0	0	0	13	0	37	2
West North Central	**0**	**0**	**0**	**52**	**2**	**0**	**10**	**1**
Iowa	0	0	0	83	2	0	0	2
Kansas	0	0	0	223	10	0	0	3
Minnesota	0	0	0	112	6	0	0	2
Missouri	0	0	0	0	66	0	0	1
Nebraska	0	0	0	147	20	0	0	4
North Dakota	0	0	0	0	5	0	42	3
South Dakota	0	0	0	0	11	0	0	11
South Atlantic	**0**	**0**	**0**	**1**	**3**	**0**	**0**	**0**
Delaware	0	0	0	69	69	0	0	27
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	6	6	0	0	1
Maryland	0	0	0	59	59	0	0	0
North Carolina	0	0	0	8	8	0	0	1
South Carolina	0	0	0	136	13	0	0	1
Virginia	0	0	0	19	16	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**31**	**31**	**0**	**0**	**1**
Alabama	0	0	0	53	53	0	0	1
Kentucky	0	0	0	37	37	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	176	176	0	0	1
West South Central	**0**	**0**	**0**	**36**	**10**	**0**	**0**	**2**
Arkansas	0	0	0	132	132	0	0	5
Louisiana	0	0	0	110	110	0	0	2
Oklahoma	0	0	0	39	10	0	0	4
Texas	0	0	0	129	35	0	0	2
Mountain	**0**	**33**	**0**	**6**	**4**	**0**	**26**	**1**
Arizona	0	0	0	7	7	0	0	1
Colorado	0	0	0	133	5	0	0	2
Idaho	0	0	0	0	26	0	0	12
Montana	0	0	0	0	21	0	0	11
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	12	12	0	0	7
Utah	0	33	0	0	33	0	39	2
Wyoming	0	0	0	0	8	0	0	5
Pacific Contiguous	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**1**
California	0	0	0	8	5	0	0	3
Oregon	0	0	0	71	4	0	0	5
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**15**	**0**	**0**	**10**
Alaska	0	0	0	0	33	0	0	19
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**10**	**0**	**2**	**2**	**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, May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**63**	**0**	**3**	**0**	**0**	**9**
Connecticut	0	70	0	0	0	0	33
Maine	0	212	0	21	0	0	11
Massachusetts	0	155	0	6	0	0	21
New Hampshire	0	836	0	0	0	0	20
Rhode Island	0	201	0	10	0	0	0
Vermont	0	0	0	0	0	0	20
Middle Atlantic	**5**	**17**	**0**	**1**	**0**	**0**	**9**
New Jersey	0	151	0	2	0	0	0
New York	0	38	0	3	0	0	9
Pennsylvania	5	14	0	1	0	0	11
East North Central	**0**	**23**	**30**	**1**	**7**	**0**	**45**
Illinois	0	22	0	10	0	0	47
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	2	0	0	100
Ohio	0	32	30	0	31	0	75
Wisconsin	0	0	0	0	0	0	95
West North Central	**0**	**286**	**0**	**10**	**0**	**0**	**70**
Iowa	0	33	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	728	0	43	0	0	74
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**15**	**0**	**3**	**0**	**0**	**4**
Delaware	0	141	0	0	0	0	0
Florida	0	32	0	8	0	0	0
Georgia	0	609	0	8	0	0	171
Maryland	0	17	0	2	0	0	1
North Carolina	0	87	0	7	0	0	58
South Carolina	0	0	0	34	0	0	71
Virginia	0	12	0	3	0	0	48
West Virginia	14	0	0	13	0	0	30
East South Central	**0**	**53**	**0**	**0**	**0**	**0**	**178**
Alabama	0	76	0	1	0	0	0
Kentucky	0	0	0	0	0	0	178
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**1**	**0**	**1**	**0**	**0**	**18**
Arkansas	0	0	0	0	0	0	54
Louisiana	0	0	0	8	0	0	19
Oklahoma	0	0	0	0	0	0	0
Texas	0	3	0	1	0	0	0
Mountain	**7**	**15**	**0**	**4**	**0**	**0**	**30**
Arizona	0	0	0	1	0	0	0
Colorado	0	0	0	18	0	0	70
Idaho	0	0	0	57	0	0	37
Montana	8	19	0	1,187	0	0	93
Nevada	0	0	0	0	0	0	129
New Mexico	0	0	0	26	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**29**	**0**	**4**	**0**	**0**	**23**
California	0	0	0	5	0	0	27
Oregon	0	0	0	4	0	0	65
Washington	0	67	0	18	0	0	56
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	39	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**20**	**1**	**4**	**0**	**6**

