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Preface

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

Background

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

Data sources

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

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Executive Summary

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Net Generation and Consumption of Fuels for March														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	78,454	80,612	-2.7%	56,546	58,552	21,336	21,359	33	26	538	676	0	0
Petroleum Liquids	Utility Scale Facilities	802	811	-1.1%	582	585	173	177	9	8	39	41	0	0
Petroleum Coke	Utility Scale Facilities	637	648	-1.7%	464	491	126	100	1	1	45	56	0	0
Natural Gas	Utility Scale Facilities	112,574	104,933	7.3%	54,214	50,592	49,878	46,383	689	651	7,794	7,307	0	0
Other Gas	Utility Scale Facilities	1,143	1,064	7.4%	31	16	345	330	0	0	766	718	0	0
Nuclear	Utility Scale Facilities	65,080	67,033	-2.9%	34,213	35,262	30,867	31,770	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	25,400	25,951	-2.1%	22,922	23,793	2,366	2,012	NM	NM	92	122	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	38,489	39,306	-2.1%	4,893	4,633	30,924	31,939	316	269	2,357	2,464	0	0
... Wind	Utility Scale Facilities	26,036	27,283	-4.6%	3,860	3,645	22,148	23,608	18	20	NM	10	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	6,020	5,203	15.7%	595	453	5,364	4,698	53	45	8	7	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,241	3,535	-8.3%	250	312	731	861	11	5	2,249	2,358	0	0
... Other Biomass	Utility Scale Facilities	1,713	1,870	-8.4%	100	132	1,333	1,450	190	199	90	89	0	0
... Geothermal	Utility Scale Facilities	1,480	1,414	4.6%	89	92	1,347	1,322	44	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-409	-490	-16.5%	-309	-408	-100	-82	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	1,018	1,113	-8.5%	32	49	528	570	80	84	378	410	0	0
All Energy Sources	Utility Scale Facilities	323,187	320,982	0.7%	173,588	173,565	136,443	134,557	1,148	1,063	12,008	11,796	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	2,968	2,427	22.3%	0	0	0	0	959	813	255	220	1,754	1,394
Estimated Total Solar Photovoltaic	All Facilities	8,728	7,373	18.4%	590	444	5,108	4,450	1,012	858	263	227	1,754	1,394
Estimated Total Solar	All Facilities	8,988	7,630	17.8%	595	453	5,364	4,698	1,012	858	263	227	1,754	1,394
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	43,971	44,388	-0.9%	31,669	32,273	12,115	11,864	9	8	177	243	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,398	1,409	-0.8%	1,049	1,058	294	297	16	12	39	42	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	247	245	0.6%	193	198	40	35	0	0	13	12	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	809,964	770,858	5.1%	409,158	387,882	350,891	336,121	4,285	4,114	45,631	42,741	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,103	1,243	-11.2%	207	205	86	97	45	43	765	898	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	176	165	6.8%	4	4	19	13	29	22	124	126	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	70	62	13.5%	1	1	9	9	1	1	59	50	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	106,560	103,896	2.6%	3,648	3,312	28,565	28,085	8,684	8,710	65,663	63,789	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	45,074	45,631	-1.2%	31,876	32,478	12,201	11,961	55	51	942	1,140	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,574	1,574	0.0%	1,053	1,062	313	310	46	35	163	168	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	317	307	3.2%	194	199	48	44	2	2	73	63	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	916,524	874,754	4.8%	412,806	391,194	379,456	364,206	12,969	12,824	111,294	106,530	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	97,699	127,242	-23.2%	79,490	106,845	17,637	19,687	62	72	510	638	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,396	28,935	-8.8%	16,770	18,987	8,150	8,140	350	448	1,126	1,361	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	636	832	-23.6%	484	614	16	103	2	2	134	113	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for March									
	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	March 2019	March 2018	Percentage Change	March 2019	March 2018	Percentage Change	March 2019	March 2018	Percentage Change
Residential	112,384	106,939	5.1%	14,414	13,893	3.7%	12.83	12.99	-1.2%
Commercial	107,422	107,886	-0.4%	11,219	11,315	-0.8%	10.44	10.49	-0.5%
Industrial	77,007	76,811	0.3%	5,184	5,118	1.3%	6.73	6.66	1.1%
Transportation	685	625	9.6%	64	59	8.4%	9.33	9.43	-1.1%
All Sectors	297,498	292,262	1.8%	30,882	30,386	1.6%	10.38	10.40	-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 March														
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	259,481	281,473	-7.8%	191,194	208,228	66,478	71,060	97	101	1,712	2,085	0	0
Petroleum Liquids	Utility Scale Facilities	2,907	6,882	-57.8%	1,971	3,554	782	3,104	31	NM	124	165	0	0
Petroleum Coke	Utility Scale Facilities	2,179	2,338	-6.8%	1,662	1,836	367	322	3	3	147	177	0	0
Natural Gas	Utility Scale Facilities	341,936	310,981	10.0%	164,337	152,630	151,720	133,768	2,067	1,960	23,812	22,623	0	0
Other Gas	Utility Scale Facilities	3,151	3,049	3.4%	65	59	1,061	942	0	0	2,024	2,048	0	0
Nuclear	Utility Scale Facilities	203,495	206,472	-1.4%	108,262	108,569	95,234	97,902	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	71,974	77,081	-6.6%	64,824	70,961	6,824	5,705	58	69	268	346	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	107,079	111,269	-3.8%	13,276	13,603	85,995	89,591	884	761	6,925	7,314	0	0
... Wind	Utility Scale Facilities	74,247	78,241	-5.1%	10,487	10,907	63,680	67,250	53	54	27	30	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	13,585	12,723	6.8%	1,367	1,075	12,083	11,523	117	109	18	17	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	9,935	10,673	-6.9%	876	978	2,404	2,665	28	20	6,628	7,010	0	0
... Other Biomass	Utility Scale Facilities	5,038	5,484	-8.1%	286	388	3,941	4,261	559	578	251	258	0	0
... Geothermal	Utility Scale Facilities	4,274	4,147	3.1%	260	254	3,888	3,893	127	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-1,121	-1,352	-17.1%	-866	-1,109	-254	-243	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	3,072	3,229	-4.9%	106	131	1,602	1,699	237	243	1,127	1,157	0	0
All Energy Sources	Utility Scale Facilities	994,155	1,001,421	-0.7%	544,830	558,462	409,808	403,849	3,377	3,195	36,140	35,915	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	6,991	5,804	20.4%	0	0	0	0	2,294	1,959	601	520	4,096	3,325
Estimated Total Solar Photovoltaic	All Facilities	20,074	17,951	11.8%	1,358	1,062	11,589	10,959	2,411	2,068	619	537	4,096	3,325
Estimated Total Solar	All Facilities	20,576	18,528	11.1%	1,367	1,075	12,083	11,523	2,411	2,068	619	537	4,096	3,325
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	144,722	154,560	-6.4%	106,323	113,913	37,761	39,858	27	29	610	760	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	5,054	11,824	-57.3%	3,598	6,509	1,278	5,057	53	94	125	165	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	828	869	-4.7%	674	728	114	103	1	1	39	37	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	2,450,873	2,292,806	6.9%	1,229,318	1,164,807	1,069,323	983,341	12,869	12,231	139,364	132,427	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	3,499	3,913	-10.6%	633	655	297	377	139	146	2,430	2,736	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	740	1,030	-28.1%	30	58	78	130	103	156	529	686	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	197	197	0.1%	4	3	24	26	4	5	165	163	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	323,167	310,784	4.0%	10,665	10,059	86,254	83,707	26,789	26,794	199,459	190,225	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	148,221	158,473	-6.5%	106,956	114,568	38,059	40,235	166	175	3,040	3,496	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	5,794	12,854	-54.9%	3,628	6,567	1,356	5,187	156	250	654	850	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	1,026	1,066	-3.8%	678	731	138	129	5	6	205	200	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	2,774,040	2,603,590	6.5%	1,239,983	1,174,866	1,155,577	1,067,048	39,657	39,025	338,823	322,652	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through March									
	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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	Percentage Change
Residential	361,684	369,301	-2.1%	45,762	46,499	-1.6%	12.65	12.59	0.5%
Commercial	321,725	324,506	-0.9%	33,504	34,198	-2.0%	10.41	10.54	-1.2%
Industrial	227,411	224,819	1.2%	15,160	15,309	-1.0%	6.67	6.81	-2.1%
Transportation	2,026	2,019	0.4%	197	193	1.9%	9.71	9.56	1.6%
All Sectors	912,846	920,645	-0.8%	94,622	96,199	-1.6%	10.37	10.45	-0.8%

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

Table 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	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal (1000 tons)	41,993	48,770	40.69	39.36	247	251	138,757	143,659	40.19	39.31
Petroleum Liquids (1000 barrels)	1,148	1,210	86.40	80.46	126	135	3,958	7,954	80.13	80.85
Petroleum Coke (1000 tons)	130	281	69.63	70.89	4	6	477	806	64.15	68.86
Natural Gas (1000 Mcf)	777,031	725,132	3.56	3.29	557	536	2,367,069	2,146,370	3.83	4.10

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal (1000 tons)	29,813	36,379	42.07	40.26	168	172	100,891	106,019	41.54	40.04
Petroleum Liquids (1000 barrels)	917	827	86.20	79.99	86	86	2,957	4,226	80.50	80.62
Petroleum Coke (1000 tons)	130	281	69.63	70.89	4	6	477	806	64.15	68.86
Natural Gas (1000 Mcf)	371,475	349,214	3.77	3.60	290	278	1,124,206	1,044,046	4.02	4.31

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal (1000 tons)	11,549	11,669	36.18	35.75	62	61	35,965	35,515	35.63	36.37
Petroleum Liquids (1000 barrels)	210	345	87.69	81.94	31	38	918	3,596	78.68	81.32
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	341,038	317,199	3.36	2.96	220	210	1,044,542	918,615	3.65	3.97

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal (1000 tons)	2	0	65.86	66.20	1	1	5	6	65.75	66.44
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	812	746	3.47	3.69	3	3	2,308	2,252	3.49	3.76

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Physical Units)		(Dollars / Physical Unit)		Number of Plants		(Physical Units)		(Dollars / Physical Unit)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal (1000 tons)	629	722	57.20	52.66	16	17	1,896	2,119	54.45	52.00
Petroleum Liquids (1000 barrels)	21	38	82.27	78.52	9	11	83	132	82.93	77.29
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	63,706	57,973	3.22	2.93	44	45	196,013	181,458	3.57	3.39

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	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal	820,726	939,471	2.08	2.04	247	251	2,671,485	2,740,829	2.09	2.06
Petroleum Liquids	6,949	7,265	14.27	13.39	126	135	24,012	47,889	13.21	13.38
Petroleum Coke	3,725	7,841	2.43	2.54	4	6	13,659	22,619	2.24	2.45
Natural Gas	802,316	749,405	3.45	3.18	557	536	2,447,568	2,216,950	3.70	3.97
Fossil Fuels	1,633,715	1,703,981	2.78	2.57	711	694	5,156,723	5,028,287	2.88	2.97

Electric Utilities										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal	585,094	699,005	2.14	2.10	168	172	1,948,796	2,027,510	2.15	2.09
Petroleum Liquids	5,584	5,017	14.15	13.19	86	86	18,027	25,590	13.21	13.30
Petroleum Coke	3,725	7,841	2.43	2.54	4	6	13,659	22,619	2.24	2.45
Natural Gas	383,043	360,699	3.66	3.48	290	278	1,162,237	1,077,668	3.89	4.18
Fossil Fuels	977,446	1,072,561	2.81	2.61	393	389	3,142,719	3,153,386	2.85	2.89

Independent Power Producers										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal	222,160	225,377	1.88	1.85	62	61	683,050	669,000	1.87	1.93
Petroleum Liquids	1,239	2,014	14.88	14.02	31	38	5,477	21,471	13.19	13.53
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	352,850	328,275	3.25	2.86	220	210	1,080,905	949,964	3.52	3.84
Fossil Fuels	576,248	555,667	2.69	2.44	268	255	1,769,431	1,640,434	2.85	3.09

Commercial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal	48	5	2.90	2.92	1	1	113	130	2.90	2.92
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	839	768	3.36	3.59	3	3	2,389	2,321	3.38	3.64
Fossil Fuels	887	773	3.33	3.58	3	3	2,502	2,451	3.35	3.61

Industrial Sector										
							Year-to-Date			
	Receipts		Cost				Receipts		Cost	
	(Billion Btu)		(Dollars / Million Btu)		Number of Plants		(Billion Btu)		(Dollars / Million Btu)	
Fuel	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
Coal	13,424	15,083	2.68	2.52	16	17	39,526	44,190	2.61	2.49
Petroleum Liquids	126	234	13.43	12.59	9	11	508	829	13.53	12.35
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	65,584	59,663	3.13	2.85	44	45	202,037	186,998	3.46	3.29
Fossil Fuels	79,134	74,981	3.07	2.81	47	47	242,071	232,016	3.34	3.17

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-March 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	13,094	4,034,268	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	1,093	343,190	1,246	3,186	3,276
February	86,822	874	723	82,694	977	63,560	23,643	2,555	27,317	-508	995	289,652	1,384	3,804	3,939
March	89,365	950	699	95,022	1,060	65,093	29,272	4,245	31,688	-521	1,062	317,935	1,972	5,921	6,218
April	81,335	846	431	88,418	1,001	56,743	29,390	4,696	30,854	-439	1,049	294,325	2,195	6,580	6,891
May	92,777	971	847	98,067	1,055	61,313	32,384	5,663	28,782	-423	1,083	322,518	2,423	7,684	8,086
June	107,508	1,001	901	117,317	992	67,011	30,222	6,175	26,258	-568	1,099	357,916	2,487	8,197	8,662
July	127,697	916	889	146,994	1,048	71,314	26,491	5,753	22,832	-759	1,211	404,386	2,555	7,996	8,308
August	119,488	970	765	141,209	1,134	72,384	21,851	5,434	20,527	-638	1,220	384,342	2,480	7,573	7,914
Sept	98,203	925	712	118,112	1,060	68,098	19,067	5,115	24,142	-606	1,033	335,861	2,225	6,991	7,340
October	89,775	956	572	106,852	999	65,995	18,284	4,821	31,558	-463	1,027	320,376	1,990	6,497	6,811
November	90,986	903	755	94,883	1,001	66,618	20,565	3,409	30,596	-478	1,077	310,315	1,561	4,839	4,970
December	106,546	1,982	737	111,373	1,096	73,700	22,377	3,389	31,762	-656	1,146	353,452	1,472	4,739	4,861
Year 2018															
January	118,939	5,291	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
Year to Date															
2017	291,520	2,945	2,366	273,190	3,082	201,774	79,703	8,831	85,681	-1,464	3,150	950,777	4,603	12,911	13,433
2018	281,473	6,882	2,338	310,981	3,049	206,472	77,081	12,723	98,546	-1,352	3,229	1,001,421	5,804	17,951	18,528
2019	259,481	2,907	2,179	341,936	3,151	203,495	71,974	13,585	93,495	-1,121	3,072	994,155	6,991	20,074	20,576
Rolling 12 Months Ending in March															
2018	1,195,789	16,351	8,948	1,334,206	12,435	809,647	297,711	57,179	345,856	-6,383	13,173	4,084,913	25,192	79,047	82,371
2019	1,124,400	11,767	8,671	1,498,968	12,294	804,101	286,617	67,465	349,394	-5,673	12,538	4,170,543	30,730	94,678	98,195

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-March 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
Year to Date													
2017	66,031	8,308	522	10,149	2,967	1,702	826	4,006	79,703	174,214	4,603	12,911	13,433
2018	78,241	12,147	577	10,673	2,929	1,750	806	4,147	77,081	188,350	5,804	17,951	18,528
2019	74,247	13,083	502	9,935	2,681	1,685	671	4,274	71,974	179,053	6,991	20,074	20,576
Rolling 12 Months Ending in March													
2018	266,512	53,855	3,324	41,676	11,505	6,999	3,095	16,068	297,711	700,746	25,192	79,047	82,371
2019	270,958	63,948	3,517	40,673	11,089	7,099	2,719	16,856	286,617	703,476	30,730	94,678	98,195

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-March 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	551	2,274,277
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	44	199,391
February	64,844	632	540	39,534	17	33,911	21,619	178	3,541	-418	39	164,437
March	65,992	755	535	46,397	16	34,693	26,768	260	4,241	-455	43	179,245
April	58,913	631	260	43,444	18	30,217	26,683	288	4,020	-368	46	164,153
May	69,099	710	654	48,524	5	31,728	29,577	328	3,467	-350	38	183,781
June	81,297	714	698	56,453	10	35,022	27,897	338	3,298	-474	45	205,299
July	96,782	648	673	71,107	19	37,874	24,333	324	2,639	-646	53	233,807
August	90,517	698	540	67,671	2	38,667	20,124	318	2,304	-531	55	220,364
Sept	71,859	661	523	56,393	0	35,496	17,749	304	2,946	-522	49	185,458
October	66,498	721	405	50,140	9	35,038	16,950	291	4,543	-388	44	174,251
November	64,983	633	583	45,117	15	34,541	18,529	279	4,235	-394	45	168,569
December	76,870	953	556	53,353	24	38,871	20,729	304	4,369	-557	50	195,521
Year 2018												
January	88,647	2,359	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
Year to Date												
2017	216,821	2,197	1,818	131,633	46	107,029	73,104	574	10,944	-1,218	126	543,073
2018	208,228	3,554	1,836	152,630	59	108,569	70,961	1,075	12,528	-1,109	131	558,462
2019	191,194	1,971	1,662	164,337	65	108,262	64,824	1,367	11,909	-866	106	544,830
Rolling 12 Months Ending in March												
2018	885,047	9,924	6,729	644,831	161	426,025	273,534	3,849	44,348	-5,339	557	2,289,666
2019	843,291	8,222	6,644	726,011	158	423,944	259,343	5,544	42,406	-4,543	561	2,311,579

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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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-March 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	523	125,751
April	21,829	174	113	37,135	282	26,526	2,538	4,358	24,347	-71	507	117,739
May	23,043	220	136	41,497	345	29,585	2,628	5,277	22,777	-73	548	125,981
June	25,528	249	132	52,380	313	31,988	2,185	5,772	20,315	-93	549	139,318
July	30,237	227	138	66,734	350	33,440	2,030	5,366	17,417	-114	572	156,397
August	28,293	231	140	64,705	358	33,717	1,617	5,056	15,432	-107	580	150,023
Sept	25,701	223	136	53,827	346	32,602	1,228	4,755	18,701	-84	508	137,942
October	22,616	191	110	48,686	318	30,957	1,221	4,480	24,488	-75	518	133,509
November	25,364	215	111	41,702	337	32,077	1,891	3,093	23,772	-84	539	129,016
December	28,990	951	122	49,104	359	34,828	1,526	3,054	24,605	-99	586	144,026
Year 2018												
January	29,504	2,805	116	46,057	303	35,283	1,798	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
Year to Date												
2017	72,597	598	343	117,152	969	94,745	6,170	8,164	67,110	-246	1,619	369,222
2018	71,060	3,104	322	133,768	942	97,902	5,705	11,523	78,069	-243	1,699	403,849
2019	66,478	782	367	151,720	1,061	95,234	6,824	12,083	73,912	-254	1,602	409,808
Rolling 12 Months Ending in March												
2018	302,662	5,786	1,459	589,536	3,950	383,622	22,569	52,734	269,921	-1,044	6,606	1,637,800
2019	273,628	2,942	NM	669,306	3,967	380,158	25,719	61,190	275,604	-1,130	6,310	1,699,000

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-March 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
Year to Date															
2017	105	30	3	1,931	0	0	57	86	671	0	248	3,131	1,507	1,594	1,594
2018	101	NM	3	1,960	0	0	69	109	652	0	243	3,195	1,959	2,068	2,068
2019	97	31	3	2,067	0	0	58	117	767	0	237	3,377	2,294	2,411	2,411
Rolling 12 Months Ending in March															
2018	325	NM	9	8,071	0	0	NM	544	2,710	0	1,082	13,124	8,136	8,680	8,680
2019	323	118	7	8,450	0	0	NM	637	2,720	0	1,014	13,500	10,091	10,728	10,728

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

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2009-March 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
Year to Date															
2017	1,997	119	202	22,474	2,067	0	371	6	6,957	0	1,157	35,351	456	463	463
2018	2,085	165	177	22,623	2,048	0	346	17	7,297	0	1,157	35,915	520	537	537
2019	1,712	124	147	23,812	2,024	0	268	18	6,906	0	1,127	36,140	601	619	619
Rolling 12 Months Ending in March															
2018	7,756	508	751	91,768	8,324	0	1,357	52	28,877	0	4,928	144,323	2,428	2,481	2,481
2019	7,159	486	712	95,201	8,170	0	1,326	94	28,664	0	4,653	146,463	2,721	2,815	2,815

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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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-March 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
Year to Date	
2017	2,639
2018	3,325
2019	4,096
Rolling 12 Months Ending in March	
2018	14,627
2019	17,918

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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	8,675	8,462	2.5%	207	233	8,134	7,861	100	110	234	258
Connecticut	3,227	3,230	-0.1%	8	8	3,142	3,138	31	33	45	51
Maine	942	1,033	-8.9%	0	0	776	852	12	15	153	167
Massachusetts	2,267	2,151	5.4%	48	38	2,151	2,036	46	50	23	26
New Hampshire	1,480	1,324	11.8%	74	95	1,397	1,220	7	7	3	3
Rhode Island	551	514	7.2%	0	0	536	498	4	5	NM	NM
Vermont	208	209	-0.7%	77	91	130	118	0	0	0	0
Middle Atlantic	34,323	34,517	-0.6%	2,869	2,890	30,903	31,043	184	198	368	386
New Jersey	5,575	6,603	-15.6%	10	5	5,456	6,478	46	61	63	59
New York	9,562	10,441	-8.4%	2,845	2,873	6,530	7,381	103	104	84	82
Pennsylvania	19,187	17,474	9.8%	14	12	18,917	17,184	35	34	221	244
East North Central	49,143	49,508	-0.7%	18,133	18,722	29,894	29,675	160	153	956	958
Illinois	15,270	15,637	-2.3%	390	336	14,600	14,994	40	40	240	267
Indiana	9,015	8,896	1.3%	6,324	6,444	2,302	2,096	20	19	368	337
Michigan	9,439	9,250	2.0%	6,321	5,829	2,913	3,214	69	70	137	138
Ohio	10,363	10,267	0.9%	1,192	1,931	9,089	8,267	17	12	66	58
Wisconsin	5,056	5,458	-7.4%	3,906	4,183	991	1,105	14	12	145	158
West North Central	28,507	28,455	0.2%	21,919	22,098	6,205	5,926	59	49	324	382
Iowa	5,642	4,767	18.4%	4,142	3,364	1,309	1,207	19	20	171	175
Kansas	4,113	4,237	-2.9%	2,396	2,456	1,706	1,776	NM	NM	10	NM
Minnesota	4,713	5,308	-11.2%	3,455	3,981	1,115	1,154	21	14	122	158
Missouri	6,327	6,358	-0.5%	5,815	5,845	493	497	16	12	3	4
Nebraska	3,071	3,014	1.9%	2,397	2,507	667	481	1	1	NM	25
North Dakota	3,629	3,700	-1.9%	2,908	3,066	708	618	0	0	13	16
South Dakota	1,013	1,071	-5.3%	806	878	208	192	NM	NM	0	0
South Atlantic	59,135	60,830	-2.8%	48,153	49,223	9,219	9,912	161	119	1,602	1,576
Delaware	432	541	-20.2%	NM	NM	319	458	1	1	111	81
District of Columbia	9	9	3.9%	0	0	NM	0	8	9	0	0
Florida	17,612	17,127	2.8%	16,501	15,900	678	776	5	6	427	445
Georgia	7,873	9,419	-16.4%	6,368	8,066	1,086	911	NM	NM	419	442
Maryland	3,495	3,536	-1.1%	551	175	2,829	3,288	89	53	27	21
North Carolina	9,823	10,540	-6.8%	8,094	9,189	1,554	1,156	27	19	149	176
South Carolina	7,824	7,556	3.5%	7,506	7,016	165	381	0	0	152	159
Virginia	7,426	7,376	0.7%	5,809	5,667	1,388	1,492	31	31	198	185
West Virginia	4,641	4,726	-1.8%	3,324	3,211	1,198	1,449	0	0	119	67
East South Central	29,132	27,197	7.1%	24,374	22,933	4,015	3,516	15	18	729	730
Alabama	11,012	10,460	5.3%	7,565	7,338	3,080	2,757	0	0	367	364
Kentucky	5,916	5,258	12.5%	5,823	5,140	40	69	0	0	53	49
Mississippi	4,935	5,021	-1.7%	3,937	4,222	860	665	0	0	138	135
Tennessee	7,269	6,457	12.6%	7,048	6,233	35	24	15	18	171	182
West South Central	53,209	51,570	3.2%	16,969	15,934	29,960	29,757	91	62	6,189	5,817
Arkansas	4,910	4,459	10.1%	4,266	3,705	487	601	NM	NM	154	150
Louisiana	7,161	6,990	2.4%	3,789	4,118	710	713	13	12	2,649	2,147
Oklahoma	6,317	6,095	3.6%	2,944	2,401	3,294	3,617	0	0	79	77
Texas	34,820	34,026	2.3%	5,970	5,710	25,470	24,826	74	46	3,306	3,443
Mountain	28,909	28,198	2.5%	21,509	21,351	7,054	6,508	91	48	255	291
Arizona	8,640	7,956	8.6%	7,468	7,427	1,160	516	12	13	0	0
Colorado	4,553	4,379	4.0%	3,409	3,138	1,135	1,232	NM	NM	7	7
Idaho	1,255	1,541	-18.6%	723	940	476	542	3	4	53	54
Montana	2,507	2,679	-6.5%	806	1,082	1,698	1,595	0	0	2	2
Nevada	2,977	2,832	5.1%	1,923	1,856	965	932	56	11	33	33
New Mexico	2,168	2,330	-6.9%	1,140	1,266	1,019	1,051	9	9	0	3
Utah	3,214	2,635	22.0%	2,844	2,241	308	334	9	8	53	51
Wyoming	3,595	3,845	-6.5%	3,196	3,400	292	305	0	0	107	140
Pacific Contiguous	30,840	30,865	-0.1%	18,574	19,264	10,722	10,001	225	238	1,320	1,363
California	16,960	14,418	17.6%	7,620	5,263	7,980	7,753	217	228	1,144	1,174
Oregon	5,569	6,252	-10.9%	4,078	4,794	1,427	1,392	6	6	59	60
Washington	8,311	10,194	-18.5%	6,876	9,206	1,315	856	3	3	118	129
Pacific Noncontiguous	1,313	1,380	-4.9%	882	917	337	359	63	68	31	37
Alaska	569	597	-4.6%	515	530	18	23	NM	33	11	11
Hawaii	743	783	-5.1%	368	387	319	335	37	35	20	25
U.S. Total	323,187	320,982	0.7%	173,588	173,565	136,443	134,557	1,148	1,063	12,008	11,796

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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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	25,813	26,138	-1.2%	750	1,084	24,067	23,977	317	322	679	755
Connecticut	9,701	9,551	1.6%	25	23	9,432	9,294	100	94	144	140
Maine	2,813	2,964	-5.1%	0	0	2,351	2,413	39	49	424	501
Massachusetts	6,910	7,238	-4.5%	135	181	6,562	6,840	144	144	69	73
New Hampshire	4,357	4,334	0.5%	333	610	3,996	3,696	21	20	7	8
Rhode Island	1,394	1,447	-3.7%	0	0	1,346	1,401	12	13	36	32
Vermont	639	604	5.8%	257	270	381	333	1	1	0	0
Middle Atlantic	107,346	102,998	4.2%	8,560	8,653	97,116	92,671	552	572	1,117	1,103
New Jersey	17,263	18,265	-5.5%	26	18	16,924	17,901	129	164	184	182
New York	31,443	31,590	-0.5%	8,492	8,601	22,395	22,459	316	302	240	227
Pennsylvania	58,639	53,143	10.3%	43	33	57,797	52,311	106	105	693	693
East North Central	151,524	154,816	-2.1%	56,789	61,381	91,433	90,208	484	486	2,818	2,741
Illinois	46,995	47,794	-1.7%	1,229	1,184	44,893	45,733	125	122	747	756
Indiana	27,148	27,614	-1.7%	19,022	20,750	7,042	5,861	57	62	1,027	940
Michigan	29,549	29,943	-1.3%	20,176	20,257	8,750	9,067	208	214	415	406
Ohio	31,625	32,305	-2.1%	3,652	5,710	27,725	26,376	55	51	193	168
Wisconsin	16,207	17,160	-5.6%	12,710	13,480	3,023	3,172	38	38	437	470
West North Central	89,092	90,593	-1.7%	71,069	72,035	16,844	17,261	166	156	1,013	1,140
Iowa	16,983	15,654	8.5%	12,800	11,448	3,617	3,640	57	60	509	506
Kansas	13,130	13,402	-2.0%	8,384	8,505	4,709	4,863	NM	NM	32	29
Minnesota	14,938	16,211	-7.8%	11,500	12,305	3,041	3,410	56	50	341	447
Missouri	21,005	21,418	-1.9%	19,640	20,062	1,311	1,303	44	38	10	14
Nebraska	9,399	9,304	1.0%	7,610	7,711	1,706	1,490	5	4	78	99
North Dakota	10,754	11,347	-5.2%	8,817	9,340	1,894	1,961	0	0	43	45
South Dakota	2,883	3,258	-11.5%	2,317	2,664	566	594	NM	NM	0	0
South Atlantic	184,611	192,483	-4.1%	153,158	158,493	26,357	28,910	448	355	4,648	4,724
Delaware	1,016	1,476	-31.2%	2	7	713	1,253	2	2	300	214
District of Columbia	25	23	7.2%	0	0	NM	0	23	23	0	0
Florida	52,472	53,349	-1.6%	49,104	49,565	2,106	2,475	17	18	1,246	1,291
Georgia	26,407	29,854	-11.5%	22,173	25,497	2,992	3,018	NM	3	1,241	1,336
Maryland	9,614	10,195	-5.7%	1,388	571	7,907	9,400	247	152	73	72
North Carolina	30,044	32,783	-8.4%	25,465	29,070	4,060	3,144	73	67	447	503
South Carolina	24,459	23,684	3.3%	23,108	22,282	888	904	1	1	462	497
Virginia	24,399	23,969	1.8%	19,483	18,802	4,243	4,498	85	89	588	581
West Virginia	16,174	17,149	-5.7%	12,436	12,700	3,446	4,219	0	0	292	229
East South Central	88,073	88,602	-0.6%	75,571	76,062	10,227	10,249	48	56	2,227	2,235
Alabama	34,473	33,561	2.7%	25,434	24,400	7,922	8,055	0	0	1,118	1,107
Kentucky	18,717	18,229	2.7%	18,450	17,883	114	195	0	0	153	152
Mississippi	14,399	15,815	-9.0%	11,851	13,433	2,113	1,935	0	5	435	443
Tennessee	20,485	20,996	-2.4%	19,837	20,346	79	64	48	51	521	534
West South Central	163,232	164,595	-0.8%	53,282	53,520	90,679	92,486	273	208	18,998	18,380
Arkansas	15,700	15,485	1.4%	13,808	13,270	1,423	1,750	NM	NM	459	455
Louisiana	21,454	22,911	-6.4%	11,451	13,374	1,945	2,212	40	37	8,019	7,287
Oklahoma	19,593	19,275	1.7%	9,318	8,271	10,052	10,776	0	0	223	228
Texas	106,485	106,924	-0.4%	18,705	18,604	77,260	77,748	223	161	10,298	10,410
Mountain	91,380	84,686	7.9%	70,240	65,185	20,135	18,540	264	135	741	826
Arizona	26,196	23,477	11.6%	22,960	21,860	3,200	1,580	36	37	0	0
Colorado	14,312	13,355	7.2%	11,094	9,928	3,192	3,404	6	4	20	19
Idaho	4,082	4,764	-14.3%	2,541	3,057	1,376	1,535	11	13	153	159
Montana	7,472	8,106	-7.8%	2,477	3,381	4,987	4,717	0	0	8	8
Nevada	9,034	8,304	8.8%	6,085	5,541	2,715	2,655	156	29	77	80
New Mexico	8,086	6,191	30.6%	5,036	3,268	3,022	2,891	27	28	0	3
Utah	10,555	8,592	22.9%	9,559	7,569	828	848	26	24	142	151
Wyoming	11,643	11,897	-2.1%	10,486	10,581	815	911	0	0	342	405
Pacific Contiguous	89,130	92,456	-3.6%	52,665	59,243	32,013	28,587	647	714	3,804	3,912
California	46,584	41,770	11.5%	19,006	16,012	23,659	21,711	621	685	3,299	3,362
Oregon	16,682	18,374	-9.2%	12,178	14,302	4,318	3,880	18	19	168	172
Washington	25,864	32,313	-20.0%	21,482	28,929	4,036	2,995	8	10	338	378
Pacific Noncontiguous	3,953	4,055	-2.5%	2,746	2,808	936	958	179	190	93	99
Alaska	1,724	1,737	-0.7%	1,556	1,542	57	63	81	103	31	28
Hawaii	2,229	2,319	-3.9%	1,190	1,265	879	895	98	87	62	71
U.S. Total	994,155	1,001,421	-0.7%	544,830	558,462	409,808	403,849	3,377	3,195	36,140	35,915

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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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	50	42	20.7%	26	38	23	2	0	0	NM	NM
Connecticut	16	-3	-673.3%	0	0	16	-3	0	0	0	0
Maine	9	7	39.0%	0	0	7	5	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	26	38	-32.5%	26	38	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	3,769	3,714	1.5%	0	0	3,755	3,695	0	0	15	19
New Jersey	90	88	2.8%	0	0	90	88	0	0	0	0
New York	66	124	-47.0%	0	0	66	120	0	0	0	3
Pennsylvania	3,614	3,503	3.2%	0	0	3,599	3,487	0	0	15	16
East North Central	20,421	22,202	-8.0%	11,656	12,766	8,563	9,211	NM	NM	194	220
Illinois	4,500	5,098	-11.7%	342	282	4,008	4,645	NM	NM	147	168
Indiana	5,602	6,201	-9.7%	5,279	5,848	319	351	4	2	0	0
Michigan	3,446	2,954	16.6%	3,437	2,908	3	36	0	0	NM	10
Ohio	4,697	5,476	-14.2%	464	1,297	4,233	4,179	0	0	0	1
Wisconsin	2,176	2,473	-12.0%	2,134	2,431	0	0	0	0	41	42
West North Central	12,988	13,325	-2.5%	12,813	13,097	0	0	11	9	164	218
Iowa	1,949	1,520	28.2%	1,824	1,383	0	0	8	9	117	128
Kansas	1,191	1,167	2.0%	1,191	1,167	0	0	0	0	0	0
Minnesota	1,260	1,708	-26.2%	1,227	1,653	0	0	1	0	32	55
Missouri	4,427	4,462	-0.8%	4,425	4,461	0	0	2	1	0	0
Nebraska	1,628	1,865	-12.7%	1,622	1,840	0	0	0	0	NM	25
North Dakota	2,237	2,364	-5.4%	2,229	2,354	0	0	0	0	NM	10
South Dakota	295	239	23.5%	295	239	0	0	0	0	0	0
South Atlantic	10,634	13,282	-19.9%	9,101	10,656	1,475	2,558	6	1	52	67
Delaware	-4	-3	16.7%	0	0	-4	-3	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,339	1,514	-11.6%	1,332	1,507	0	0	0	0	7	7
Georgia	1,503	1,707	-12.0%	1,492	1,688	0	0	0	0	NM	19
Maryland	477	1,280	-62.7%	0	0	471	1,274	0	0	7	6
North Carolina	2,053	2,413	-14.9%	2,030	2,392	5	7	6	0	12	15
South Carolina	833	1,219	-31.7%	833	1,218	0	0	0	0	0	1
Virginia	212	810	-73.9%	184	729	11	61	1	1	16	19
West Virginia	4,222	4,342	-2.8%	3,230	3,123	992	1,219	0	0	0	0
East South Central	7,874	7,268	8.3%	7,547	7,042	287	165	0	0	41	61
Alabama	1,827	2,315	-21.1%	1,824	2,311	0	0	0	0	3	4
Kentucky	4,253	3,613	17.7%	4,253	3,613	0	0	0	0	0	0
Mississippi	414	176	135.5%	127	11	287	165	0	0	0	0
Tennessee	1,381	1,164	18.7%	1,343	1,107	0	0	0	0	38	57
West South Central	10,602	9,069	16.9%	5,703	4,965	4,888	4,079	0	0	12	25
Arkansas	1,801	1,365	31.9%	1,458	914	341	447	0	0	1	4
Louisiana	605	507	19.4%	250	181	355	326	0	0	0	0
Oklahoma	890	934	-4.8%	880	837	0	77	0	0	10	21
Texas	7,306	6,262	16.7%	3,115	3,033	4,191	3,229	0	0	0	0
Mountain	11,119	11,515	-3.4%	9,505	9,963	1,582	1,513	0	0	31	39
Arizona	1,827	2,327	-21.5%	1,827	2,327	0	0	0	0	0	0
Colorado	2,118	1,975	7.3%	2,117	1,973	0	0	0	0	1	1
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	1,431	1,338	7.0%	27	26	1,404	1,313	0	0	0	0
Nevada	137	95	44.5%	56	-3	81	98	0	0	0	0
New Mexico	685	839	-18.4%	685	839	0	0	0	0	0	0
Utah	1,906	1,732	10.0%	1,867	1,694	39	38	0	0	0	0
Wyoming	3,013	3,206	-6.0%	2,926	3,107	58	64	0	0	28	36
Pacific Contiguous	819	25	NM	149	0	643	0	0	0	28	25
California	25	23	7.5%	0	0	0	0	0	0	25	23
Oregon	149	0	--	149	0	0	0	0	0	0	0
Washington	645	2	NM	0	0	643	0	0	0	2	2
Pacific Noncontiguous	178	170	4.9%	NM	NM	121	135	NM	10	0	0
Alaska	71	53	33.3%	NM	NM	NM	18	NM	10	0	0
Hawaii	107	117	-8.0%	0	0	107	117	0	0	0	0
U.S. Total	78,454	80,612	-2.7%	56,546	58,552	21,336	21,359	33	26	538	676