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

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

Independent Power Producers by Census Division and State, May 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**6**	**0**	**1**	**2**
Connecticut	0	0	0	24	11	0	0	1
Maine	0	0	0	94	8	0	0	6
Massachusetts	0	0	0	8	6	0	2	4
New Hampshire	0	0	0	0	18	0	0	3
Rhode Island	0	0	0	38	11	0	0	9
Vermont	0	0	0	24	20	0	0	15
Middle Atlantic	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	12	4	0	0	1
Pennsylvania	0	0	0	27	4	0	0	1
East North Central	**0**	**0**	**0**	**11**	**2**	**0**	**17**	**0**
Illinois	0	0	0	23	2	0	0	1
Indiana	0	0	0	13	3	0	0	1
Michigan	0	0	0	37	6	0	21	1
Ohio	0	0	0	25	4	0	0	0
Wisconsin	0	0	0	49	9	0	0	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**2**
Iowa	0	0	0	106	3	0	0	2
Kansas	0	0	0	110	3	0	0	3
Minnesota	0	0	0	7	3	0	0	5
Missouri	0	0	0	27	4	0	0	2
Nebraska	0	0	0	51	3	0	0	3
North Dakota	0	0	0	0	3	0	0	3
South Dakota	0	0	0	120	8	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	30	40	0	0	1
District of Columbia	0	0	0	85	85	0	0	85
Florida	0	0	0	7	4	0	1	5
Georgia	0	0	0	4	4	0	0	7
Maryland	0	0	0	8	6	0	0	1
North Carolina	0	0	0	2	2	0	0	3
South Carolina	0	0	0	10	13	0	0	13
Virginia	0	0	0	8	9	0	0	3
West Virginia	0	0	0	0	6	0	0	10
East South Central	**0**	**0**	**0**	**5**	**6**	**0**	**0**	**0**
Alabama	0	0	0	8	10	0	0	1
Kentucky	0	0	0	213	120	0	0	74
Mississippi	0	0	0	3	5	0	0	0
Tennessee	0	0	0	12	14	0	0	14
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	6	15	0	0	1
Louisiana	0	0	0	0	60	0	0	5
Oklahoma	0	0	0	0	2	0	0	2
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**13**	**0**	**1**	**2**	**0**	**0**	**2**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	4	0	0	4
Idaho	0	52	0	10	6	0	0	13
Montana	0	0	0	54	7	0	0	6
Nevada	0	13	0	2	6	0	0	5
New Mexico	0	0	0	6	3	0	0	4
Utah	0	33	0	4	5	0	0	4
Wyoming	0	0	0	0	6	0	0	5
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**2**
California	0	5	0	1	2	0	0	2
Oregon	0	35	0	10	4	0	0	4
Washington	0	0	0	51	6	0	0	8
Pacific Noncontiguous	**0**	**30**	**0**	**14**	**14**	**0**	**0**	**4**
Alaska	0	0	0	0	45	0	0	32
Hawaii	0	30	0	14	14	0	0	4
U.S. Total	**0**	**7**	**0**	**1**	**1**	**0**	**1**	**0**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**63**	**0**	**3**	**0**	**0**	**9**
Connecticut	0	70	0	0	0	0	33
Maine	0	212	0	21	0	0	11
Massachusetts	0	155	0	6	0	0	21
New Hampshire	0	836	0	0	0	0	20
Rhode Island	0	201	0	10	0	0	0
Vermont	0	0	0	0	0	0	20
Middle Atlantic	**5**	**17**	**0**	**1**	**0**	**0**	**9**
New Jersey	0	151	0	2	0	0	0
New York	0	38	0	3	0	0	9
Pennsylvania	5	14	0	1	0	0	11
East North Central	**0**	**23**	**30**	**1**	**7**	**0**	**45**
Illinois	0	22	0	10	0	0	47
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	2	0	0	100
Ohio	0	32	30	0	31	0	75
Wisconsin	0	0	0	0	0	0	95
West North Central	**0**	**286**	**0**	**10**	**0**	**0**	**70**
Iowa	0	33	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	728	0	43	0	0	74
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**7**	**15**	**0**	**3**	**0**	**0**	**4**
Delaware	0	141	0	0	0	0	0
Florida	0	32	0	8	0	0	0
Georgia	0	609	0	8	0	0	171
Maryland	0	17	0	2	0	0	1
North Carolina	0	87	0	7	0	0	58
South Carolina	0	0	0	34	0	0	71
Virginia	0	12	0	3	0	0	48
West Virginia	14	0	0	13	0	0	30
East South Central	**0**	**53**	**0**	**0**	**0**	**0**	**178**
Alabama	0	76	0	1	0	0	0
Kentucky	0	0	0	0	0	0	178
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**1**	**0**	**1**	**0**	**0**	**18**
Arkansas	0	0	0	0	0	0	54
Louisiana	0	0	0	8	0	0	19
Oklahoma	0	0	0	0	0	0	0
Texas	0	3	0	1	0	0	0
Mountain	**7**	**15**	**0**	**4**	**0**	**0**	**30**
Arizona	0	0	0	1	0	0	0
Colorado	0	0	0	18	0	0	70
Idaho	0	0	0	57	0	0	37
Montana	8	19	0	1,187	0	0	93
Nevada	0	0	0	0	0	0	129
New Mexico	0	0	0	26	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**29**	**0**	**4**	**0**	**0**	**23**
California	0	0	0	5	0	0	27
Oregon	0	0	0	4	0	0	65
Washington	0	67	0	18	0	0	56
Pacific Noncontiguous	**5**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	39	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**20**	**1**	**4**	**0**	**6**