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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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	261	576	-54.6%	171	361	86	205	0	0	NM	9
Connecticut	65	185	-64.7%	0	0	65	185	0	0	0	0
Maine	25	30	-14.5%	0	0	20	20	0	0	NM	9
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	171	361	-52.8%	171	361	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	12,407	12,867	-3.6%	0	0	12,364	12,806	0	0	43	61
New Jersey	288	375	-23.2%	0	0	288	375	0	0	0	0
New York	333	384	-13.3%	0	0	333	373	0	0	0	11
Pennsylvania	11,786	12,108	-2.7%	0	0	11,743	12,058	0	0	43	50
East North Central	64,320	71,056	-9.5%	36,671	41,830	27,047	28,548	20	23	583	654
Illinois	14,918	15,816	-5.7%	1,102	1,019	13,363	14,303	NM	15	442	478
Indiana	17,088	19,511	-12.4%	16,047	18,530	1,032	974	8	8	0	0
Michigan	10,692	10,408	2.7%	10,608	10,266	68	109	0	0	17	33
Ohio	14,138	16,841	-16.1%	1,552	3,676	12,585	13,162	0	0	1	3
Wisconsin	7,484	8,480	-11.7%	7,362	8,339	0	0	0	0	123	141
West North Central	45,580	46,246	-1.4%	45,006	45,535	0	0	26	26	548	685
Iowa	6,902	6,039	14.3%	6,536	5,644	0	0	20	21	346	375
Kansas	4,878	4,853	0.5%	4,878	4,853	0	0	0	0	0	0
Minnesota	4,995	5,914	-15.5%	4,897	5,730	0	0	1	0	98	183
Missouri	15,629	15,960	-2.1%	15,623	15,955	0	0	5	5	0	0
Nebraska	5,438	5,589	-2.7%	5,361	5,490	0	0	0	0	78	99
North Dakota	6,932	7,151	-3.1%	6,906	7,123	0	0	0	0	26	28
South Dakota	805	739	8.9%	805	739	0	0	0	0	0	0
South Atlantic	34,724	48,767	-28.8%	30,229	41,320	4,305	7,213	22	19	167	215
Delaware	35	82	-58.1%	0	0	35	82	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4,322	6,611	-34.6%	4,304	6,583	0	0	0	0	18	28
Georgia	4,636	6,979	-33.6%	4,596	6,923	0	0	0	0	40	55
Maryland	1,410	3,433	-58.9%	0	0	1,390	3,411	0	0	20	22
North Carolina	5,123	8,638	-40.7%	5,049	8,557	18	23	19	15	37	43
South Carolina	3,421	4,379	-21.9%	3,416	4,370	0	0	0	0	4	9
Virginia	785	2,692	-70.8%	697	2,453	37	176	4	4	47	58
West Virginia	14,992	15,953	-6.0%	12,167	12,432	2,825	3,521	0	0	0	0
East South Central	25,690	28,400	-9.5%	24,975	27,574	586	637	0	0	129	189
Alabama	7,078	8,416	-15.9%	7,064	8,407	0	0	0	0	14	9
Kentucky	14,104	13,154	7.2%	14,104	13,154	0	0	0	0	0	0
Mississippi	861	990	-13.0%	276	353	586	637	0	0	0	0
Tennessee	3,647	5,839	-37.5%	3,532	5,659	0	0	0	0	115	180
West South Central	34,206	36,381	-6.0%	19,114	20,171	15,034	16,131	0	0	58	79
Arkansas	6,237	6,054	3.0%	5,216	4,707	1,007	1,333	0	0	14	14
Louisiana	2,023	2,595	-22.1%	1,215	1,523	808	1,072	0	0	0	0
Oklahoma	2,814	3,934	-28.5%	2,714	3,524	57	345	0	0	43	65
Texas	23,131	23,797	-2.8%	9,968	10,417	13,163	13,380	0	0	0	0
Mountain	38,877	35,885	8.3%	34,090	31,363	4,690	4,411	0	0	98	112
Arizona	6,589	7,465	-11.7%	6,589	7,465	0	0	0	0	0	0
Colorado	6,812	6,244	9.1%	6,808	6,240	0	0	0	0	4	4
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	4,183	3,940	6.2%	78	66	4,104	3,872	0	0	1	2
Nevada	904	244	270.2%	600	-10	303	254	0	0	0	0
New Mexico	3,490	2,167	61.1%	3,490	2,167	0	0	0	0	0	0
Utah	6,925	5,879	17.8%	6,815	5,768	110	111	0	0	0	0
Wyoming	9,969	9,938	0.3%	9,709	9,666	173	174	0	0	87	99
Pacific Contiguous	2,911	798	264.7%	805	0	2,025	718	0	0	82	81
California	75	75	0.1%	0	0	0	0	0	0	75	75
Oregon	805	0	--	805	0	0	0	0	0	0	0
Washington	2,032	724	180.8%	0	0	2,025	718	0	0	7	6
Pacific Noncontiguous	505	497	1.6%	135	75	341	391	29	32	0	0
Alaska	209	154	35.9%	135	75	45	47	29	32	0	0
Hawaii	296	343	-13.9%	0	0	296	343	0	0	0	0
U.S. Total	259,481	281,473	-7.8%	191,194	208,228	66,478	71,060	97	101	1,712	2,085

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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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	19	22	-14.2%	NM	2	10	14	3	4	3	NM
Connecticut	8	4	75.5%	NM	0	6	4	NM	NM	2	0
Maine	3	1	175.2%	0	0	2	0	0	0	NM	NM
Massachusetts	4	12	-69.6%	NM	NM	NM	9	NM	2	0	0
New Hampshire	3	3	-6.4%	NM	1	NM	NM	2	2	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	24	31	-23.1%	NM	5	15	20	NM	2	3	4
New Jersey	2	2	-5.1%	0	0	2	2	0	0	0	0
New York	12	17	-30.6%	NM	5	3	7	NM	NM	3	4
Pennsylvania	10	12	-15.9%	0	0	9	11	0	1	1	0
East North Central	43	48	-9.8%	25	31	17	15	0	0	1	1
Illinois	4	5	-21.6%	NM	1	3	4	NM	0	0	0
Indiana	15	11	37.1%	14	10	0	0	0	0	0	1
Michigan	8	16	-52.1%	7	15	0	0	0	0	NM	0
Ohio	15	14	4.3%	NM	4	14	10	0	0	0	0
Wisconsin	NM	2	NM	NM	NM	0	1	0	0	NM	NM
West North Central	35	28	27.3%	35	27	NM	NM	0	0	0	0
Iowa	14	12	12.1%	14	12	NM	NM	0	0	0	0
Kansas	3	6	-41.9%	3	6	0	0	0	0	0	0
Minnesota	NM	NM	NM	NM	NM	NM	NM	0	0	0	0
Missouri	9	5	96.2%	9	5	0	0	0	0	0	0
Nebraska	NM	NM	NM	NM	NM	0	0	0	0	0	0
North Dakota	6	2	154.1%	6	2	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	93	74	25.8%	69	54	12	9	2	1	9	9
Delaware	NM	NM	NM	0	0	NM	NM	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	23	17	34.8%	21	14	NM	0	0	0	NM	3
Georgia	12	3	361.5%	6	-1	NM	NM	0	0	5	NM
Maryland	6	5	26.5%	0	0	6	5	NM	NM	0	0
North Carolina	18	20	-8.1%	17	18	NM	NM	NM	NM	NM	1
South Carolina	10	6	56.5%	9	5	0	0	NM	NM	1	2
Virginia	14	12	18.3%	7	8	4	3	2	1	NM	NM
West Virginia	9	11	-16.7%	9	11	0	0	0	0	0	0
East South Central	20	19	6.9%	19	16	0	0	0	0	NM	3
Alabama	1	2	-22.0%	1	1	NM	NM	0	0	NM	NM
Kentucky	6	8	-18.5%	6	8	0	0	0	0	0	0
Mississippi	2	2	-5.6%	2	0	0	0	0	0	0	2
Tennessee	10	7	48.2%	10	6	0	0	0	0	0	0
West South Central	11	11	-2.3%	7	9	3	1	0	0	1	0
Arkansas	5	5	-3.0%	3	5	2	0	0	0	0	0
Louisiana	NM	1	NM	NM	1	0	0	0	0	0	0
Oklahoma	1	1	-17.2%	1	1	0	0	0	0	0	0
Texas	5	3	39.4%	3	2	1	1	0	0	0	0
Mountain	16	13	26.5%	16	12	1	1	NM	0	0	0
Arizona	3	4	-13.7%	3	4	0	0	NM	0	0	0
Colorado	NM	NM	NM	NM	NM	0	0	0	0	0	0
Idaho	0	0	169.3%	0	0	0	0	0	0	0	0
Montana	2	1	54.0%	1	NM	NM	1	0	0	0	0
Nevada	1	0	NM	1	0	0	0	0	0	0	0
New Mexico	4	NM	NM	4	NM	0	0	0	0	0	0
Utah	3	3	9.4%	3	3	0	0	0	0	0	0
Wyoming	3	4	-10.0%	3	4	0	0	0	0	0	0
Pacific Contiguous	5	4	28.9%	NM	3	1	0	NM	NM	NM	1
California	3	3	5.2%	NM	3	0	0	NM	0	1	0
Oregon	0	NM	NM	0	0	0	0	NM	NM	0	0
Washington	NM	NM	NM	NM	NM	1	0	0	0	NM	NM
Pacific Noncontiguous	536	563	-4.7%	400	425	115	115	1	1	20	22
Alaska	63	66	-5.1%	58	61	0	0	1	1	4	4
Hawaii	473	497	-4.7%	342	364	115	115	1	0	16	17
U.S. Total	802	811	-1.1%	582	585	173	177	9	8	39	41

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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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	107	1,046	-89.8%	11	164	74	842	14	NM	7	NM
Connecticut	32	267	-87.9%	NM	NM	27	262	3	NM	2	1
Maine	10	167	-94.1%	0	0	5	152	1	1	5	NM
Massachusetts	47	403	-88.3%	NM	74	37	315	NM	NM	1	1
New Hampshire	10	150	-93.0%	4	84	NM	59	6	7	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	416	1,834	-77.3%	148	514	252	1,291	NM	NM	12	17
New Jersey	39	219	-81.9%	1	1	37	214	0	3	1	1
New York	325	1,239	-73.8%	146	511	166	705	NM	NM	10	14
Pennsylvania	51	376	-86.4%	0	2	49	372	1	2	2	NM
East North Central	127	206	-38.7%	64	94	56	104	1	1	5	7
Illinois	11	NM	NM	NM	NM	10	NM	NM	0	0	0
Indiana	35	35	-0.3%	32	29	0	0	0	0	3	6
Michigan	22	31	-26.9%	21	29	0	0	1	1	NM	0
Ohio	45	112	-59.3%	4	26	40	84	0	0	2	1
Wisconsin	12	NM	NM	5	NM	7	1	0	0	NM	NM
West North Central	99	109	-8.8%	95	98	NM	NM	1	1	0	0
Iowa	28	33	-15.8%	28	33	NM	NM	0	0	0	0
Kansas	13	NM	NM	13	NM	0	0	0	0	0	0
Minnesota	11	NM	NM	7	4	NM	NM	1	1	0	0
Missouri	25	32	-20.6%	25	32	0	0	0	0	0	0
Nebraska	4	3	69.3%	4	3	0	0	0	0	0	0
North Dakota	16	7	137.4%	16	7	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	308	1,735	-82.3%	206	1,116	70	557	7	NM	25	NM
Delaware	12	138	-91.6%	0	6	11	132	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	40	186	-78.2%	35	167	NM	11	0	0	6	NM
Georgia	31	NM	NM	16	NM	NM	46	0	3	13	NM
Maryland	29	198	-85.5%	0	2	27	191	NM	NM	1	2
North Carolina	67	341	-80.4%	63	315	NM	NM	NM	NM	2	NM
South Carolina	25	203	-87.8%	20	160	2	38	NM	NM	2	5
Virginia	78	502	-84.4%	46	380	26	111	6	10	1	NM
West Virginia	26	52	-49.9%	26	44	0	9	0	0	0	0
East South Central	77	102	-24.1%	73	71	1	24	0	0	4	NM
Alabama	6	40	-85.2%	4	12	1	24	0	0	2	NM
Kentucky	23	24	-6.8%	23	24	0	0	0	0	0	0
Mississippi	4	NM	NM	3	NM	0	0	0	0	1	3
Tennessee	45	31	44.6%	43	31	0	0	0	0	2	0
West South Central	32	NM	NM	21	NM	8	NM	0	0	2	3
Arkansas	13	NM	NM	7	NM	5	0	0	0	1	2
Louisiana	NM	NM	NM	NM	NM	0	0	0	0	0	0
Oklahoma	5	4	41.4%	5	4	0	0	0	0	0	0
Texas	12	NM	NM	7	11	3	NM	0	0	1	1
Mountain	48	42	14.4%	45	39	3	3	NM	0	0	0
Arizona	13	15	-13.9%	13	15	0	0	NM	0	0	0
Colorado	3	3	-13.5%	3	3	0	0	0	0	0	0
Idaho	0	0	169.3%	0	0	0	0	0	0	0	0
Montana	4	2	66.6%	NM	NM	3	2	0	0	0	0
Nevada	3	0	741.0%	2	0	1	0	0	0	0	0
New Mexico	9	4	148.7%	9	4	0	0	0	0	0	0
Utah	8	9	-15.4%	7	9	0	0	0	0	0	0
Wyoming	9	9	-1.4%	9	9	0	0	0	0	0	0
Pacific Contiguous	17	18	-8.4%	10	8	3	NM	NM	NM	4	9
California	11	15	-27.8%	8	8	1	0	0	NM	2	7
Oregon	NM	NM	NM	1	0	0	0	NM	NM	0	0
Washington	4	3	62.9%	NM	NM	2	NM	0	0	NM	NM
Pacific Noncontiguous	1,677	1,734	-3.3%	1,298	1,401	312	269	4	4	62	61
Alaska	192	224	-14.3%	178	209	0	0	2	3	11	13
Hawaii	1,484	1,510	-1.7%	1,120	1,192	312	269	1	1	51	48
U.S. Total	2,907	6,882	-57.8%	1,971	3,554	782	3,104	31	NM	124	165

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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 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	13	NM	NM	0	0	0	0	0	0	13	NM
New Jersey	5	3	79.9%	0	0	0	0	0	0	5	3
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	177	147	20.9%	85	86	83	NM	0	0	10	2
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	88	78	12.2%	78	76	0	0	0	0	10	2
Ohio	83	NM	NM	0	0	83	NM	0	0	0	0
Wisconsin	7	10	-32.2%	7	10	0	0	0	0	0	0
West North Central	1	8	-86.4%	0	0	0	0	1	1	0	7
Iowa	1	8	-86.4%	0	0	0	0	1	1	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	96	91	6.2%	82	74	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	82	74	10.1%	82	74	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	306	351	-13.0%	298	330	0	0	0	0	8	21
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	298	346	-13.9%	298	330	0	0	0	0	0	15
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	8	6	40.6%	0	0	0	0	0	0	8	6
Mountain	44	41	5.4%	0	0	44	41	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	44	41	5.4%	0	0	44	41	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	637	648	-1.7%	464	491	126	100	1	1	45	56

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

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	44	42	5.7%	0	0	0	0	0	0	44	42
New Jersey	16	14	13.4%	0	0	0	0	0	0	16	14
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	28	NM	NM	0	0	0	0	0	0	28	NM
East North Central	554	537	3.3%	287	322	241	205	0	0	27	10
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	287	303	-5.4%	260	293	0	0	0	0	27	10
Ohio	241	205	17.5%	0	0	241	205	0	0	0	0
Wisconsin	26	29	-7.4%	26	29	0	0	0	0	0	0
West North Central	3	24	-86.4%	0	0	0	0	3	3	0	21
Iowa	3	24	-86.4%	0	0	0	0	3	3	0	21
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	403	456	-11.5%	351	399	0	0	0	0	52	57
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	351	399	-12.1%	351	399	0	0	0	0	0	0
Georgia	52	57	-7.8%	0	0	0	0	0	0	52	57
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	1,048	1,163	-9.8%	1,025	1,114	0	0	0	0	24	48
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,030	1,148	-10.3%	1,025	1,114	0	0	0	0	6	34
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	18	14	27.3%	0	0	0	0	0	0	18	14
Mountain	126	117	7.7%	0	0	126	117	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	126	117	7.7%	0	0	126	117	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	2,179	2,338	-6.8%	1,662	1,836	367	322	3	3	147	177

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

Table 1.7.A. Utility Scale Facility Net Generation from Natural Gas by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	3,761	3,950	-4.8%	NM	NM	3,569	3,742	76	81	109	118
Connecticut	1,498	1,530	-2.1%	3	3	1,420	1,443	31	33	43	51
Maine	146	207	-29.6%	0	0	114	177	2	2	NM	28
Massachusetts	1,400	1,702	-17.8%	NM	NM	1,334	1,630	38	42	23	25
New Hampshire	215	36	494.8%	0	0	211	33	1	1	3	3
Rhode Island	502	474	5.9%	0	0	489	460	3	3	NM	NM
Vermont	0	0	69.4%	0	0	0	0	0	0	0	0
Middle Atlantic	13,708	12,393	10.6%	683	627	12,727	11,448	87	105	211	213
New Jersey	2,883	3,182	-9.4%	NM	NM	2,824	3,115	9	20	36	36
New York	3,343	3,306	1.1%	670	616	2,549	2,568	66	71	59	51
Pennsylvania	7,483	5,905	26.7%	0	1	7,355	5,764	12	14	116	126
East North Central	11,900	10,727	10.9%	3,859	3,402	7,614	6,891	123	118	304	316
Illinois	1,036	1,160	-10.7%	39	45	924	1,019	36	36	37	61
Indiana	2,464	1,788	37.8%	959	519	1,347	1,130	14	13	143	126
Michigan	2,453	2,996	-18.1%	675	849	1,665	2,029	53	53	60	65
Ohio	4,305	3,287	31.0%	694	601	3,577	2,657	15	11	19	18
Wisconsin	1,642	1,496	9.8%	1,491	1,388	101	56	5	4	44	47
West North Central	2,134	2,121	0.6%	1,761	1,799	273	239	26	22	74	61
Iowa	582	509	14.3%	527	464	0	0	6	7	49	38
Kansas	128	221	-42.0%	119	218	0	0	0	0	9	NM
Minnesota	760	735	3.5%	669	643	70	69	10	7	12	15
Missouri	511	516	-1.0%	295	335	204	170	9	7	3	4
Nebraska	44	32	37.4%	44	NM	0	0	0	1	0	0
North Dakota	51	50	2.0%	51	49	0	0	0	0	1	1
South Dakota	57	57	-0.9%	57	57	0	0	0	0	0	0
South Atlantic	27,957	26,508	5.5%	22,993	21,905	4,435	4,206	101	63	429	333
Delaware	410	513	-20.1%	0	0	314	452	0	0	97	61
District of Columbia	4	3	17.1%	0	0	0	0	4	3	0	0
Florida	12,791	12,277	4.2%	12,348	11,772	316	383	2	2	125	121
Georgia	3,511	3,893	-9.8%	2,606	3,171	856	673	0	0	49	49
Maryland	1,610	943	70.8%	551	174	966	711	85	50	9	8
North Carolina	3,401	3,648	-6.8%	2,653	3,173	725	457	NM	NM	15	11
South Carolina	1,501	1,335	12.4%	1,430	1,036	61	287	0	0	10	12
Virginia	4,629	3,856	20.0%	3,390	2,569	1,175	1,230	2	2	62	55
West Virginia	100	38	159.9%	15	10	22	NM	0	0	63	16
East South Central	10,856	10,049	8.0%	6,998	6,585	3,613	3,246	15	17	231	201
Alabama	4,766	4,176	14.1%	1,634	1,371	3,028	2,708	0	0	104	97
Kentucky	1,278	1,248	2.4%	1,220	1,164	37	67	0	0	22	17
Mississippi	3,365	3,683	-8.7%	2,778	3,175	546	469	0	0	40	39
Tennessee	1,447	942	53.6%	1,366	875	2	2	15	17	65	48
West South Central	24,983	23,978	4.2%	7,916	7,305	11,574	11,638	82	52	5,411	4,981
Arkansas	1,228	1,444	-14.9%	1,079	1,295	115	121	NM	NM	31	25
Louisiana	4,944	4,186	18.1%	2,441	2,204	262	299	13	12	2,228	1,672
Oklahoma	2,713	2,186	24.1%	1,714	1,251	960	907	0	0	39	27
Texas	16,098	16,162	-0.4%	2,682	2,555	10,238	10,311	66	38	3,112	3,258
Mountain	7,984	5,962	33.9%	6,115	4,925	1,698	849	37	38	134	151
Arizona	2,872	1,500	91.4%	2,135	1,399	725	89	11	12	0	0
Colorado	1,266	1,134	11.6%	985	989	279	144	0	0	2	2
Idaho	203	175	16.2%	39	NM	148	144	3	3	13	14
Montana	30	23	27.7%	16	21	14	NM	0	0	0	0
Nevada	1,819	1,867	-2.6%	1,639	1,715	141	114	6	5	33	33
New Mexico	809	748	8.2%	415	386	385	349	9	9	0	3
Utah	908	448	102.9%	858	397	6	6	8	7	36	37
Wyoming	77	66	16.5%	27	NM	0	0	0	0	50	62
Pacific Contiguous	8,984	8,944	0.4%	3,582	3,739	4,374	4,123	142	156	886	927
California	6,241	6,511	-4.2%	2,231	2,477	3,003	2,979	137	150	870	905
Oregon	1,925	1,668	15.4%	920	935	994	720	3	4	8	9
Washington	818	764	7.1%	431	326	378	424	2	2	8	12
Pacific Noncontiguous	307	302	1.4%	300	296	0	0	0	0	6	7
Alaska	307	302	1.4%	300	296	0	0	0	0	6	7
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	112,574	104,933	7.3%	54,214	50,592	49,878	46,383	689	651	7,794	7,307

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	11,251	10,983	2.4%	18	NM	10,667	10,404	239	225	327	324
Connecticut	4,640	4,160	11.5%	9	10	4,392	3,920	97	92	142	139
Maine	447	401	11.6%	0	0	365	318	7	7	74	75
Massachusetts	4,435	4,945	-10.3%	NM	NM	4,236	4,741	122	115	67	69
New Hampshire	472	192	145.8%	0	0	461	182	3	2	7	8
Rhode Island	1,257	1,285	-2.2%	0	0	1,213	1,244	8	9	36	32
Vermont	1	0	51.1%	0	0	0	0	0	0	0	0
Middle Atlantic	42,074	33,995	23.8%	2,228	2,098	38,919	31,018	275	291	652	588
New Jersey	8,906	7,985	11.5%	NM	NM	8,754	7,799	24	51	100	103
New York	10,729	9,605	11.7%	2,198	2,063	8,153	7,215	213	197	165	131
Pennsylvania	22,439	16,405	36.8%	1	3	22,013	16,004	38	42	387	355
East North Central	35,235	30,642	15.0%	11,201	10,244	22,704	19,134	371	365	960	899
Illinois	3,093	3,179	-2.7%	100	132	2,720	2,772	112	104	161	171
Indiana	7,369	5,445	35.3%	2,737	2,006	4,188	3,032	39	44	406	363
Michigan	7,396	7,828	-5.5%	1,879	2,194	5,172	5,298	155	157	190	179
Ohio	12,557	9,952	26.2%	1,999	1,928	10,441	7,922	51	47	66	55
Wisconsin	4,820	4,238	13.7%	4,486	3,983	183	111	14	14	136	130
West North Central	6,129	5,651	8.5%	5,069	4,794	749	596	79	71	231	190
Iowa	1,685	1,342	25.6%	1,512	1,212	0	0	22	25	151	105
Kansas	427	549	-22.2%	396	521	0	0	0	0	31	28
Minnesota	2,243	1,860	20.6%	1,956	1,590	219	204	32	26	37	40
Missouri	1,337	1,509	-11.4%	772	1,085	530	392	25	18	10	14
Nebraska	104	110	-5.1%	103	108	0	0	1	2	0	0
North Dakota	156	130	19.7%	153	127	0	0	0	0	2	3
South Dakota	176	150	17.6%	176	150	0	0	0	0	0	0
South Atlantic	83,942	77,583	8.2%	69,946	64,594	12,519	11,788	280	181	1,196	1,020
Delaware	900	1,179	-23.7%	0	0	645	1,017	0	0	255	162
District of Columbia	9	8	13.0%	0	0	0	0	9	8	0	0
Florida	37,220	35,873	3.8%	35,796	34,201	1,034	1,310	5	5	385	357
Georgia	11,756	12,225	-3.8%	9,184	9,750	2,426	2,323	0	0	146	152
Maryland	3,679	2,236	64.5%	1,386	567	2,033	1,504	238	142	23	24
North Carolina	10,503	10,236	2.6%	8,362	8,881	2,075	1,297	24	22	43	36
South Carolina	4,933	3,743	31.8%	4,287	3,088	614	621	0	0	32	33
Virginia	14,710	11,912	23.5%	10,892	8,067	3,632	3,673	4	4	182	167
West Virginia	231	171	35.6%	40	39	60	NM	0	0	132	89
East South Central	30,100	31,216	-3.6%	19,994	21,240	9,367	9,327	47	55	692	594
Alabama	12,481	12,433	0.4%	4,374	4,232	7,792	7,905	0	0	315	296
Kentucky	3,379	3,867	-12.6%	3,208	3,619	107	189	0	0	63	58
Mississippi	10,271	12,238	-16.1%	8,688	10,888	1,462	1,228	0	5	120	116
Tennessee	3,969	2,679	48.2%	3,724	2,500	5	4	47	50	193	124
West South Central	77,967	75,609	3.1%	24,401	22,843	36,590	36,622	246	184	16,729	15,960
Arkansas	3,872	4,392	-11.8%	3,436	3,958	338	338	NM	NM	89	87
Louisiana	14,974	14,035	6.7%	7,262	7,148	859	895	40	37	6,812	5,955
Oklahoma	8,930	7,059	26.5%	5,533	3,894	3,295	3,086	0	0	102	80
Texas	50,191	50,123	0.1%	8,171	7,843	32,098	32,304	197	138	9,726	9,838
Mountain	24,569	18,225	34.8%	19,006	14,810	5,058	2,891	111	109	395	413
Arizona	8,457	4,485	88.6%	6,256	3,948	2,166	501	35	35	0	0
Colorado	4,116	3,754	9.7%	3,400	3,198	710	552	1	0	5	4
Idaho	956	535	78.6%	454	138	448	347	9	10	44	39
Montana	137	79	73.7%	69	63	67	14	0	0	1	1
Nevada	5,518	5,690	-3.0%	4,918	5,115	507	481	16	16	76	79
New Mexico	2,614	2,002	30.6%	1,447	993	1,140	977	26	27	0	3
Utah	2,532	1,471	72.1%	2,383	1,325	18	18	23	21	108	107
Wyoming	239	209	14.5%	79	29	1	0	0	0	160	179
Pacific Contiguous	29,735	26,257	13.2%	11,556	11,171	15,147	11,987	419	478	2,612	2,621
California	21,312	19,850	7.4%	7,328	7,726	11,017	9,103	404	460	2,563	2,562
Oregon	5,740	4,248	35.1%	2,660	2,307	3,044	1,905	10	11	26	24
Washington	2,683	2,159	24.3%	1,568	1,138	1,087	979	5	7	23	35
Pacific Noncontiguous	935	821	13.9%	916	806	0	0	0	0	19	15
Alaska	935	821	13.9%	916	806	0	0	0	0	19	15
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	341,936	310,981	10.0%	164,337	152,630	151,720	133,768	2,067	1,960	23,812	22,623

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

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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 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	60	61	-1.8%	0	0	0	0	0	0	60	61
New Jersey	19	20	-1.7%	0	0	0	0	0	0	19	20
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	40	41	-1.9%	0	0	0	0	0	0	40	41
East North Central	469	415	13.0%	31	16	188	189	0	0	250	210
Illinois	37	14	161.7%	0	0	0	0	0	0	37	14
Indiana	196	186	5.3%	0	0	0	0	0	0	196	186
Michigan	167	151	10.7%	31	16	136	134	0	0	0	0
Ohio	70	64	8.4%	0	0	52	55	0	0	17	9
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	1.4%	0	0	0	0	0	0	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	1.4%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	18	21	-14.1%	0	0	0	0	0	0	18	21
Delaware	14	19	-29.6%	0	0	0	0	0	0	14	19
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	-96.9%	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	5	2	150.1%	0	0	0	0	0	0	5	2
East South Central	1	0	89.9%	0	0	0	0	0	0	1	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	1	0	89.9%	0	0	0	0	0	0	1	0
West South Central	433	362	19.6%	0	0	157	103	0	0	275	259
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	200	179	12.0%	0	0	0	0	0	0	200	179
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	232	183	26.9%	0	0	157	103	0	0	75	80
Mountain	24	37	-36.6%	0	0	0	2	0	0	23	35
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	2	-84.8%	0	0	0	2	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	0	NM	0	0	0	0	0	0	1	0
Wyoming	22	35	-38.1%	0	0	0	0	0	0	22	35
Pacific Contiguous	134	159	-15.8%	0	0	0	36	0	0	134	123
California	134	123	8.6%	0	0	0	0	0	0	134	123
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	36	-100.0%	0	0	0	36	0	0	0	0
Pacific Noncontiguous	1	5	-84.6%	0	0	0	0	0	0	1	5
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	1	5	-84.6%	0	0	0	0	0	0	1	5
U.S. Total	1,143	1,064	7.4%	31	16	345	330	0	0	766	718

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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	172	159	8.0%	0	0	0	NM	0	0	172	159
New Jersey	57	57	0.2%	0	0	0	0	0	0	57	57
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	115	102	12.3%	0	0	0	NM	0	0	115	102
East North Central	1,284	1,125	14.2%	65	59	544	516	0	0	675	550
Illinois	99	36	178.1%	0	0	0	0	0	0	99	36
Indiana	530	489	8.3%	0	0	0	0	0	0	530	489
Michigan	457	439	4.2%	65	59	392	380	0	0	0	0
Ohio	198	161	22.9%	0	0	152	136	0	0	46	25
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	13	12	3.4%	0	0	0	0	0	0	13	12
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	13	12	3.4%	0	0	0	0	0	0	13	12
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	51	56	-9.3%	0	0	0	0	0	0	51	56
Delaware	42	49	-15.3%	0	0	0	0	0	0	42	49
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	1	-95.8%	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	9	6	52.3%	0	0	0	0	0	0	9	6
East South Central	3	2	30.9%	0	0	0	0	0	0	3	2
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	3	1	76.2%	0	0	0	0	0	0	3	1
West South Central	1,177	1,087	8.3%	0	0	467	321	0	0	710	766
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	491	514	-4.5%	0	0	0	0	0	0	491	514
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	686	573	19.7%	0	0	467	321	0	0	219	251
Mountain	80	108	-25.9%	0	0	2	3	0	0	78	106
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	2	3	-20.6%	0	0	2	3	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	4	0	NM	0	0	0	0	0	0	4	0
Wyoming	75	106	-29.3%	0	0	0	0	0	0	75	106
Pacific Contiguous	370	487	-24.0%	0	0	49	101	0	0	321	385
California	321	385	-16.7%	0	0	0	0	0	0	321	385
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	49	101	-51.9%	0	0	49	101	0	0	0	0
Pacific Noncontiguous	2	12	-83.9%	0	0	0	0	0	0	2	12
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	2	12	-83.9%	0	0	0	0	0	0	2	12
U.S. Total	3,151	3,049	3.4%	65	59	1,061	942	0	0	2,024	2,048

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
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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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	2,968	2,570	15.5%	0	0	2,968	2,570	0	0	0	0
Connecticut	1,549	1,558	-0.5%	0	0	1,549	1,558	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	492	83	493.3%	0	0	492	83	0	0	0	0
New Hampshire	927	929	-0.2%	0	0	927	929	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	12,335	13,801	-10.6%	0	0	12,335	13,801	0	0	0	0
New Jersey	2,360	3,098	-23.8%	0	0	2,360	3,098	0	0	0	0
New York	2,796	3,573	-21.7%	0	0	2,796	3,573	0	0	0	0
Pennsylvania	7,179	7,131	0.7%	0	0	7,179	7,131	0	0	0	0
East North Central	12,251	12,109	1.2%	1,843	1,671	10,408	10,439	0	0	0	0
Illinois	8,187	7,972	2.7%	0	0	8,187	7,972	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,451	2,179	12.5%	1,843	1,671	608	508	0	0	0	0
Ohio	858	1,062	-19.2%	0	0	858	1,062	0	0	0	0
Wisconsin	755	897	-15.8%	0	0	755	897	0	0	0	0
West North Central	4,085	3,998	2.2%	3,632	3,547	453	451	0	0	0	0
Iowa	453	451	0.6%	0	0	453	451	0	0	0	0
Kansas	912	875	4.1%	912	875	0	0	0	0	0	0
Minnesota	1,214	1,297	-6.4%	1,214	1,297	0	0	0	0	0	0
Missouri	912	904	0.9%	912	904	0	0	0	0	0	0
Nebraska	594	471	26.2%	594	471	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	15,109	16,252	-7.0%	14,128	15,280	981	972	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,336	2,262	3.3%	2,336	2,262	0	0	0	0	0	0
Georgia	1,853	3,010	-38.5%	1,853	3,010	0	0	0	0	0	0
Maryland	981	972	0.9%	0	0	981	972	0	0	0	0
North Carolina	2,874	3,213	-10.6%	2,874	3,213	0	0	0	0	0	0
South Carolina	4,999	4,547	9.9%	4,999	4,547	0	0	0	0	0	0
Virginia	2,067	2,248	-8.1%	2,067	2,248	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	7,485	7,257	3.1%	7,485	7,257	0	0	0	0	0	0
Alabama	2,974	2,732	8.9%	2,974	2,732	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	1,030	1,036	-0.6%	1,030	1,036	0	0	0	0	0	0
Tennessee	3,481	3,490	-0.3%	3,481	3,490	0	0	0	0	0	0
West South Central	5,886	6,154	-4.4%	2,165	2,616	3,721	3,538	0	0	0	0
Arkansas	1,365	1,214	12.4%	1,365	1,214	0	0	0	0	0	0
Louisiana	800	1,402	-42.9%	800	1,402	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,721	3,538	5.2%	0	0	3,721	3,538	0	0	0	0
Mountain	2,967	2,977	-0.4%	2,967	2,977	0	0	0	0	0	0
Arizona	2,967	2,977	-0.4%	2,967	2,977	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	1,994	1,913	4.2%	1,994	1,913	0	0	0	0	0	0
California	1,133	1,047	8.2%	1,133	1,047	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	861	866	-0.6%	861	866	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	65,080	67,033	-2.9%	34,213	35,262	30,867	31,770	0	0	0	0

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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.B. Utility Scale Facility Net Generation from Nuclear Energy