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

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

Independent Power Producers by Census Division and State, Year-to-Date through May 2019 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**6**	**0**	**1**	**2**
Connecticut	0	0	0	24	11	0	0	1
Maine	0	0	0	94	8	0	0	6
Massachusetts	0	0	0	8	6	0	2	4
New Hampshire	0	0	0	0	18	0	0	3
Rhode Island	0	0	0	38	11	0	0	9
Vermont	0	0	0	24	20	0	0	15
Middle Atlantic	**0**	**0**	**0**	**7**	**3**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	12	4	0	0	1
Pennsylvania	0	0	0	27	4	0	0	1
East North Central	**0**	**0**	**0**	**11**	**2**	**0**	**17**	**0**
Illinois	0	0	0	23	2	0	0	1
Indiana	0	0	0	13	3	0	0	1
Michigan	0	0	0	37	6	0	21	1
Ohio	0	0	0	25	4	0	0	0
Wisconsin	0	0	0	49	9	0	0	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**2**
Iowa	0	0	0	106	3	0	0	2
Kansas	0	0	0	110	3	0	0	3
Minnesota	0	0	0	7	3	0	0	5
Missouri	0	0	0	27	4	0	0	2
Nebraska	0	0	0	51	3	0	0	3
North Dakota	0	0	0	0	3	0	0	3
South Dakota	0	0	0	120	8	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**2**
Delaware	0	0	0	30	40	0	0	1
District of Columbia	0	0	0	85	85	0	0	85
Florida	0	0	0	7	4	0	1	5
Georgia	0	0	0	4	4	0	0	7
Maryland	0	0	0	8	6	0	0	1
North Carolina	0	0	0	2	2	0	0	3
South Carolina	0	0	0	10	13	0	0	13
Virginia	0	0	0	8	9	0	0	3
West Virginia	0	0	0	0	6	0	0	10
East South Central	**0**	**0**	**0**	**5**	**6**	**0**	**0**	**0**
Alabama	0	0	0	8	10	0	0	1
Kentucky	0	0	0	213	120	0	0	74
Mississippi	0	0	0	3	5	0	0	0
Tennessee	0	0	0	12	14	0	0	14
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**1**
Arkansas	0	0	0	6	15	0	0	1
Louisiana	0	0	0	0	60	0	0	5
Oklahoma	0	0	0	0	2	0	0	2
Texas	0	0	0	2	2	0	0	1
Mountain	**0**	**13**	**0**	**1**	**2**	**0**	**0**	**2**
Arizona	0	0	0	2	3	0	0	1
Colorado	0	0	0	5	4	0	0	4
Idaho	0	52	0	10	6	0	0	13
Montana	0	0	0	54	7	0	0	6
Nevada	0	13	0	2	6	0	0	5
New Mexico	0	0	0	6	3	0	0	4
Utah	0	33	0	4	5	0	0	4
Wyoming	0	0	0	0	6	0	0	5
Pacific Contiguous	**0**	**5**	**0**	**1**	**2**	**0**	**0**	**2**
California	0	5	0	1	2	0	0	2
Oregon	0	35	0	10	4	0	0	4
Washington	0	0	0	51	6	0	0	8
Pacific Noncontiguous	**0**	**30**	**0**	**14**	**14**	**0**	**0**	**4**
Alaska	0	0	0	0	45	0	0	32
Hawaii	0	30	0	14	14	0	0	4
U.S. Total	**0**	**7**	**0**	**1**	**1**	**0**	**1**	**0**

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

Table A.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**45**	**0**	**19**	**0**	**0**	**0**
Connecticut	0	1,187	0	32	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	88	0	28	0	0	0
New Hampshire	0	2	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**	**88**	**0**	**17**	**0**	**0**	**0**
New Jersey	0	0	0	25	0	0	0
New York	0	167	0	21	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**32**	**37**	**0**	**9**	**0**	**0**	**0**
Illinois	136	371	0	26	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	166	0	14	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	29	0	0	0
West North Central	**0**	**23**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	24	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	6,758	0	0	0	0	0
South Atlantic	**0**	**8**	**0**	**7**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	15	0	0	0	0	0
Maryland	0	714	0	3	0	0	0
North Carolina	0	129	0	96	0	0	0
South Carolina	0	200	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**47**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	47	0	0	0
West South Central	**0**	**0**	**0**	**26**	**0**	**0**	**442**
Arkansas	0	0	0	162	0	0	0
Louisiana	0	0	0	50	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	29	0	0	442
Mountain	**0**	**608**	**0**	**10**	**0**	**0**	**0**
Arizona	0	608	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	41	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**213**	**0**	**3**	**0**	**0**	**128**
California	0	48	0	3	0	0	128
Oregon	0	3,114	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**48**	**3**	**0**	**0**	**0**	**0**	**83**
Alaska	48	6	0	0	0	0	83
Hawaii	0	0	0	0	0	0	0
U.S. Total	**21**	**18**	**0**	**5**	**0**	**0**	**61**