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	8,604	8,160	5.4%	0	0	8,604	8,160	0	0	0	0
Connecticut	4,513	4,528	-0.3%	0	0	4,513	4,528	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	1,398	932	50.1%	0	0	1,398	932	0	0	0	0
New Hampshire	2,693	2,701	-0.3%	0	0	2,693	2,701	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	39,473	41,500	-4.9%	0	0	39,473	41,500	0	0	0	0
New Jersey	7,359	9,036	-18.6%	0	0	7,359	9,036	0	0	0	0
New York	10,440	10,920	-4.4%	0	0	10,440	10,920	0	0	0	0
Pennsylvania	21,674	21,544	0.6%	0	0	21,674	21,544	0	0	0	0
East North Central	38,816	39,394	-1.5%	6,642	6,524	32,174	32,870	0	0	0	0
Illinois	24,622	24,461	0.7%	0	0	24,622	24,461	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	8,290	8,195	1.2%	6,642	6,524	1,648	1,671	0	0	0	0
Ohio	3,457	4,129	-16.3%	0	0	3,457	4,129	0	0	0	0
Wisconsin	2,446	2,609	-6.2%	0	0	2,446	2,609	0	0	0	0
West North Central	11,984	11,973	0.1%	10,671	10,658	1,313	1,315	0	0	0	0
Iowa	1,313	1,315	-0.1%	0	0	1,313	1,315	0	0	0	0
Kansas	2,647	2,611	1.4%	2,647	2,611	0	0	0	0	0	0
Minnesota	3,656	3,803	-3.8%	3,656	3,803	0	0	0	0	0	0
Missouri	2,637	2,653	-0.6%	2,637	2,653	0	0	0	0	0	0
Nebraska	1,730	1,592	8.7%	1,730	1,592	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	50,147	50,961	-1.6%	46,856	47,682	3,290	3,279	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	7,630	7,517	1.5%	7,630	7,517	0	0	0	0	0	0
Georgia	7,160	8,281	-13.5%	7,160	8,281	0	0	0	0	0	0
Maryland	3,290	3,279	0.4%	0	0	3,290	3,279	0	0	0	0
North Carolina	10,280	10,256	0.2%	10,280	10,256	0	0	0	0	0	0
South Carolina	14,545	14,114	3.1%	14,545	14,114	0	0	0	0	0	0
Virginia	7,241	7,514	-3.6%	7,241	7,514	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	23,225	21,570	7.7%	23,225	21,570	0	0	0	0	0	0
Alabama	10,375	9,289	11.7%	10,375	9,289	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	2,883	2,188	31.8%	2,883	2,188	0	0	0	0	0	0
Tennessee	9,966	10,094	-1.3%	9,966	10,094	0	0	0	0	0	0
West South Central	16,324	18,184	-10.2%	5,945	7,406	10,379	10,779	0	0	0	0
Arkansas	3,998	3,840	4.1%	3,998	3,840	0	0	0	0	0	0
Louisiana	1,946	3,566	-45.4%	1,946	3,566	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	10,379	10,779	-3.7%	0	0	10,379	10,779	0	0	0	0
Mountain	8,631	8,518	1.3%	8,631	8,518	0	0	0	0	0	0
Arizona	8,631	8,518	1.3%	8,631	8,518	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	6,292	6,212	1.3%	6,292	6,212	0	0	0	0	0	0
California	3,801	3,696	2.9%	3,801	3,696	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2,491	2,517	-1.0%	2,491	2,517	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	203,495	206,472	-1.4%	108,262	108,569	95,234	97,902	0	0	0	0

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

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	758	682	11.1%	110	99	637	549	1	0	NM	34
Connecticut	38	32	18.8%	4	4	34	28	0	0	0	0
Maine	325	307	5.9%	0	0	315	275	0	0	NM	33
Massachusetts	106	95	12.3%	28	24	78	70	1	0	0	1
New Hampshire	158	130	21.7%	32	31	126	99	0	0	0	0
Rhode Island	0	0	-6.3%	0	0	0	0	0	0	0	0
Vermont	129	117	10.1%	46	41	83	77	0	0	0	0
Middle Atlantic	3,047	3,053	-0.2%	2,218	2,291	822	754	1	1	6	7
New Jersey	5	5	8.1%	0	0	5	5	0	0	0	0
New York	2,710	2,760	-1.8%	2,205	2,280	498	472	1	1	6	7
Pennsylvania	333	289	15.2%	14	12	319	277	0	0	0	0
East North Central	392	486	-19.4%	332	418	49	51	0	0	NM	17
Illinois	11	11	1.9%	NM	NM	NM	8	0	0	0	0
Indiana	32	28	15.7%	32	28	0	0	0	0	0	0
Michigan	114	156	-26.9%	105	143	NM	NM	0	0	NM	NM
Ohio	52	47	9.7%	29	25	NM	NM	0	0	0	0
Wisconsin	182	244	-25.2%	162	218	NM	NM	0	0	NM	NM
West North Central	947	1,198	-21.0%	920	1,168	NM	NM	0	0	8	NM
Iowa	69	94	-26.9%	68	94	1	0	0	0	0	0
Kansas	2	1	28.0%	0	0	2	1	0	0	0	0
Minnesota	85	112	-24.2%	NM	83	NM	NM	0	0	8	NM
Missouri	146	108	34.7%	146	108	0	0	0	0	0	0
Nebraska	103	142	-27.0%	103	142	0	0	0	0	0	0
North Dakota	177	242	-27.0%	177	242	0	0	0	0	0	0
South Dakota	365	499	-26.7%	365	499	0	0	0	0	0	0
South Atlantic	1,720	1,208	42.3%	1,326	921	339	235	2	2	53	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	22	20	10.4%	22	20	0	0	0	0	0	0
Georgia	347	201	73.1%	344	198	NM	NM	0	0	1	1
Maryland	277	182	52.3%	0	0	277	182	0	0	0	0
North Carolina	491	364	35.0%	482	358	NM	NM	2	1	NM	NM
South Carolina	274	186	47.2%	267	179	NM	6	0	0	0	0
Virginia	147	105	40.4%	141	99	NM	6	0	0	0	0
West Virginia	162	151	6.8%	69	67	41	35	0	0	51	49
East South Central	2,354	2,051	14.8%	2,353	2,050	NM	NM	0	0	0	0
Alabama	1,129	920	22.8%	1,129	920	0	0	0	0	0	0
Kentucky	333	336	-0.9%	332	335	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	892	795	12.1%	892	795	0	0	0	0	0	0
West South Central	829	638	29.8%	735	551	93	87	NM	NM	0	0
Arkansas	349	270	29.1%	346	267	NM	NM	0	0	0	0
Louisiana	86	82	5.8%	0	0	86	82	0	0	0	0
Oklahoma	237	187	27.1%	237	187	0	0	0	0	0	0
Texas	156	100	56.1%	152	97	4	2	NM	NM	0	0
Mountain	2,507	3,294	-23.9%	2,406	3,153	100	141	0	0	0	0
Arizona	483	677	-28.7%	483	677	0	0	0	0	0	0
Colorado	132	191	-30.9%	115	168	NM	NM	0	0	0	0
Idaho	734	1,004	-26.9%	667	909	67	95	0	0	0	0
Montana	751	1,028	-26.9%	741	1,014	NM	NM	0	0	0	0
Nevada	226	147	54.2%	222	140	NM	NM	0	0	0	0
New Mexico	NM	NM	NM	NM	NM	0	0	0	0	0	0
Utah	89	122	-26.6%	88	121	1	1	0	0	0	0
Wyoming	77	106	-26.9%	77	106	0	0	0	0	0	0
Pacific Contiguous	12,726	13,172	-3.4%	12,419	13,000	305	170	NM	NM	0	0
California	4,407	1,797	145.2%	4,149	1,694	255	101	NM	NM	0	0
Oregon	2,988	3,776	-20.9%	2,966	3,746	NM	NM	0	0	0	0
Washington	5,332	7,599	-29.8%	5,303	7,560	NM	39	0	0	0	0
Pacific Noncontiguous	121	168	-28.3%	103	142	1	5	NM	NM	NM	NM
Alaska	115	157	-26.8%	102	139	0	0	NM	NM	0	0
Hawaii	NM	11	NM	1	3	1	5	0	0	NM	NM
U.S. Total	25,400	25,951	-2.1%	22,922	23,793	2,366	2,012	NM	NM	92	122

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

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	2,294	1,875	22.4%	336	271	1,924	1,508	2	1	33	95
Connecticut	120	88	36.2%	15	11	106	78	0	0	0	0
Maine	963	844	14.0%	0	0	930	752	0	0	33	92
Massachusetts	322	261	23.3%	87	65	233	192	2	1	0	2
New Hampshire	497	360	37.9%	94	85	403	276	0	0	0	0
Rhode Island	1	1	57.1%	0	0	1	1	0	0	0	0
Vermont	392	321	22.2%	141	110	251	211	0	0	0	0
Middle Atlantic	8,753	8,241	6.2%	6,267	6,155	2,466	2,065	2	2	18	19
New Jersey	11	9	18.9%	0	0	11	9	0	0	0	0
New York	7,724	7,440	3.8%	6,226	6,127	1,479	1,293	2	2	18	19
Pennsylvania	1,018	792	28.5%	41	28	977	764	0	0	0	0
East North Central	1,206	1,514	-20.3%	1,027	1,314	146	150	0	0	33	51
Illinois	33	31	7.2%	12	11	20	19	0	0	0	0
Indiana	99	77	28.7%	99	77	0	0	0	0	0	0
Michigan	353	496	-28.8%	324	457	NM	32	0	0	NM	8
Ohio	156	130	20.0%	89	70	67	60	0	0	0	0
Wisconsin	565	781	-27.6%	503	699	NM	39	0	0	30	43
West North Central	2,902	3,711	-21.8%	2,822	3,612	60	67	0	0	20	31
Iowa	220	314	-29.9%	218	313	2	1	0	0	0	0
Kansas	7	5	20.2%	0	0	7	5	0	0	0	0
Minnesota	263	365	-27.9%	191	273	51	60	0	0	20	31
Missouri	455	299	52.0%	455	299	0	0	0	0	0	0
Nebraska	320	450	-29.0%	320	450	0	0	0	0	0	0
North Dakota	542	761	-28.7%	542	761	0	0	0	0	0	0
South Dakota	1,095	1,515	-27.7%	1,095	1,515	0	0	0	0	0	0
South Atlantic	5,500	3,480	58.1%	4,324	2,587	1,015	750	6	4	155	139
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	66	55	21.4%	66	55	0	0	0	0	0	0
Georgia	1,083	594	82.4%	1,075	586	NM	NM	0	0	2	3
Maryland	825	605	36.3%	0	0	825	605	0	0	0	0
North Carolina	1,650	991	66.5%	1,625	975	18	11	5	3	NM	NM
South Carolina	918	527	74.4%	896	509	21	17	1	1	0	0
Virginia	475	293	62.3%	458	277	18	16	0	0	0	0
West Virginia	483	415	16.2%	204	184	128	97	0	0	151	134
East South Central	7,397	5,681	30.2%	7,394	5,678	NM	NM	0	0	0	0
Alabama	3,610	2,451	47.3%	3,610	2,451	0	0	0	0	0	0
Kentucky	1,078	1,038	3.8%	1,075	1,036	NM	NM	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	2,709	2,191	23.7%	2,709	2,191	0	0	0	0	0	0
West South Central	2,662	1,776	49.9%	2,382	1,534	280	242	NM	NM	0	0
Arkansas	1,139	750	51.9%	1,128	740	11	10	0	0	0	0
Louisiana	257	224	14.8%	0	0	257	224	0	0	0	0
Oklahoma	747	518	44.2%	747	518	0	0	0	0	0	0
Texas	519	284	82.5%	506	276	12	8	NM	NM	0	0
Mountain	7,470	9,987	-25.2%	7,161	9,546	308	440	1	1	0	0
Arizona	1,393	1,823	-23.6%	1,393	1,823	0	0	0	0	0	0
Colorado	408	555	-26.6%	357	485	50	69	1	1	0	0
Idaho	2,248	3,163	-28.9%	2,040	2,864	209	300	0	0	0	0
Montana	2,304	3,230	-28.7%	2,271	3,185	NM	46	0	0	0	0
Nevada	565	442	27.6%	552	421	NM	21	0	0	0	0
New Mexico	40	54	-25.9%	40	54	0	0	0	0	0	0
Utah	278	391	-28.9%	274	387	4	4	0	0	0	0
Wyoming	235	328	-28.3%	235	328	0	0	0	0	0	0
Pacific Contiguous	33,427	40,309	-17.1%	32,802	39,835	619	471	NM	NM	0	0
California	8,141	4,514	80.3%	7,670	4,255	465	255	NM	NM	0	0
Oregon	8,644	11,798	-26.7%	8,578	11,705	66	93	0	0	0	0
Washington	16,642	23,997	-30.7%	16,554	23,875	87	123	0	0	0	0
Pacific Noncontiguous	361	507	-28.7%	309	430	3	9	40	57	NM	NM
Alaska	347	482	-28.0%	307	425	0	0	40	57	0	0
Hawaii	14	25	-42.1%	2	5	3	9	0	0	NM	NM
U.S. Total	71,974	77,081	-6.6%	64,824	70,961	6,824	5,705	58	69	268	346

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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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	1,018	1,081	-5.9%	60	84	845	889	16	18	97	91
Connecticut	79	72	10.2%	0	0	79	71	NM	NM	NM	NM
Maine	428	476	-10.2%	0	0	326	380	5	7	96	90
Massachusetts	239	218	9.4%	14	7	219	204	5	6	0	1
New Hampshire	147	185	-20.5%	15	25	128	155	4	5	0	0
Rhode Island	47	38	24.5%	0	0	46	36	1	1	0	0
Vermont	78	92	-14.8%	31	51	47	41	0	0	0	0
Middle Atlantic	1,296	1,364	-5.0%	8	7	1,171	1,231	59	56	58	71
New Jersey	185	173	6.7%	8	7	150	139	26	27	NM	NM
New York	608	617	-1.5%	0	0	573	584	19	17	17	17
Pennsylvania	503	574	-12.4%	0	0	448	509	14	12	41	53
East North Central	3,480	3,354	3.7%	354	377	2,967	2,811	20	21	139	146
Illinois	1,477	1,355	9.0%	5	6	1,471	1,348	NM	NM	0	0
Indiana	682	662	3.1%	39	39	636	614	1	2	6	7
Michigan	750	747	0.3%	199	196	485	486	8	8	58	57
Ohio	281	257	9.6%	NM	NM	250	223	1	1	27	29
Wisconsin	289	334	-13.4%	107	133	125	139	9	8	48	54
West North Central	8,265	7,707	7.2%	2,724	2,416	5,452	5,201	20	14	70	76
Iowa	2,574	2,173	18.5%	1,710	1,411	855	756	4	3	5	2
Kansas	1,876	1,966	-4.5%	171	189	1,704	1,775	NM	NM	0	0
Minnesota	1,369	1,418	-3.4%	275	288	1,020	1,052	10	4	64	73
Missouri	299	337	-11.3%	NM	NM	290	327	4	4	0	0
Nebraska	700	505	38.7%	33	23	667	481	1	1	0	0
North Dakota	1,151	1,034	11.3%	442	415	708	618	0	0	NM	NM
South Dakota	296	276	7.4%	88	83	208	192	0	0	0	0
South Atlantic	3,273	3,153	3.8%	579	489	1,780	1,720	37	39	877	904
Delaware	11	10	4.0%	NM	NM	9	8	1	1	1	1
District of Columbia	6	6	-3.2%	0	0	NM	0	5	6	0	0
Florida	766	692	10.6%	360	251	231	261	3	4	172	176
Georgia	586	608	-3.6%	28	25	227	236	NM	NM	331	347
Maryland	128	127	0.7%	NM	NM	113	117	3	3	11	7
North Carolina	946	830	14.0%	38	35	795	665	11	11	101	120
South Carolina	276	284	-2.8%	39	53	97	88	0	0	140	143
Virginia	410	412	-0.5%	112	124	163	162	14	15	121	111
West Virginia	144	183	-21.2%	0	0	144	183	0	0	0	0
East South Central	586	584	0.3%	16	17	114	103	NM	NM	455	464
Alabama	314	315	-0.3%	NM	NM	52	49	0	0	259	263
Kentucky	46	46	-1.9%	13	13	NM	NM	0	0	32	32
Mississippi	125	124	0.5%	0	0	27	31	0	0	98	93
Tennessee	101	98	3.2%	NM	0	33	22	NM	NM	67	75
West South Central	10,070	10,911	-7.7%	139	154	9,517	10,301	8	9	406	448
Arkansas	147	149	-1.6%	NM	NM	26	29	1	1	121	120
Louisiana	191	232	-17.5%	NM	NM	NM	7	0	0	184	224
Oklahoma	2,483	2,790	-11.0%	120	132	2,334	2,629	0	0	29	29
Texas	7,249	7,741	-6.4%	18	22	7,151	7,635	8	9	72	75
Mountain	4,196	4,325	-3.0%	510	350	3,599	3,931	54	10	33	34
Arizona	489	481	1.6%	54	54	435	427	NM	NM	0	0
Colorado	1,047	1,097	-4.5%	207	31	838	1,064	NM	NM	0	0
Idaho	309	353	-12.5%	17	18	261	302	0	1	31	32
Montana	220	217	1.7%	21	21	198	193	0	0	2	2
Nevada	792	721	9.8%	3	3	738	712	50	5	0	0
New Mexico	657	723	-9.1%	23	20	634	702	NM	NM	0	0
Utah	286	312	-8.3%	23	22	262	289	1	1	0	0
Wyoming	395	421	-6.0%	162	180	233	241	0	0	0	0
Pacific Contiguous	6,164	6,685	-7.8%	482	728	5,379	5,647	80	80	223	230
California	5,010	4,966	0.9%	160	168	4,708	4,656	76	77	66	65
Oregon	506	805	-37.1%	42	113	411	639	2	3	51	51
Washington	647	914	-29.2%	280	447	260	352	1	1	106	114
Pacific Noncontiguous	141	140	0.8%	19	14	100	105	22	22	NM	NM
Alaska	15	19	-21.9%	NM	10	NM	5	3	4	NM	NM
Hawaii	127	121	4.4%	12	4	96	99	18	18	0	0
U.S. Total	38,489	39,306	-2.1%	4,893	4,633	30,924	31,939	316	269	2,357	2,464

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

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	2,988	3,160	-5.4%	214	258	2,454	2,578	47	51	274	273
Connecticut	214	208	2.8%	1	1	213	207	NM	NM	NM	NM
Maine	1,285	1,422	-9.7%	0	0	996	1,128	16	22	273	272
Massachusetts	613	586	4.6%	34	21	563	548	16	15	NM	1
New Hampshire	501	558	-10.2%	64	79	425	468	12	11	0	0
Rhode Island	129	106	22.5%	0	0	127	103	2	3	0	0
Vermont	246	279	-12.0%	116	156	130	123	1	0	0	0
Middle Atlantic	3,708	4,084	-9.2%	18	16	3,361	3,697	164	160	166	211
New Jersey	479	462	3.6%	18	16	389	372	71	72	NM	NM
New York	1,770	1,898	-6.7%	0	0	1,671	1,796	52	50	47	52
Pennsylvania	1,460	1,724	-15.3%	0	0	1,301	1,529	42	38	117	157
East North Central	9,914	10,278	-3.5%	950	1,140	8,495	8,650	62	64	408	424
Illinois	4,177	4,181	-0.1%	14	16	4,161	4,163	NM	NM	0	0
Indiana	1,951	1,988	-1.9%	106	109	1,823	1,855	5	5	17	19
Michigan	2,113	2,327	-9.2%	499	585	1,415	1,543	26	28	173	171
Ohio	829	771	7.5%	8	10	742	677	4	4	75	81
Wisconsin	844	1,010	-16.5%	322	420	354	413	24	24	143	153
West North Central	22,180	22,737	-2.5%	7,254	7,268	14,688	15,237	53	47	185	185
Iowa	6,831	6,586	3.7%	4,506	4,246	2,301	2,323	12	11	12	6
Kansas	5,156	5,363	-3.9%	450	501	4,703	4,858	NM	NM	0	0
Minnesota	3,692	4,158	-11.2%	765	868	2,738	3,100	19	15	171	176
Missouri	809	941	-14.1%	14	15	780	911	14	15	1	1
Nebraska	1,802	1,561	15.5%	92	69	1,706	1,490	4	3	0	0
North Dakota	3,085	3,275	-5.8%	1,189	1,312	1,894	1,961	0	0	2	2
South Dakota	805	852	-5.6%	239	259	566	594	0	0	0	0
South Atlantic	8,728	8,802	-0.8%	1,527	1,288	4,558	4,696	100	102	2,544	2,716
Delaware	28	28	1.2%	NM	NM	22	22	2	2	3	3
District of Columbia	16	15	4.2%	0	0	NM	0	14	15	0	0
Florida	2,080	1,934	7.6%	922	643	673	760	12	12	473	519
Georgia	1,587	1,729	-8.2%	65	59	558	644	NM	NM	963	1,025
Maryland	337	366	-7.8%	NM	NM	298	331	9	8	29	25
North Carolina	2,290	2,174	5.3%	86	86	1,875	1,718	26	26	304	344
South Carolina	784	794	-1.3%	120	123	250	226	0	0	414	445
Virginia	1,170	1,207	-3.0%	330	374	444	441	38	37	358	354
West Virginia	435	555	-21.6%	0	0	435	555	0	0	0	0
East South Central	1,712	1,744	-1.8%	42	44	271	258	NM	NM	1,398	1,441
Alabama	923	932	-0.9%	7	8	129	126	0	0	787	798
Kentucky	127	133	-4.3%	34	36	NM	3	0	0	90	94
Mississippi	379	393	-3.4%	0	0	65	69	0	0	314	324
Tennessee	282	286	-1.4%	NM	0	74	60	NM	NM	207	225
West South Central	29,546	30,084	-1.8%	397	413	27,899	28,355	26	24	1,224	1,292
Arkansas	417	420	-0.7%	NM	NM	62	68	1	2	354	350
Louisiana	601	658	-8.7%	NM	NM	21	22	0	0	579	635
Oklahoma	7,120	7,769	-8.4%	343	355	6,700	7,332	0	0	77	82
Texas	21,409	21,237	0.8%	53	58	21,117	20,933	25	22	214	224
Mountain	11,494	11,728	-2.0%	1,382	1,013	9,870	10,590	152	25	91	101
Arizona	1,158	1,214	-4.5%	123	133	1,034	1,079	NM	2	0	0
Colorado	3,011	2,866	5.0%	576	85	2,430	2,778	NM	3	1	1
Idaho	853	1,040	-18.0%	48	56	719	887	2	3	84	94
Montana	639	654	-2.4%	58	66	576	583	0	0	5	5
Nevada	2,039	1,920	6.2%	7	8	1,891	1,898	140	13	0	1
New Mexico	1,932	1,965	-1.6%	50	50	1,882	1,914	NM	NM	0	0
Utah	765	783	-2.3%	66	66	696	714	4	3	0	0
Wyoming	1,097	1,287	-14.8%	455	549	642	737	0	0	0	0
Pacific Contiguous	16,419	18,257	-10.1%	1,442	2,113	14,119	15,240	222	232	636	673
California	12,982	13,167	-1.4%	442	448	12,141	12,309	211	221	188	189
Oregon	1,491	2,318	-35.7%	134	291	1,207	1,872	8	8	142	148
Washington	1,945	2,772	-29.8%	866	1,374	771	1,059	3	3	306	336
Pacific Noncontiguous	390	396	-1.6%	51	50	280	290	59	56	NM	NM
Alaska	42	57	-25.0%	21	29	12	15	9	12	NM	NM
Hawaii	347	340	2.3%	30	21	268	274	49	44	0	0
U.S. Total	107,079	111,269	-3.8%	13,276	13,603	85,995	89,591	884	761	6,925	7,314

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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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	-50	-34	49.9%	0	0	-50	-34	0	0	0	0
Connecticut	-6	-3	108.1%	0	0	-6	-3	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-45	-31	44.6%	0	0	-45	-31	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	-95	-88	8.0%	-45	-40	-49	-48	0	0	0	0
New Jersey	-11	-12	-9.7%	-11	-12	0	0	0	0	0	0
New York	-34	-27	25.2%	-34	-27	0	0	0	0	0	0
Pennsylvania	-49	-48	2.7%	0	0	-49	-48	0	0	0	0
East North Central	-54	-47	15.2%	-54	-47	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	-54	-47	15.2%	-54	-47	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	22	26	-13.0%	22	26	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	22	26	-13.0%	22	26	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	-124	-157	-20.9%	-124	-157	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	38	-25	-253.7%	38	-25	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	-70	-22	216.2%	-70	-22	0	0	0	0	0	0
Virginia	-92	-110	-16.1%	-92	-110	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-43	-40	8.9%	-43	-40	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	-43	-40	8.9%	-43	-40	0	0	0	0	0	0
West South Central	7	3	99.2%	7	3	0	0	0	0	0	0
Arkansas	15	10	42.8%	15	10	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-8	-7	14.6%	-8	-7	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-17	-35	-52.1%	-17	-35	0	0	0	0	0	0
Arizona	-1	-11	-92.1%	-1	-11	0	0	0	0	0	0
Colorado	-16	-24	-33.1%	-16	-24	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	-55	-119	-53.9%	-55	-119	0	0	0	0	0	0
California	-55	-126	-56.3%	-55	-126	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	7	-100.2%	0	7	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	-409	-490	-16.5%	-309	-408	-100	-82	0	0	0	0

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	-110	-102	7.4%	0	0	-110	-102	0	0	0	0
Connecticut	2	-6	-128.0%	0	0	2	-6	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-111	-96	15.7%	0	0	-111	-96	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	-244	-272	-10.1%	-100	-130	-144	-141	0	0	0	0
New Jersey	-21	-31	-31.1%	-21	-31	0	0	0	0	0	0
New York	-78	-99	-21.2%	-78	-99	0	0	0	0	0	0
Pennsylvania	-144	-141	2.2%	0	0	-144	-141	0	0	0	0
East North Central	-122	-150	-18.5%	-122	-150	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	-122	-150	-18.5%	-122	-150	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	113	22	403.2%	113	22	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	113	22	403.2%	113	22	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	-282	-492	-42.8%	-282	-492	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	77	-145	-153.0%	77	-145	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	-178	-83	114.5%	-178	-83	0	0	0	0	0	0
Virginia	-181	-264	-31.6%	-181	-264	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-138	-128	7.3%	-138	-128	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	-138	-128	7.3%	-138	-128	0	0	0	0	0	0
West South Central	-3	-11	-71.7%	-3	-11	0	0	0	0	0	0
Arkansas	22	12	75.6%	22	12	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-25	-23	7.4%	-25	-23	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-93	-125	-25.5%	-93	-125	0	0	0	0	0	0
Arizona	-43	-42	2.3%	-43	-42	0	0	0	0	0	0
Colorado	-49	-82	-39.8%	-49	-82	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	-242	-95	154.3%	-242	-95	0	0	0	0	0	0
California	-244	-121	102.4%	-244	-121	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	2	25	-92.3%	2	25	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	-1,121	-1,352	-17.1%	-866	-1,109	-254	-243	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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	151	148	1.7%	0	0	132	129	5	6	14	13
Connecticut	45	39	14.5%	0	0	45	39	0	0	0	0
Maine	31	35	-12.0%	0	0	12	15	5	6	14	13
Massachusetts	71	71	-0.5%	0	0	71	71	0	0	0	0
New Hampshire	4	3	44.0%	0	0	4	3	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	166	177	-6.5%	0	0	129	142	35	35	2	0
New Jersey	38	45	-15.9%	0	0	26	32	10	13	2	0
New York	62	72	-13.8%	0	0	45	57	17	15	0	0
Pennsylvania	66	60	9.2%	0	0	57	53	8	7	0	0
East North Central	64	67	-3.4%	2	2	6	9	9	10	47	46
Illinois	18	23	-19.2%	0	0	-1	-2	0	0	19	24
Indiana	24	20	21.0%	0	0	0	0	1	2	23	18
Michigan	17	20	-17.4%	0	0	7	11	7	8	2	2
Ohio	2	1	94.6%	0	0	0	0	0	0	2	1
Wisconsin	3	3	16.8%	2	2	0	0	0	0	NM	NM
West North Central	26	41	-36.6%	11	19	8	13	NM	3	5	6
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	0.0%	0	0	0	0	0	0	0	0
Minnesota	22	37	-40.4%	8	15	8	13	NM	3	5	5
Missouri	0	0	-100.0%	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	-1.5%	4	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	359	398	-9.8%	0	0	196	211	12	13	151	174
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	253	270	-6.0%	0	0	131	132	0	0	122	138
Georgia	9	7	28.5%	0	0	0	0	0	0	9	7
Maryland	15	27	-43.1%	0	0	15	27	0	0	0	0
North Carolina	40	51	-22.0%	0	0	21	23	0	0	19	28
South Carolina	2	2	27.1%	0	0	1	1	0	0	2	1
Virginia	40	43	-6.6%	0	0	28	30	12	13	0	0
West Virginia	-1	-1	-48.4%	0	0	-1	-1	0	0	0	0
East South Central	NM	7	NM	0	6	0	0	0	0	NM	1
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	6	-100.0%	0	6	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	1	NM	0	0	0	0	0	0	NM	1
West South Central	84	93	-9.4%	0	0	7	10	0	0	77	82
Arkansas	1	1	49.9%	0	0	0	0	0	0	1	1
Louisiana	37	57	-35.2%	0	0	0	0	0	0	37	57
Oklahoma	0	4	-93.0%	0	0	0	4	0	0	0	1
Texas	46	31	47.8%	0	0	7	7	0	0	39	25
Mountain	70	68	2.7%	7	7	29	30	0	0	33	31
Arizona	0	0	925.0%	0	0	0	0	0	0	0	0
Colorado	5	5	5.0%	0	0	1	1	0	0	4	4
Idaho	7	7	0.3%	0	0	0	0	0	0	7	7
Montana	28	29	-1.8%	0	0	28	29	0	0	0	0
Nevada	3	2	52.0%	3	2	0	0	0	0	0	0
New Mexico	0	0	29.3%	0	0	0	0	0	0	0	0
Utah	21	19	9.2%	5	5	0	0	0	0	16	14
Wyoming	7	7	-1.5%	0	0	0	0	0	0	7	7
Pacific Contiguous	69	81	-15.2%	0	0	20	25	0	0	49	57
California	62	73	-14.7%	0	0	13	16	0	0	49	57
Oregon	1	3	-74.6%	0	0	1	3	0	0	0	0
Washington	6	5	13.0%	0	0	6	5	0	0	0	0
Pacific Noncontiguous	30	33	-10.6%	12	16	0	0	18	17	0	0
Alaska	0	0	37.2%	0	0	0	0	0	0	0	0
Hawaii	30	33	-10.3%	12	16	0	0	18	17	0	0
U.S. Total	1,018	1,113	-8.5%	32	49	528	570	80	84	378	410

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

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	417	440	-5.1%	0	0	368	382	15	20	34	37
Connecticut	114	121	-5.3%	0	0	114	121	0	0	0	0
Maine	84	100	-16.2%	0	0	34	42	15	20	34	37
Massachusetts	207	208	-0.5%	0	0	207	208	0	0	0	0
New Hampshire	13	11	12.1%	0	0	13	11	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	543	547	-0.9%	0	0	426	436	107	106	10	6
New Jersey	130	140	-7.2%	0	0	86	96	34	38	10	6
New York	200	203	-1.1%	0	0	154	158	46	45	0	0
Pennsylvania	212	205	3.7%	0	0	186	182	26	23	0	0
East North Central	190	213	-11.1%	5	5	26	31	30	32	128	146
Illinois	41	67	-38.3%	0	0	-3	-4	0	0	44	71
Indiana	76	67	12.5%	0	0	0	0	5	5	71	62
Michigan	60	67	-9.5%	0	0	29	34	25	27	6	5
Ohio	3	4	-21.3%	0	-1	0	0	0	0	3	4
Wisconsin	9	9	9.2%	5	5	0	0	0	0	NM	NM
West North Central	89	109	-18.5%	39	47	31	36	NM	8	15	17
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	1	1	-0.6%	0	0	0	0	0	0	1	1
Minnesota	77	96	-20.3%	28	36	31	36	NM	8	14	16
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	11	11	1.0%	11	11	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,090	1,137	-4.1%	0	0	600	627	34	33	457	476
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	762	773	-1.4%	0	0	398	395	0	0	364	378
Georgia	24	20	24.5%	0	0	0	0	0	0	24	20
Maryland	44	79	-44.4%	0	0	44	79	0	0	0	0
North Carolina	131	148	-11.4%	0	0	72	75	0	0	59	73
South Carolina	11	7	50.5%	0	0	1	1	0	0	9	6
Virginia	120	113	5.9%	0	0	86	80	34	33	0	0
West Virginia	-2	-3	-48.0%	0	0	-2	-3	0	0	0	0
East South Central	8	16	-52.0%	6	12	0	0	0	0	2	3
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	6	12	-53.4%	6	12	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	2	3	-46.5%	0	0	0	0	0	0	2	3
West South Central	273	266	2.5%	0	0	21	33	0	0	251	232
Arkansas	1	1	-12.8%	0	0	0	0	0	0	1	1
Louisiana	130	149	-12.7%	0	0	0	0	0	0	130	149
Oklahoma	1	14	-89.1%	0	0	1	13	0	0	1	1
Texas	140	102	37.3%	0	0	21	21	0	0	120	81
Mountain	177	200	-11.8%	19	21	77	84	0	0	80	94
Arizona	-1	0	806.8%	0	0	-1	0	0	0	0	0
Colorado	12	15	-19.0%	0	0	2	5	0	0	11	11
Idaho	19	18	1.7%	0	0	0	0	0	0	19	18
Montana	77	80	-3.7%	0	0	77	80	0	0	0	0
Nevada	5	7	-31.4%	5	7	0	0	0	0	0	0
New Mexico	0	0	-39.7%	0	0	0	0	0	0	0	0
Utah	45	59	-23.7%	14	14	0	0	0	0	31	44
Wyoming	20	21	-5.2%	0	0	0	0	0	0	20	21
Pacific Contiguous	202	213	-5.0%	0	-1	52	70	0	0	150	144
California	186	188	-1.3%	0	-1	36	45	0	0	150	144
Oregon	1	10	-92.6%	0	0	1	10	0	0	0	0
Washington	16	15	6.4%	0	0	16	15	0	0	0	0
Pacific Noncontiguous	84	89	-4.9%	37	46	0	0	47	42	0	0
Alaska	-1	-1	41.5%	-1	-1	0	0	0	0	0	0
Hawaii	85	89	-4.7%	38	47	0	0	47	42	0	0
U.S. Total	3,072	3,229	-4.9%	106	131	1,602	1,699	237	243	1,127	1,157

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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 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	332	380	-12.5%	20	24	309	351	4	4	0	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	221	257	-13.7%	0	0	221	257	0	0	0	0
Massachusetts	21	25	-15.0%	NM	6	13	15	NM	3	0	0
New Hampshire	31	43	-29.0%	0	0	31	43	0	0	0	0
Rhode Island	23	17	31.7%	0	0	22	16	1	1	0	0
Vermont	36	37	-3.1%	14	18	21	19	0	0	0	0
Middle Atlantic	695	770	-9.7%	0	0	695	769	NM	NM	0	0
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	389	403	-3.3%	0	0	389	402	NM	NM	0	0
Pennsylvania	304	365	-16.8%	0	0	304	365	0	0	0	0
East North Central	2,949	2,809	5.0%	268	292	2,670	2,505	NM	NM	NM	8
Illinois	1,437	1,311	9.6%	NM	NM	1,435	1,309	NM	NM	0	0
Indiana	612	594	3.0%	0	0	612	594	0	0	0	0
Michigan	532	521	2.0%	189	186	342	335	0	0	0	0
Ohio	208	183	13.4%	NM	NM	200	174	0	0	NM	7
Wisconsin	161	200	-19.4%	77	103	81	93	NM	NM	1	1
West North Central	7,951	7,370	7.9%	2,683	2,364	5,265	5,002	NM	4	0	0
Iowa	2,554	2,153	18.7%	1,706	1,407	848	745	0	0	0	0
Kansas	1,871	1,960	-4.5%	171	189	1,699	1,769	NM	NM	0	0
Minnesota	1,113	1,138	-2.2%	249	252	862	883	NM	NM	0	0
Missouri	277	316	-12.4%	0	0	277	316	0	0	0	0
Nebraska	690	495	39.4%	26	16	664	478	0	0	0	0
North Dakota	1,150	1,033	11.4%	442	415	708	618	0	0	0	0
South Dakota	296	276	7.4%	88	83	207	192	0	0	0	0
South Atlantic	254	305	-16.9%	0	0	253	305	1	1	0	0
Delaware	1	1	-23.5%	0	0	0	0	1	1	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	51	55	-7.1%	0	0	51	55	0	0	0	0
North Carolina	58	67	-13.1%	0	0	58	67	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	144	183	-21.2%	0	0	144	183	0	0	0	0
East South Central	NM	5	NM	0	0	NM	5	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	5	NM	0	0	NM	5	0	0	0	0
West South Central	9,256	10,126	-8.6%	133	147	9,117	9,973	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	2,447	2,754	-11.1%	115	126	2,332	2,628	0	0	0	0
Texas	6,808	7,373	-7.7%	18	21	6,785	7,345	5	5	NM	NM
Mountain	2,441	2,692	-9.3%	406	249	2,035	2,443	NM	NM	0	0
Arizona	53	60	-12.7%	0	0	53	60	0	0	0	0
Colorado	934	998	-6.4%	207	31	727	967	NM	NM	0	0
Idaho	215	257	-16.5%	16	17	199	240	0	0	0	0
Montana	215	212	1.8%	21	21	195	190	0	0	0	0
Nevada	32	38	-14.1%	0	0	32	38	0	0	0	0
New Mexico	542	617	-12.2%	0	0	541	617	NM	NM	0	0
Utah	70	89	-21.3%	0	0	70	89	0	0	0	0
Wyoming	380	421	-9.7%	162	180	218	241	0	0	0	0
Pacific Contiguous	2,097	2,755	-23.9%	344	559	1,752	2,196	1	1	0	0
California	1,246	1,353	-7.9%	48	47	1,197	1,305	1	1	0	0
Oregon	347	656	-47.2%	37	107	310	549	0	0	0	0
Washington	504	746	-32.5%	259	405	245	342	0	0	0	0
Pacific Noncontiguous	58	70	-16.9%	NM	10	51	60	0	0	0	0
Alaska	11	15	-24.1%	NM	10	NM	5	0	0	0	0
Hawaii	47	55	-14.9%	0	0	47	55	0	0	0	0
U.S. Total	26,036	27,283	-4.6%	3,860	3,645	22,148	23,608	18	20	NM	10