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

Table A.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, May 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**	**76**	**7**	**0**	**0**	**15**
Connecticut	0	0	0	209	209	0	0	32
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	80	21	0	0	24
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**	**15**	**5**	**0**	**4**	**8**
New Jersey	0	0	0	16	8	0	0	7
New York	0	0	0	59	6	0	8	12
Pennsylvania	0	0	0	73	10	0	0	4
East North Central	**0**	**0**	**0**	**77**	**14**	**0**	**0**	**7**
Illinois	0	0	0	158	108	0	0	25
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	223	8	0	0	11
Ohio	0	0	0	100	22	0	0	2
Wisconsin	0	0	0	129	29	0	0	20
West North Central	**0**	**0**	**0**	**0**	**34**	**0**	**68**	**7**
Iowa	0	0	0	0	39	0	0	6
Kansas	0	0	0	0	148	0	0	148
Minnesota	0	0	0	0	49	0	68	17
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	261	0	0	261
South Dakota	0	0	0	0	0	0	0	6,758
South Atlantic	**0**	**0**	**0**	**16**	**6**	**0**	**0**	**5**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	97	35	0	0	26
Georgia	0	0	0	107	94	0	0	38
Maryland	0	0	0	71	35	0	0	3
North Carolina	0	0	0	16	16	0	0	31
South Carolina	0	0	0	0	0	0	0	16
Virginia	0	0	0	196	5	0	0	2
East South Central	**0**	**0**	**0**	**84**	**84**	**0**	**0**	**45**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	84	84	0	0	45
West South Central	**0**	**0**	**0**	**126**	**32**	**0**	**0**	**24**
Arkansas	0	0	0	0	0	0	0	139
Louisiana	0	0	0	0	0	0	0	50
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	126	35	0	0	27
Mountain	**0**	**0**	**0**	**20**	**5**	**0**	**0**	**5**
Arizona	0	0	0	66	66	0	0	7
Colorado	0	0	0	56	81	0	0	51
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	21	3	0	0	2
New Mexico	0	0	0	0	263	0	0	41
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**18**	**11**	**0**	**0**	**4**
California	0	0	0	18	11	0	0	4
Oregon	0	0	0	0	44	0	0	16
Washington	0	0	0	0	110	0	0	86
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**
Alaska	0	0	0	0	0	0	0	53
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**9**	**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 May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**45**	**0**	**19**	**0**	**0**	**0**
Connecticut	0	1,187	0	32	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	88	0	28	0	0	0
New Hampshire	0	2	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**	**88**	**0**	**17**	**0**	**0**	**0**
New Jersey	0	0	0	25	0	0	0
New York	0	167	0	21	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**32**	**37**	**0**	**9**	**0**	**0**	**0**
Illinois	136	371	0	26	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	166	0	14	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	29	0	0	0
West North Central	**0**	**23**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	24	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	6,758	0	0	0	0	0
South Atlantic	**0**	**8**	**0**	**7**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	15	0	0	0	0	0
Maryland	0	714	0	3	0	0	0
North Carolina	0	129	0	96	0	0	0
South Carolina	0	200	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**47**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	47	0	0	0
West South Central	**0**	**0**	**0**	**26**	**0**	**0**	**442**
Arkansas	0	0	0	162	0	0	0
Louisiana	0	0	0	50	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	29	0	0	442
Mountain	**0**	**608**	**0**	**10**	**0**	**0**	**0**
Arizona	0	608	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	41	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**213**	**0**	**3**	**0**	**0**	**128**
California	0	48	0	3	0	0	128
Oregon	0	3,114	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**48**	**3**	**0**	**0**	**0**	**0**	**83**
Alaska	48	6	0	0	0	0	83
Hawaii	0	0	0	0	0	0	0
U.S. Total	**21**	**18**	**0**	**5**	**0**	**0**	**61**