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

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

by State, by Sector, Year-to-Date through March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	961	1,125	-14.6%	57	73	893	1,041	11	10	NM	1
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	642	754	-14.8%	0	0	642	754	0	0	0	0
Massachusetts	60	72	-17.7%	15	19	36	45	8	8	NM	1
New Hampshire	92	131	-29.3%	0	0	92	131	0	0	0	0
Rhode Island	66	49	35.7%	0	0	64	46	2	3	0	0
Vermont	97	115	-15.6%	42	55	56	61	0	0	0	0
Middle Atlantic	2,028	2,401	-15.5%	0	0	2,027	2,399	NM	NM	0	1
New Jersey	NM	NM	NM	0	0	NM	NM	0	0	0	0
New York	1,149	1,288	-10.8%	0	0	1,148	1,286	NM	NM	0	1
Pennsylvania	874	1,106	-21.0%	0	0	874	1,106	0	0	0	0
East North Central	8,370	8,668	-3.4%	711	885	7,627	7,747	NM	NM	22	24
Illinois	4,063	4,045	0.4%	NM	4	4,058	4,039	NM	NM	0	0
Indiana	1,767	1,804	-2.1%	0	0	1,767	1,804	0	0	0	0
Michigan	1,448	1,651	-12.3%	478	565	969	1,086	0	0	0	0
Ohio	626	565	10.9%	NM	NM	603	538	1	1	20	22
Wisconsin	466	602	-22.6%	226	311	230	279	NM	NM	2	2
West North Central	21,370	21,885	-2.4%	7,125	7,126	14,234	14,747	11	13	0	0
Iowa	6,771	6,529	3.7%	4,498	4,236	2,273	2,292	1	1	0	0
Kansas	5,141	5,347	-3.9%	449	500	4,688	4,842	NM	NM	0	0
Minnesota	3,048	3,469	-12.1%	679	769	2,363	2,692	NM	8	0	0
Missouri	750	882	-15.0%	0	0	750	882	0	0	0	0
Nebraska	1,773	1,533	15.6%	72	50	1,700	1,483	0	0	0	0
North Dakota	3,083	3,273	-5.8%	1,189	1,312	1,894	1,961	0	0	0	0
South Dakota	804	852	-5.6%	239	259	565	594	0	0	0	0
South Atlantic	738	907	-18.6%	0	0	736	906	2	2	0	0
Delaware	2	2	-0.2%	0	0	0	0	2	2	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	143	170	-15.6%	0	0	143	170	0	0	0	0
North Carolina	158	181	-12.6%	0	0	158	181	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	435	555	-21.6%	0	0	435	555	0	0	0	0
East South Central	NM	15	NM	0	0	NM	15	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	15	NM	0	0	NM	15	0	0	0	0
West South Central	27,292	27,894	-2.2%	383	398	26,891	27,479	15	14	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	7,026	7,669	-8.4%	331	342	6,695	7,327	0	0	0	0
Texas	20,266	20,225	0.2%	52	56	20,195	20,152	15	14	NM	NM
Mountain	7,204	7,495	-3.9%	1,132	751	6,070	6,743	NM	NM	1	1
Arizona	150	156	-3.5%	0	0	150	156	0	0	0	0
Colorado	2,746	2,617	4.9%	575	83	2,170	2,533	NM	NM	1	1
Idaho	614	782	-21.4%	44	52	570	729	0	0	0	0
Montana	626	641	-2.3%	58	66	569	575	0	0	0	0
Nevada	93	99	-5.8%	0	0	93	99	0	0	0	0
New Mexico	1,667	1,705	-2.2%	0	0	1,666	1,704	NM	NM	0	0
Utah	242	209	15.9%	0	0	242	209	0	0	0	0
Wyoming	1,065	1,287	-17.2%	455	549	610	737	0	0	0	0
Pacific Contiguous	6,106	7,659	-20.3%	1,058	1,645	5,045	6,012	2	2	1	1
California	3,509	3,482	0.8%	148	124	3,359	3,356	2	2	1	1
Oregon	1,073	1,903	-43.6%	119	274	954	1,628	0	0	0	0
Washington	1,524	2,275	-33.0%	792	1,246	732	1,028	0	0	0	0
Pacific Noncontiguous	169	191	-11.6%	21	29	148	162	0	0	0	0
Alaska	33	45	-26.4%	21	29	12	15	0	0	0	0
Hawaii	136	147	-7.2%	0	0	136	147	0	0	0	0
U.S. Total	74,247	78,241	-5.1%	10,487	10,907	63,680	67,250	53	54	27	30

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

Table 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	529	586	-9.8%	28	55	393	428	11	14	96	90
Connecticut	64	61	5.5%	0	0	64	61	0	0	0	0
Maine	205	219	-6.2%	0	0	104	122	5	7	96	90
Massachusetts	98	101	-3.2%	0	0	96	99	2	2	0	0
New Hampshire	116	142	-17.9%	15	25	97	112	4	5	0	0
Rhode Island	18	18	3.7%	0	0	18	18	0	0	0	0
Vermont	27	45	-41.5%	13	29	13	16	0	0	0	0
Middle Atlantic	432	476	-9.2%	0	0	332	364	43	43	56	69
New Jersey	69	83	-17.0%	0	0	57	68	12	15	0	0
New York	173	190	-9.0%	0	0	138	157	18	16	17	17
Pennsylvania	190	203	-6.3%	0	0	137	139	13	12	40	53
East North Central	457	486	-5.9%	60	62	251	269	16	16	131	138
Illinois	35	39	-9.4%	4	4	31	35	0	0	0	0
Indiana	36	40	-10.6%	25	28	4	4	1	2	6	7
Michigan	202	214	-5.6%	0	0	136	148	8	8	58	57
Ohio	60	63	-3.9%	NM	NM	39	39	1	1	19	21
Wisconsin	124	130	-4.8%	31	29	41	43	6	5	47	53
West North Central	172	226	-23.9%	39	50	48	91	16	10	70	76
Iowa	18	18	-2.1%	NM	NM	7	11	4	3	5	2
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	130	181	-28.3%	26	36	33	71	7	2	64	73
Missouri	11	13	-14.2%	NM	NM	NM	NM	4	4	0	0
Nebraska	8	7	3.0%	7	7	0	0	1	1	0	0
North Dakota	NM	NM	NM	0	0	0	0	0	0	NM	NM
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,593	1,749	-8.9%	175	206	518	612	24	27	876	904
Delaware	NM	NM	NM	0	0	NM	NM	0	0	1	1
District of Columbia	5	6	-21.8%	0	0	0	0	5	6	0	0
Florida	401	448	-10.5%	44	45	183	224	3	4	171	175
Georgia	404	440	-8.2%	0	0	73	93	0	0	331	347
Maryland	32	44	-27.5%	0	0	19	35	2	2	11	7
North Carolina	211	231	-8.6%	0	0	108	110	1	NM	101	120
South Carolina	209	234	-10.6%	39	52	31	38	0	0	139	143
Virginia	327	342	-4.3%	93	109	100	108	14	15	121	111
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	491	502	-2.1%	8	9	28	29	0	0	455	463
Alabama	279	284	-1.8%	0	0	20	21	0	0	259	263
Kentucky	41	42	-2.1%	8	9	NM	NM	0	0	32	32
Mississippi	99	94	4.7%	0	0	NM	NM	0	0	98	93
Tennessee	73	82	-10.9%	0	0	NM	7	0	0	66	75
West South Central	478	512	-6.7%	0	0	70	62	4	4	404	447
Arkansas	129	129	-0.1%	0	0	8	9	1	1	121	120
Louisiana	191	231	-17.5%	0	0	NM	7	0	0	184	224
Oklahoma	31	30	1.3%	0	0	NM	NM	0	0	29	29
Texas	127	121	4.7%	0	0	53	44	3	3	71	74
Mountain	87	90	-4.1%	NM	NM	52	54	1	2	33	33
Arizona	14	16	-11.9%	0	0	14	16	0	0	0	0
Colorado	14	12	17.2%	0	0	14	12	0	0	0	0
Idaho	43	46	-5.9%	NM	NM	11	12	0	1	31	32
Montana	2	2	4.1%	0	0	0	0	0	0	2	2
Nevada	NM	NM	NM	0	0	NM	NM	0	0	0	0
New Mexico	2	2	-18.3%	0	0	2	2	0	0	0	0
Utah	NM	7	NM	0	0	NM	NM	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	679	750	-9.4%	29	59	368	397	64	68	218	226
California	454	491	-7.7%	2	12	330	355	61	64	60	61
Oregon	86	90	-5.0%	NM	NM	28	32	2	3	51	51
Washington	140	168	-16.8%	21	42	11	11	1	1	106	114
Pacific Noncontiguous	35	28	24.6%	9	2	NM	NM	22	22	NM	NM
Alaska	4	4	-14.1%	0	0	0	0	3	4	NM	NM
Hawaii	32	24	31.2%	9	2	NM	NM	18	18	0	0
U.S. Total	4,954	5,405	-8.4%	350	444	2,065	2,310	201	204	2,339	2,447

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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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	1,682	1,766	-4.8%	129	173	1,245	1,282	35	40	273	272
Connecticut	179	188	-4.9%	0	0	179	188	0	0	0	0
Maine	640	666	-3.9%	0	0	351	372	16	22	273	272
Massachusetts	292	295	-0.9%	0	0	285	288	7	6	0	0
New Hampshire	409	428	-4.4%	64	79	333	337	12	11	0	0
Rhode Island	50	50	0.9%	0	0	50	50	0	0	0	0
Vermont	113	140	-19.8%	65	93	47	46	1	0	0	0
Middle Atlantic	1,311	1,401	-6.4%	0	0	1,019	1,066	130	129	163	206
New Jersey	224	245	-8.5%	0	0	185	201	40	44	0	0
New York	521	551	-5.6%	0	0	424	453	50	48	47	51
Pennsylvania	566	604	-6.2%	0	0	411	411	40	37	116	155
East North Central	1,382	1,473	-6.2%	183	205	765	817	49	51	385	400
Illinois	103	125	-17.5%	10	11	93	114	0	0	0	0
Indiana	107	117	-8.6%	73	81	12	12	5	5	17	19
Michigan	630	651	-3.3%	0	0	431	451	26	28	173	171
Ohio	173	180	-4.1%	NM	4	113	116	2	2	54	59
Wisconsin	369	399	-7.6%	96	109	116	125	16	15	141	151
West North Central	503	607	-17.2%	123	138	153	250	41	34	185	185
Iowa	56	53	5.8%	NM	7	27	30	11	10	12	6
Kansas	14	15	-5.0%	0	0	14	15	0	0	0	0
Minnesota	372	474	-21.6%	85	98	103	193	12	7	171	176
Missouri	36	41	-12.8%	13	14	NM	12	14	14	1	1
Nebraska	23	22	6.7%	19	19	0	0	4	3	0	0
North Dakota	2	2	-26.7%	0	0	0	0	0	0	2	2
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,787	5,253	-8.9%	587	626	1,587	1,839	70	73	2,543	2,715
Delaware	15	16	-4.8%	0	0	12	13	0	0	3	3
District of Columbia	14	15	-11.8%	0	0	0	0	14	15	0	0
Florida	1,230	1,366	-9.9%	180	167	568	670	10	11	472	518
Georgia	1,180	1,316	-10.3%	0	0	217	291	0	0	963	1,025
Maryland	96	135	-28.7%	0	0	61	104	6	6	29	25
North Carolina	627	688	-8.8%	0	0	321	341	3	3	304	344
South Carolina	635	676	-6.1%	120	123	102	109	0	0	413	445
Virginia	989	1,040	-4.9%	287	337	307	312	38	37	358	354
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	1,504	1,552	-3.1%	25	26	83	87	0	0	1,396	1,439
Alabama	845	859	-1.6%	0	0	58	61	0	0	787	798
Kentucky	117	122	-4.1%	25	26	NM	NM	0	0	90	94
Mississippi	317	326	-2.8%	0	0	NM	NM	0	0	314	324
Tennessee	225	244	-8.1%	0	0	19	20	0	0	205	224
West South Central	1,410	1,507	-6.4%	0	0	179	208	11	10	1,221	1,289
Arkansas	379	378	0.5%	0	0	24	26	1	2	354	350
Louisiana	600	657	-8.7%	0	0	21	22	0	0	579	635
Oklahoma	81	87	-6.2%	0	0	NM	NM	0	0	77	82
Texas	350	386	-9.3%	0	0	130	156	9	8	211	222
Mountain	256	270	-5.3%	NM	NM	158	162	6	6	89	100
Arizona	47	49	-3.6%	0	0	47	49	0	0	0	0
Colorado	40	38	6.8%	0	0	40	38	0	0	0	0
Idaho	122	136	-10.0%	NM	NM	33	35	2	3	84	94
Montana	5	5	4.3%	0	0	0	0	0	0	5	5
Nevada	17	18	-5.8%	0	0	17	18	0	0	0	0
New Mexico	5	6	-11.5%	0	0	5	6	0	0	0	0
Utah	20	19	0.1%	0	0	16	17	4	3	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	2,045	2,247	-9.0%	92	182	1,143	1,201	187	201	624	662
California	1,385	1,479	-6.4%	NM	39	1,029	1,071	177	191	176	178
Oregon	247	270	-8.4%	14	15	83	99	8	8	142	148
Washington	413	497	-16.9%	74	128	31	31	3	3	306	336
Pacific Noncontiguous	93	83	12.2%	21	13	13	13	59	56	NM	NM
Alaska	10	12	-19.7%	0	0	0	0	9	12	NM	NM
Hawaii	83	71	17.6%	21	13	13	13	49	44	0	0
U.S. Total	14,973	16,158	-7.3%	1,162	1,367	6,344	6,925	587	598	6,879	7,268

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 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	411	355	15.7%	23	22	344	333	44	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	7	7	2.4%	0	0	7	7	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	358	308	16.1%	0	0	314	308	44	0	0	0
New Mexico	6	1	335.5%	0	0	6	1	0	0	0	0
Utah	40	39	2.9%	23	22	17	17	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,041	1,032	0.9%	66	70	975	963	0	0	0	0
California	1,025	1,017	0.8%	66	70	959	947	0	0	0	0
Oregon	16	15	3.6%	0	0	16	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	27	27	3.2%	0	0	27	27	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	27	27	3.2%	0	0	27	27	0	0	0	0
U.S. Total	1,480	1,414	4.6%	89	92	1,347	1,322	44	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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	1,192	1,044	14.1%	66	66	999	979	127	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	19	19	0.0%	0	0	19	19	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,040	907	14.6%	0	0	913	907	127	0	0	0
New Mexico	17	3	566.7%	0	0	17	3	0	0	0	0
Utah	115	115	-0.1%	66	66	50	50	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	3,004	3,024	-0.7%	194	188	2,810	2,835	0	0	0	0
California	2,957	2,977	-0.7%	194	188	2,764	2,789	0	0	0	0
Oregon	46	46	-0.1%	0	0	46	46	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	79	79	-0.1%	0	0	79	79	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	79	79	-0.1%	0	0	79	79	0	0	0	0
U.S. Total	4,274	4,147	3.1%	260	254	3,888	3,893	127	0	0	0