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

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

Commercial Sector by Census Division and State, Year-to-Date through May 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**	**76**	**7**	**0**	**0**	**15**
Connecticut	0	0	0	209	209	0	0	32
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	80	21	0	0	24
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**	**15**	**5**	**0**	**4**	**8**
New Jersey	0	0	0	16	8	0	0	7
New York	0	0	0	59	6	0	8	12
Pennsylvania	0	0	0	73	10	0	0	4
East North Central	**0**	**0**	**0**	**77**	**14**	**0**	**0**	**7**
Illinois	0	0	0	158	108	0	0	25
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	223	8	0	0	11
Ohio	0	0	0	100	22	0	0	2
Wisconsin	0	0	0	129	29	0	0	20
West North Central	**0**	**0**	**0**	**0**	**34**	**0**	**68**	**7**
Iowa	0	0	0	0	39	0	0	6
Kansas	0	0	0	0	148	0	0	148
Minnesota	0	0	0	0	49	0	68	17
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	261	0	0	261
South Dakota	0	0	0	0	0	0	0	6,758
South Atlantic	**0**	**0**	**0**	**16**	**6**	**0**	**0**	**5**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	97	35	0	0	26
Georgia	0	0	0	107	94	0	0	38
Maryland	0	0	0	71	35	0	0	3
North Carolina	0	0	0	16	16	0	0	31
South Carolina	0	0	0	0	0	0	0	16
Virginia	0	0	0	196	5	0	0	2
East South Central	**0**	**0**	**0**	**84**	**84**	**0**	**0**	**45**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	84	84	0	0	45
West South Central	**0**	**0**	**0**	**126**	**32**	**0**	**0**	**24**
Arkansas	0	0	0	0	0	0	0	139
Louisiana	0	0	0	0	0	0	0	50
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	126	35	0	0	27
Mountain	**0**	**0**	**0**	**20**	**5**	**0**	**0**	**5**
Arizona	0	0	0	66	66	0	0	7
Colorado	0	0	0	56	81	0	0	51
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	21	3	0	0	2
New Mexico	0	0	0	0	263	0	0	41
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**18**	**11**	**0**	**0**	**4**
California	0	0	0	18	11	0	0	4
Oregon	0	0	0	0	44	0	0	16
Washington	0	0	0	0	110	0	0	86
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**22**
Alaska	0	0	0	0	0	0	0	53
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**9**	**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, May 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**177**	**134**	**0**	**12**	**0**	**0**	**56**
Connecticut	0	0	0	14	0	0	0
Maine	177	134	0	36	0	0	56
Massachusetts	0	0	0	10	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	50	0	0	0
Middle Atlantic	**32**	**23**	**48**	**10**	**26**	**0**	**26**
New Jersey	0	0	0	11	0	0	0
New York	0	3	0	12	0	0	26
Pennsylvania	32	77	80	15	39	0	0
East North Central	**8**	**72**	**0**	**8**	**15**	**0**	**71**
Illinois	7	0	0	18	0	0	0
Indiana	0	5	0	7	16	0	0
Michigan	78	350	0	34	0	0	281
Ohio	0	0	0	17	0	0	0
Wisconsin	26	420	0	32	0	0	73
West North Central	**3**	**0**	**0**	**20**	**0**	**0**	**0**
Iowa	2	0	0	47	0	0	0
Kansas	0	0	0	24	0	0	0
Minnesota	15	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	53	0	0	0	0	0	0
South Atlantic	**11**	**30**	**61**	**6**	**0**	**0**	**24**
Delaware	0	0	0	0	0	0	0
Florida	58	71	0	16	0	0	0
Georgia	56	40	61	22	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	86	0	38	0	0	408
South Carolina	0	0	0	6	0	0	0
Virginia	0	719	0	10	0	0	0
West Virginia	0	0	0	0	0	0	25
East South Central	**0**	**47**	**0**	**11**	**0**	**0**	**0**
Alabama	0	78	0	20	0	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	30	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**4**	**10**	**2**	**8**	**0**	**0**
Arkansas	0	0	0	24	0	0	0
Louisiana	0	0	0	2	11	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	13	10	3	7	0	0
Mountain	**22**	**0**	**0**	**10**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	115	0	0	72	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	23	0	0	16	0	0	0
Pacific Contiguous	**0**	**157**	**0**	**1**	**2**	**0**	**0**
California	0	0	0	1	2	0	0
Oregon	0	0	0	97	0	0	0
Washington	0	170	0	42	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**112**
Alaska	0	15	0	0	0	0	0
Hawaii	0	0	0	0	0	0	112
U.S. Total	**3**	**9**	**23**	**2**	**5**	**0**	**18**

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, May 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**	**19**	**10**	**0**	**0**	**8**
Connecticut	0	0	0	534	534	0	0	14
Maine	0	0	0	0	10	0	0	10
Massachusetts	0	0	0	0	97	0	0	10
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	50
Middle Atlantic	**0**	**0**	**0**	**47**	**9**	**0**	**0**	**8**
New Jersey	0	0	0	69	69	0	0	6
New York	0	0	0	0	30	0	0	10
Pennsylvania	0	0	0	63	9	0	0	11
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	40	0	0	7
Michigan	0	0	0	0	12	0	0	15
Ohio	0	0	0	0	12	0	0	7
Wisconsin	0	0	0	0	10	0	0	14
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	4
Kansas	0	0	0	0	0	0	0	23
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	6,728	0	0	32
South Atlantic	**0**	**0**	**0**	**113**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	95	0	0	1
Florida	0	0	0	162	7	0	0	6
Georgia	0	0	0	0	5	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	5
South Carolina	0	0	0	158	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	10
East South Central	**0**	**0**	**0**	**129**	**4**	**0**	**61**	**4**
Alabama	0	0	0	0	5	0	0	7
Kentucky	0	0	0	0	20	0	0	13
Mississippi	0	0	0	0	6	0	0	9
Tennessee	0	0	0	129	7	0	61	3
West South Central	**0**	**0**	**0**	**0**	**5**	**0**	**4**	**2**
Arkansas	0	0	0	0	6	0	0	7
Louisiana	0	0	0	0	8	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	13	0	12	2
Mountain	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	15
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	10
Pacific Contiguous	**0**	**0**	**0**	**39**	**8**	**0**	**4**	**2**
California	0	0	0	39	12	0	4	1
Oregon	0	0	0	0	19	0	0	20
Washington	0	0	0	0	11	0	0	10
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**355**	**0**	**0**	**13**
Alaska	0	0	0	0	355	0	0	6
Hawaii	0	0	0	0	0	0	0	18
U.S. Total	**0**	**0**	**0**	**29**	**3**	**0**	**1**	**1**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**177**	**134**	**0**	**12**	**0**	**0**	**56**
Connecticut	0	0	0	14	0	0	0
Maine	177	134	0	36	0	0	56
Massachusetts	0	0	0	10	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	50	0	0	0
Middle Atlantic	**32**	**23**	**48**	**10**	**26**	**0**	**26**
New Jersey	0	0	0	11	0	0	0
New York	0	3	0	12	0	0	26
Pennsylvania	32	77	80	15	39	0	0
East North Central	**8**	**72**	**0**	**8**	**15**	**0**	**71**
Illinois	7	0	0	18	0	0	0
Indiana	0	5	0	7	16	0	0
Michigan	78	350	0	34	0	0	281
Ohio	0	0	0	17	0	0	0
Wisconsin	26	420	0	32	0	0	73
West North Central	**3**	**0**	**0**	**20**	**0**	**0**	**0**
Iowa	2	0	0	47	0	0	0
Kansas	0	0	0	24	0	0	0
Minnesota	15	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	6	0	0	0	0	0	0
North Dakota	53	0	0	0	0	0	0
South Atlantic	**11**	**30**	**61**	**6**	**0**	**0**	**24**
Delaware	0	0	0	0	0	0	0
Florida	58	71	0	16	0	0	0
Georgia	56	40	61	22	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	86	0	38	0	0	408
South Carolina	0	0	0	6	0	0	0
Virginia	0	719	0	10	0	0	0
West Virginia	0	0	0	0	0	0	25
East South Central	**0**	**47**	**0**	**11**	**0**	**0**	**0**
Alabama	0	78	0	20	0	0	0
Kentucky	0	0	0	14	0	0	0
Mississippi	0	0	0	30	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**4**	**10**	**2**	**8**	**0**	**0**
Arkansas	0	0	0	24	0	0	0
Louisiana	0	0	0	2	11	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	13	10	3	7	0	0
Mountain	**22**	**0**	**0**	**10**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	115	0	0	72	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	23	0	0	16	0	0	0
Pacific Contiguous	**0**	**157**	**0**	**1**	**2**	**0**	**0**
California	0	0	0	1	2	0	0
Oregon	0	0	0	97	0	0	0
Washington	0	170	0	42	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**112**
Alaska	0	15	0	0	0	0	0
Hawaii	0	0	0	0	0	0	112
U.S. Total	**3**	**9**	**23**	**2**	**5**	**0**	**18**

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 May 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**	**19**	**10**	**0**	**0**	**8**
Connecticut	0	0	0	534	534	0	0	14
Maine	0	0	0	0	10	0	0	10
Massachusetts	0	0	0	0	97	0	0	10
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	50
Middle Atlantic	**0**	**0**	**0**	**47**	**9**	**0**	**0**	**8**
New Jersey	0	0	0	69	69	0	0	6
New York	0	0	0	0	30	0	0	10
Pennsylvania	0	0	0	63	9	0	0	11
East North Central	**0**	**0**	**0**	**0**	**7**	**0**	**0**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	40	0	0	7
Michigan	0	0	0	0	12	0	0	15
Ohio	0	0	0	0	12	0	0	7
Wisconsin	0	0	0	0	10	0	0	14
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	4
Kansas	0	0	0	0	0	0	0	23
Minnesota	0	0	0	0	0	0	0	5
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	6
North Dakota	0	0	0	0	6,728	0	0	32
South Atlantic	**0**	**0**	**0**	**113**	**3**	**0**	**0**	**3**
Delaware	0	0	0	0	95	0	0	1
Florida	0	0	0	162	7	0	0	6
Georgia	0	0	0	0	5	0	0	6
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	5
South Carolina	0	0	0	158	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	10
East South Central	**0**	**0**	**0**	**129**	**4**	**0**	**61**	**4**
Alabama	0	0	0	0	5	0	0	7
Kentucky	0	0	0	0	20	0	0	13
Mississippi	0	0	0	0	6	0	0	9
Tennessee	0	0	0	129	7	0	61	3
West South Central	**0**	**0**	**0**	**0**	**5**	**0**	**4**	**2**
Arkansas	0	0	0	0	6	0	0	7
Louisiana	0	0	0	0	8	0	0	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	13	0	12	2
Mountain	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**6**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	15
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	10
Pacific Contiguous	**0**	**0**	**0**	**39**	**8**	**0**	**4**	**2**
California	0	0	0	39	12	0	4	1
Oregon	0	0	0	0	19	0	0	20
Washington	0	0	0	0	11	0	0	10
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**355**	**0**	**0**	**13**
Alaska	0	0	0	0	355	0	0	6
Hawaii	0	0	0	0	0	0	0	18
U.S. Total	**0**	**0**	**0**	**29**	**3**	**0**	**1**	**1**

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**3**	**0**	**1**
Connecticut	0	1	3	0	1
Maine	0	1	2	0	1
Massachusetts	0	1	6	0	1
New Hampshire	0	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	2	8	9	0	4
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	2	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	0	1	1	0	1
Indiana	1	4	2	0	1
Michigan	0	2	3	0	1
Ohio	0	1	1	0	1
Wisconsin	1	4	6	0	3
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	1	8	6	0	4
Kansas	3	2	7	0	2
Minnesota	1	5	8	0	3
Missouri	1	3	7	0	2
Nebraska	1	8	10	0	5
North Dakota	1	5	9	0	5
South Dakota	1	10	15	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	2	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	3	0	1
Kentucky	1	4	3	0	2
Mississippi	3	2	5	0	2
Tennessee	1	3	5	0	2
West South Central	**2**	**1**	**1**	**0**	**1**
Arkansas	3	2	4	0	2
Louisiana	4	3	2	0	2
Oklahoma	3	1	4	0	2
Texas	2	1	2	0	1
Mountain	**0**	**2**	**2**	**0**	**1**
Arizona	0	3	4	0	1
Colorado	1	5	7	0	3
Idaho	1	5	4	0	2
Montana	1	8	6	0	4
Nevada	0	2	1	0	1
New Mexico	1	7	8	0	4
Utah	1	5	3	0	2
Wyoming	1	8	4	0	3
Pacific Contiguous	**0**	**1**	**3**	**0**	**1**
California	0	1	2	0	1
Oregon	1	4	10	0	3
Washington	1	5	7	0	3
Pacific Noncontiguous	**1**	**5**	**5**	**0**	**2**
Alaska	1	11	18	0	7
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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Table A.6.B. Relative Standard Error for Sales of Electricity to Ultimate Customers

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**1**
Connecticut	0	1	3	1	1
Maine	0	1	2	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	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	0
Wisconsin	1	3	5	0	2
West North Central	**1**	**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	6	0	1
Nebraska	1	6	8	0	3
North Dakota	1	3	7	0	3
South Dakota	2	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	1	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	2	1	4	0	2
Tennessee	1	3	4	0	1
West South Central	**1**	**1**	**1**	**0**	**1**
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**	**2**	**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	2	6	6	0	3
Utah	1	4	2	0	2
Wyoming	2	6	3	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	2	0	0
Oregon	1	4	8	0	2
Washington	1	3	6	0	2
Pacific Noncontiguous	**1**	**4**	**4**	**0**	**2**
Alaska	2	8	14	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 A.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, May 2019

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

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**1**	**1**
Connecticut	4	1	1	2	2
Maine	1	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	3	6	5	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	1	3	1	0	1
Michigan	1	1	4	0	1
Ohio	1	1	1	0	1
Wisconsin	1	2	6	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	5	6	0	3
Kansas	2	2	5	0	1
Minnesota	1	3	7	0	2
Missouri	2	3	5	0	2
Nebraska	2	5	11	0	3
North Dakota	2	3	7	0	3
South Dakota	2	6	13	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	2	3	7	0	2
District of Columbia	0	0	0	0	0
Florida	1	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	1
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	2
Mississippi	2	2	4	0	2
Tennessee	1	3	4	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	2	3	0	1
Louisiana	1	1	2	0	1
Oklahoma	2	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	5	0	2
Montana	2	4	8	0	3
Nevada	1	2	1	0	1
New Mexico	3	6	9	0	4
Utah	3	4	3	0	2
Wyoming	2	5	4	0	3
Pacific Contiguous	**0**	**1**	**2**	**0**	**0**
California	0	1	2	0	0
Oregon	1	3	9	0	2
Washington	1	2	7	0	2
Pacific Noncontiguous	**1**	**2**	**3**	**0**	**1**
Alaska	2	6	13	0	3
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

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

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

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

Table A.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 May 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**0**	**1**
Connecticut	4	1	3	1	2
Maine	1	1	2	0	1
Massachusetts	1	1	5	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	3	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	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	1	3	2	0	1
Michigan	1	2	4	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	6	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	7	0	3
Kansas	1	2	6	0	2
Minnesota	2	4	8	0	3
Missouri	2	3	6	0	2
Nebraska	2	7	11	0	4
North Dakota	2	4	8	0	4
South Dakota	2	8	14	0	4
South Atlantic	**0**	**0**	**2**	**0**	**0**
Delaware	2	3	7	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	1	1	3	0	1
Virginia	1	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	2	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	4	0	1
Texas	1	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	2	4	7	0	2
Idaho	1	4	5	0	2
Montana	2	6	7	0	3
Nevada	1	2	1	0	1
New Mexico	3	7	9	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	8	16	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

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.

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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

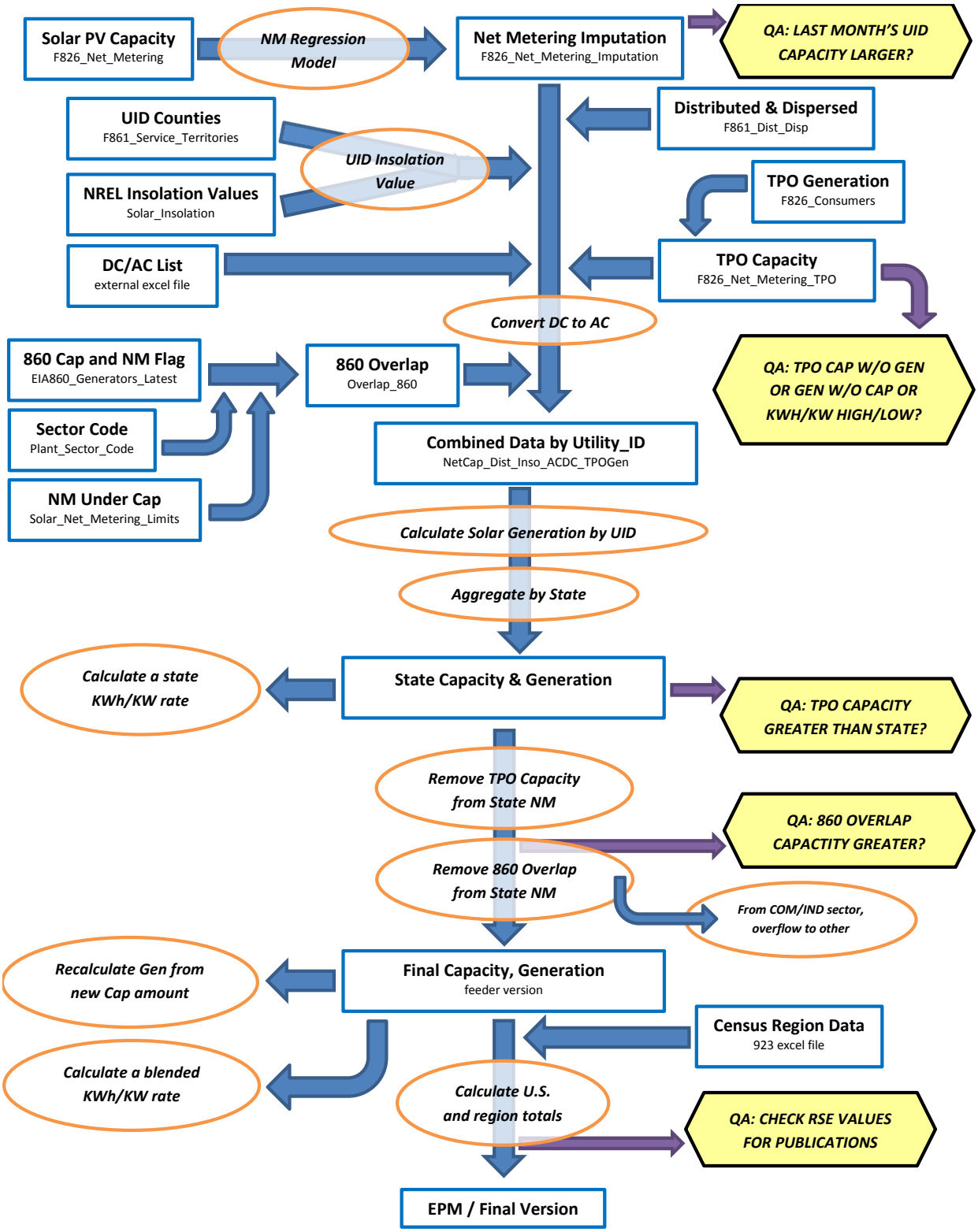
TMY3 (1991-2005) Weather Stations by MSA

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, May 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	21.33	5.95	--	1.03
Connecticut	--	--	--	1.03
Maine	24.70	6.25	--	1.03
Massachusetts	--	--	--	1.03
New Hampshire	21.10	5.81	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.97	5.87	--	1.03
New Jersey	24.87	5.72	--	1.04
New York	--	5.78	--	1.03
Pennsylvania	22.91	5.87	--	1.03
East North Central	20.07	5.77	27.81	1.05
Illinois	17.78	5.79	--	1.01
Indiana	22.08	5.78	--	1.07
Michigan	18.63	5.84	27.81	1.06
Ohio	24.83	5.74	--	1.06
Wisconsin	18.01	5.84	27.96	1.02
West North Central	16.75	5.78	--	1.06
Iowa	17.54	5.76	--	1.10
Kansas	17.14	5.79	--	1.01
Minnesota	17.65	5.80	--	1.09
Missouri	17.70	5.79	--	1.04
Nebraska	17.04	5.80	--	1.07
North Dakota	12.99	5.70	--	1.00
South Dakota	16.48	--	--	--
South Atlantic	23.57	5.83	28.42	1.03
Delaware	--	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.81	5.79	28.42	1.02
Georgia	19.50	5.89	--	1.02
Maryland	24.49	5.80	--	1.04
North Carolina	24.92	5.79	--	1.03
South Carolina	24.89	5.79	--	1.03
Virginia	21.05	5.92	--	1.04
West Virginia	25.06	5.85	--	1.08
East South Central	20.80	5.78	--	1.03
Alabama	18.91	5.50	--	1.03
Kentucky	22.25	5.83	--	1.03
Mississippi	13.49	5.80	--	1.03
Tennessee	22.85	5.76	--	1.01
West South Central	15.94	5.86	29.08	1.02
Arkansas	17.42	5.80	--	1.02
Louisiana	16.49	5.90	29.08	1.04
Oklahoma	17.22	6.00	--	1.02
Texas	15.70	5.81	--	1.02
Mountain	18.82	5.69	--	1.05
Arizona	19.36	5.56	--	1.03
Colorado	18.38	--	--	1.13
Idaho	--	--	--	1.00
Montana	16.87	5.92	--	1.04
Nevada	20.66	5.74	--	1.04
New Mexico	18.28	5.66	--	1.03
Utah	21.74	5.88	--	1.04
Wyoming	17.59	5.85	--	1.05
Pacific Contiguous	17.59	6.00	--	1.03
California	22.83	--	--	1.02
Oregon	17.21	--	--	1.05
Washington	16.87	6.00	--	1.10
Pacific Noncontiguous	18.45	6.12	--	1.00
Alaska	14.24	5.60	--	1.00
Hawaii	19.48	6.12	--	--
U.S. Total	19.39	6.01	28.53	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.