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

Table 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	457	350	30.8%	157	116	301	234	12	5	144	110	NM	NM	NM	NM	160	130	12	10	0	0	11	10	130	94
Connecticut	66	52	27.7%	14	10	52	42	0	0	14	10	NM	NM	NM	NM	20	16	NM	NM	NM	NM	2	2	30	23
Maine	NM	6	NM	NM	NM	6	5	0	0	NM	NM	3	2	0	0	3	2	0	0	0	0	0	0	4	3
Massachusetts	326	253	28.9%	120	92	206	161	8	NM	111	90	NM	NM	NM	NM	121	102	8	7	0	0	8	7	77	52
New Hampshire	11	9	22.9%	0	0	11	9	0	0	0	0	3	3	0	0	3	3	1	1	0	0	1	1	7	6
Rhode Island	19	10	80.3%	6	NM	13	8	0	0	6	NM	8	4	0	0	8	4	0	0	0	0	0	0	5	4
Vermont	29	20	41.6%	16	10	13	11	4	3	12	6	5	4	0	0	5	4	NM	NM	0	0	NM	NM	8	7
Middle Atlantic	564	440	28.1%	169	118	395	322	8	7	144	97	190	159	15	13	175	146	NM	NM	NM	NM	20	18	201	158
New Jersey	311	252	23.2%	113	87	197	165	8	7	91	68	109	96	14	12	95	84	NM	NM	NM	NM	13	11	90	70
New York	203	147	38.2%	46	25	157	122	0	0	46	25	NM	NM	NM	NM	66	50	2	1	0	0	2	1	89	71
Pennsylvania	50	41	22.3%	9	6	41	35	0	0	7	5	NM	NM	NM	NM	14	13	NM	NM	NM	NM	5	5	22	17
East North Central	128	101	27.1%	73	60	55	41	25	22	47	36	NM	NM	NM	NM	33	26	3	2	0	0	3	2	20	13
Illinois	18	13	39.3%	5	5	13	8	NM	NM	5	5	NM	NM	NM	NM	7	5	0	0	0	0	0	0	5	3
Indiana	45	35	28.2%	35	28	11	8	15	12	20	16	7	5	0	0	7	5	0	0	0	0	0	0	3	2
Michigan	24	19	27.7%	16	12	8	7	9	10	7	NM	4	4	0	0	4	4	0	0	0	0	0	0	4	3
Ohio	29	24	20.7%	13	11	15	13	NM	NM	12	10	NM	NM	NM	NM	10	10	1	1	0	0	1	1	4	3
Wisconsin	12	10	22.0%	4	NM	8	6	0	0	4	NM	NM	3	NM	0	3	3	2	1	0	0	2	1	4	3
West North Central	190	150	27.1%	142	111	49	39	NM	NM	139	109	23	19	0	0	23	19	2	2	0	0	2	2	24	18
Iowa	NM	12	NM	NM	NM	13	10	NM	NM	NM	NM	8	7	0	0	8	7	0	0	0	0	0	0	4	4
Kansas	NM	3	NM	NM	NM	3	2	NM	NM	NM	NM	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Minnesota	135	105	29.0%	126	98	9	7	NM	NM	126	98	3	2	0	0	3	2	1	1	0	0	1	1	5	3
Missouri	32	26	21.3%	10	7	22	19	0	0	10	7	10	9	0	0	10	9	0	0	0	0	0	0	12	10
Nebraska	4	3	24.7%	3	NM	1	1	NM	0	3	NM	0	0	0	0	0	0	0	0	0	0	0	0	1	0
North Dakota	0	0	52.0%	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	1,669	1,282	30.2%	1,422	1,089	247	193	400	273	1,008	804	78	68	13	11	66	57	NM	NM	NM	NM	29	26	152	110
Delaware	16	14	18.2%	5	4	11	10	NM	NM	5	4	3	NM	0	NM	3	3	1	1	0	0	1	1	7	6
District of Columbia	NM	6	NM	NM	0	7	6	0	0	NM	0	4	4	0	0	4	4	0	0	0	0	0	0	3	2
Florida	415	270	53.6%	361	235	54	35	312	197	48	38	NM	NM	NM	NM	12	10	NM	NM	NM	NM	1	1	41	25
Georgia	NM	192	NM	183	168	NM	23	28	25	154	143	NM	NM	NM	NM	NM	3	NM	NM	0	0	NM	NM	NM	1
Maryland	132	102	29.0%	45	28	87	74	NM	NM	43	26	NM	NM	NM	NM	23	20	3	3	0	0	3	3	61	51
North Carolina	700	550	27.2%	677	533	23	17	38	35	629	488	21	20	10	10	11	10	1	1	0	0	1	1	11	7
South Carolina	94	70	35.9%	67	50	27	19	NM	NM	67	50	7	5	0	0	7	5	NM	2	NM	0	2	2	18	13
Virginia	93	77	20.2%	82	70	10	7	19	15	63	55	NM	3	NM	0	3	3	0	0	0	0	0	0	7	4
West Virginia	1	1	26.2%	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
East South Central	106	89	18.4%	92	77	13	12	8	8	83	69	NM	NM	NM	NM	9	8	NM	NM	NM	NM	0	0	4	4
Alabama	NM	33	NM	36	32	NM	NM	NM	NM	33	28	1	1	0	0	1	1	0	0	0	0	0	0	NM	NM
Kentucky	8	7	12.3%	4	4	3	2	4	4	NM	NM	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Mississippi	27	31	-11.9%	26	30	1	1	0	0	26	30	1	1	0	0	1	1	NM	NM	0	0	NM	NM	1	0
Tennessee	34	19	79.2%	26	11	8	8	NM	0	25	10	NM	NM	NM	NM	6	6	NM	NM	NM	NM	NM	NM	2	2
West South Central	436	350	24.4%	337	273	98	77	6	7	330	266	20	17	0	0	20	17	0	0	0	0	0	0	78	60
Arkansas	20	22	-7.0%	18	20	2	2	NM	NM	18	20	1	1	0	0	1	1	0	0	0	0	0	0	1	1
Louisiana	NM	19	NM	NM	NM	21	19	NM	NM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	19	18
Oklahoma	7	7	0.9%	5	6	1	1	5	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Texas	388	302	28.1%	314	247	74	56	NM	NM	313	246	18	15	0	0	18	15	0	0	0	0	0	0	56	41
Mountain	1,599	1,472	8.6%	1,166	1,125	432	347	81	78	1,077	1,040	127	116	8	7	119	108	6	6	0	0	6	6	307	233
Arizona	614	554	10.9%	361	357	253	197	54	54	306	303	NM	NM	NM	NM	74	64	1	2	0	0	1	2	177	130
Colorado	153	138	10.2%	99	86	54	52	NM	NM	97	84	NM	NM	NM	NM	19	19	NM	0	0	0	NM	0	35	32
Idaho	49	46	6.0%	45	44	4	2	0	0	45	44	0	0	0	0	0	0	0	0	0	0	0	0	3	2
Montana	NM	5	NM	NM	NM	2	2	0	0	NM	NM	1	0	0	0	1	0	0	0	0	0	0	0	1	1
Nevada	422	394	7.1%	367	355	55	39	3	3	358	346	15	14	6	5	9	9	4	3	0	0	3	2	42	28
New Mexico	132	125	6.3%	107	102	25	22	23	20	84	82	8	8	0	0	8	8	0	0	0	0	0	0	18	14
Utah	208	209	-0.9%	169	177	38	33	0	0	169	177	7	7	0	0	7	7	1	1	0	0	1	1	30	25
Wyoming	16	0	NM	16	0	1	0	0	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pacific Contiguous	3,466	3,038	14.1%	2,182	1,962	1,284	1,076	44	40	2,118	1,906	334	280	15	12	319	268	188	NM	5	NM	183	157	783	651
California	3,372	2,969	13.6%	2,121	1,919	1,251	1,050	44	40	2,057	1,863	324	272	15	12	309	260	186	NM	5	NM	181	155	761	635
Oregon	76	58	30.5%	58	43	19	15	NM	NM	57	43	8	6	0	0	8	6	1	1	0	0	1	1	10	8
Washington	18	11	67.3%	4	0	14	11	0	0	3	0	2	2	0	0	2	2	0	0	0	0	0	0	12	9
Pacific Noncontiguous	113	102	11.1%	20	15	93	86	3	2	17	13	36	33	0	0	36	33	0	0	0	0	0	0	56	53
Alaska	0	0	48.2%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	112	101	11.0%	20	15	92	86	3	2	17	13	36	33	0	0	36	33	0	0	0	0	0	0	56	53
U.S. Total	8,728	7,373	18.4%	5,760	4,945	2,968	2,427	590	444	5,108	4,450	1,012	858	53	45	959	813	263	227	8	7	255	220	1,754	1,394

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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	1,027	822	24.9%	344	268	683	554	27	12	316	255	374	315	NM	1	373	314	28	24	0	0	28	23	282	217
Connecticut	154	115	34.0%	32	16	122	98	1	1	31	16	48	39	NM	NM	48	39	6	5	NM	NM	6	5	67	54
Maine	17	14	26.4%	NM	NM	15	11	0	0	NM	NM	6	4	0	0	6	4	0	0	0	0	0	0	9	7
Massachusetts	719	598	20.1%	261	219	458	379	18	3	242	215	279	247	NM	1	278	245	20	17	0	0	20	16	159	118
New Hampshire	26	22	20.8%	0	0	26	22	0	0	0	0	8	6	0	0	8	6	2	1	0	0	2	1	17	14
Rhode Island	46	25	81.9%	13	7	33	18	0	0	13	7	21	10	0	0	21	10	0	0	0	0	0	0	12	9
Vermont	66	49	33.9%	36	24	29	25	8	8	28	16	11	9	0	0	11	9	1	0	0	0	1	0	18	16
Middle Atlantic	1,286	1,035	24.2%	369	282	917	752	18	16	315	233	451	379	33	30	417	348	51	46	3	3	48	43	452	361
New Jersey	711	600	18.5%	249	210	462	391	18	16	199	164	261	232	31	28	230	204	32	29	NM	NM	31	27	201	159
New York	459	338	35.7%	100	58	359	280	0	0	99	58	154	115	NM	NM	153	114	4	4	0	0	4	4	202	162
Pennsylvania	115	96	20.0%	20	14	96	82	0	0	16	11	35	32	NM	NM	33	30	15	14	NM	NM	13	12	49	39
East North Central	282	228	23.8%	163	138	119	90	57	50	104	86	72	57	NM	NM	70	56	6	5	0	0	6	5	43	29
Illinois	38	28	37.1%	11	11	27	17	0	NM	10	10	17	12	NM	NM	16	11	0	0	0	0	0	0	11	6
Indiana	101	83	21.0%	77	67	24	17	33	28	43	39	16	11	0	0	16	11	1	1	0	0	1	1	7	5
Michigan	53	39	33.9%	36	25	17	14	21	20	15	5	8	8	0	0	8	8	0	0	0	0	0	0	8	7
Ohio	63	54	17.2%	30	26	33	28	NM	NM	27	23	24	22	NM	NM	23	21	2	2	0	0	2	1	9	6
Wisconsin	26	23	16.1%	9	9	18	14	0	0	8	9	7	5	NM	0	7	5	3	3	0	0	3	3	8	6
West North Central	420	336	24.9%	307	245	113	91	5	4	301	240	54	45	0	0	53	45	5	3	0	0	5	3	55	43
Iowa	33	27	22.4%	4	4	29	23	NM	NM	NM	NM	18	14	0	0	18	14	1	1	0	0	1	1	10	8
Kansas	9	6	32.7%	NM	NM	7	5	NM	NM	NM	NM	3	1	0	0	3	1	0	0	0	0	0	0	4	3
Minnesota	292	229	27.6%	272	215	20	14	NM	NM	272	214	7	5	0	0	7	5	2	2	0	0	2	2	11	7
Missouri	76	65	17.0%	22	18	53	47	1	1	22	17	25	23	0	0	25	23	1	1	0	0	1	1	28	24
Nebraska	9	8	17.5%	7	6	3	2	NM	0	6	6	1	1	0	0	1	1	0	0	0	0	0	0	2	1
North Dakota	0	0	52.7%	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	0.4%	NM	NM	0	0	0	0	NM	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	3,782	3,088	22.5%	3,194	2,629	587	460	931	648	2,234	1,952	192	166	28	28	164	138	75	67	NM	NM	74	66	349	255
Delaware	37	33	13.4%	12	10	26	22	NM	NM	10	9	7	7	0	NM	7	7	2	2	0	0	2	2	16	14
District of Columbia	20	14	39.1%	NM	0	17	14	0	0	NM	0	9	8	0	0	9	8	0	0	0	0	0	0	8	6
Florida	976	644	51.6%	841	555	135	89	733	463	106	90	31	26	NM	NM	29	24	3	3	NM	NM	3	3	103	62
Georgia	474	472	0.4%	407	413	67	59	65	59	341	353	10	8	NM	NM	9	7	54	48	0	0	54	48	4	4
Maryland	289	227	27.5%	98	61	191	165	NM	NM	94	58	58	49	NM	NM	55	47	8	8	0	0	8	8	128	111
North Carolina	1,561	1,349	15.7%	1,504	1,305	57	44	86	86	1,395	1,196	50	49	23	23	28	25	2	2	0	0	2	2	28	17
South Carolina	215	164	31.7%	149	118	67	46	NM	NM	148	117	17	12	0	0	17	12	6	4	NM	0	6	4	43	30
Virginia	207	184	12.2%	181	166	26	18	43	37	137	129	8	7	NM	0	8	7	0	0	0	0	0	0	18	11
West Virginia	2	2	26.0%	0	0	2	2	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	2	1
East South Central	232	206	12.9%	200	177	32	29	18	18	180	156	22	21	NM	NM	21	20	2	2	NM	NM	1	0	10	9
Alabama	81	75	7.7%	78	73	3	2	7	8	71	65	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Kentucky	18	16	8.0%	10	11	8	6	9	10	NM	NM	4	3	0	0	4	3	0	0	0	0	0	0	3	2
Mississippi	65	69	-5.4%	62	66	3	2	0	0	62	66	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Tennessee	69	45	50.9%	49	27	19	19	NM	0	47	24	15	15	NM	NM	14	14	1	1	NM	NM	0	0	5	5
West South Central	1,091	876	24.6%	845	683	246	193	15	15	830	667	52	43	0	0	51	43	1	0	0	0	1	0	194	150
Arkansas	44	47	-6.1%	38	43	6	4	NM	NM	38	42	2	1	0	0	2	1	1	0	0	0	1	0	4	2
Louisiana	52	48	9.8%	NM	NM	52	47	NM	NM	0	0	4	3	0	0	4	3	0	0	0	0	0	0	48	45
Oklahoma	15	15	4.6%	12	13	3	2	12	13	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Texas	979	766	27.7%	794	627	185	140	NM	NM	792	625	46	38	0	0	45	38	0	0	0	0	0	0	140	102
Mountain	3,714	3,626	2.4%	2,661	2,775	1,053	851	181	192	2,462	2,564	316	292	18	18	298	274	16	14	0	1	15	14	740	563
Arizona	1,470	1,380	6.5%	843	889	627	491	123	133	719	754	191	167	NM	2	189	166	4	5	0	0	4	5	434	320
Colorado	355	335	5.8%	224	212	130	124	NM	NM	220	207	50	51	3	3	47	48	1	1	0	0	1	1	83	75
Idaho	105	108	-2.6%	96	103	9	5	0	0	96	103	1	1	0	0	1	1	0	0	0	0	0	0	7	4
Montana	11	11	0.3%	7	8	4	3	0	0	7	8	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Nevada	955	968	-1.4%	827	873	127	94	7	8	807	852	36	36	13	13	23	22	9	6	0	1	8	6	96	66
New Mexico	308	308	0.0%	243	251	65	56	50	50	194	201	19	20	0	0	19	20	0	0	0	0	0	0	45	36
Utah	477	514	-7.2%	388	439	90	76	0	0	388	439	17	15	0	0	17	15	2	2	0	0	2	2	71	59
Wyoming	33	1	NM	32	0	2	1	0	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Pacific Contiguous	7,945	7,461	6.5%	4,951	4,907	2,994	2,553	99	99	4,809	4,770	781	662	33	29	748	634	435	375	11	10	424	365	1,822	1,555
California	7,742	7,305	6.0%	4,818	4,808	2,924	2,497	97	97	4,677	4,672	760	644	33	29	727	616	432	372	11	10	421	362	1,776	1,519
Oregon	164	133	23.3%	125	100	39	33	NM	NM	124	99	16	14	0	0	16	14	3	3	0	0	3	3	20	16
Washington	39	23	69.4%	8	0	31	23	0	0	8	0	5	4	0	0	5	4	0	0	0	0	0	0	27	19
Pacific Noncontiguous	296	274	7.9%	49	43	247	231	9	8	40	35	97	89	0	0	97	89	1	1	0	0	1	1	149	142
Alaska	0	0	47.6%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	296	274	7.9%	49	43	247	231	9	8	40	35	97	89	0	0	97	89	1	1	0	0	1	1	149	141
U.S. Total	20,074	17,951	11.8%	13,083	12,147	6,991	5,804	1,358	1,062	11,589	10,959	2,411	2,068	117	109	2,294	1,959	619	537	18	17	601	520	4,096	3,325

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, March 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	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4	9	-56.2%	4	9	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4	9	-56.2%	4	9	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	91	62	46.5%	0	0	91	62	0	0	0	0
Arizona	62	48	28.5%	0	0	62	48	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	29	14	109.1%	0	0	29	14	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	165	186	-11.4%	0	0	165	186	0	0	0	0
California	165	186	-11.4%	0	0	165	186	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	260	258	1.0%	4	9	256	248	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 March 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	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	9	13	-32.0%	9	13	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	9	13	-32.0%	9	13	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	181	143	26.3%	0	0	181	143	0	0	0	0
Arizona	118	120	-1.7%	0	0	118	120	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	63	23	171.4%	0	0	63	23	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	313	421	-25.7%	0	0	313	421	0	0	0	0
California	313	421	-25.7%	0	0	313	421	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	502	577	-13.0%	9	13	493	564	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-March 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
Year to Date					
2017	160,285	117,854	41,637	30	764
2018	154,560	113,913	39,858	29	760
2019	144,722	106,323	37,761	27	610
Rolling 12 Months Ending in March					
2018	658,186	480,448	174,865	93	2,780
2019	625,995	465,973	157,355	93	2,574

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-March 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
Year to Date					
2017	3,960	751	327	164	2,719
2018	3,913	655	377	146	2,736
2019	3,499	633	297	139	2,430
Rolling 12 Months Ending in March					
2018	14,620	2,706	1,208	498	10,209
2019	13,307	2,299	1,082	486	9,439

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-March 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
Year to Date					
2017	164,245	118,605	41,964	194	3,482
2018	158,473	114,568	40,235	175	3,496
2019	148,221	106,956	38,059	166	3,040
Rolling 12 Months Ending in March					
2018	672,806	483,154	176,073	591	12,988
2019	639,301	468,272	158,437	579	12,013

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-March 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
Year to Date					
2017	5,137	3,921	1,041	47	129
2018	11,824	6,509	5,057	94	165
2019	5,054	3,598	1,278	53	125
Rolling 12 Months Ending in March					
2018	28,383	18,155	9,478	238	512
2019	20,475	14,822	4,913	241	499

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

Table 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	488	27	62	86	313
2018	1,030	58	130	156	686
2019	740	30	78	103	529
Rolling 12 Months Ending in March					
2018	2,554	103	287	309	1,855
2019	2,404	64	268	310	1,762

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.C. Petroleum Liquids: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	5,625	3,948	1,103	133	442
2018	12,854	6,567	5,187	250	850
2019	5,794	3,628	1,356	156	654
Rolling 12 Months Ending in March					
2018	30,937	18,258	9,765	546	2,367
2019	22,879	14,886	5,181	551	2,261

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

Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2009-March 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
Year to Date					
2017	910	733	126	1	50
2018	869	728	103	1	37
2019	828	674	114	1	39
Rolling 12 Months Ending in March					
2018	3,449	2,726	519	3	201
2019	3,270	2,687	399	2	183

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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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.
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Table 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	240	1	29	5	205
2018	197	3	26	5	163
2019	197	4	24	4	165
Rolling 12 Months Ending in March					
2018	934	13	112	15	794
2019	833	12	91	10	720

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.
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Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	1,150	734	156	6	255
2018	1,066	731	129	6	200
2019	1,026	678	138	5	205
Rolling 12 Months Ending in March					
2018	4,383	2,739	631	17	996
2019	4,103	2,699	490	12	903

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.
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Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2009-March 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
Year to Date					
2017	1,957,069	980,198	832,077	12,019	132,775
2018	2,292,806	1,164,807	983,341	12,231	132,427
2019	2,450,873	1,229,318	1,069,323	12,869	139,364
Rolling 12 Months Ending in March					
2018	9,843,497	4,939,492	4,313,251	50,272	540,482
2019	11,013,222	5,559,380	4,842,862	52,482	558,497

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

Table 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	288,720	10,409	77,896	26,366	174,049
2018	310,784	10,059	83,707	26,794	190,225
2019	323,167	10,665	86,254	26,789	199,459
Rolling 12 Months Ending in March					
2018	1,190,914	38,390	315,755	104,752	732,018
2019	1,248,086	41,645	335,452	103,281	767,708

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

Table 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	2,245,789	990,607	909,973	38,385	306,824
2018	2,603,590	1,174,866	1,067,048	39,025	322,652
2019	2,774,040	1,239,983	1,155,577	39,657	338,823
Rolling 12 Months Ending in March					
2018	11,034,411	4,977,882	4,629,006	155,024	1,272,500
2019	12,261,308	5,601,025	5,178,315	155,763	1,326,205

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-March 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
Year to Date					
2017	71,361	6,652	58,601	5,054	1,055
2018	74,017	7,570	60,214	5,290	943
2019	67,305	5,435	56,044	5,000	826
Rolling 12 Months Ending in March					
2018	280,767	25,993	230,664	20,356	3,755
2019	277,955	23,512	232,218	19,176	3,050

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

Table 2.5.B. Landfill Gas: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	1,035	1	503	279	252
2018	1,246	2	759	229	256
2019	1,209	2	755	231	221
Rolling 12 Months Ending in March					
2018	4,151	4	2,203	1,049	894
2019	3,995	8	2,239	912	836

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

Table 2.5.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	72,396	6,652	59,104	5,333	1,307
2018	75,263	7,572	60,973	5,519	1,198
2019	68,514	5,437	56,800	5,230	1,046
Rolling 12 Months Ending in March					
2018	284,918	25,997	232,867	21,406	4,649
2019	281,951	23,519	234,457	20,088	3,886

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

Table 2.6.A. Biogenic Municipal Solid Waste: Consumption for Electricity Generation, by Sector, 2009-March 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
Year to Date					
2017	4,008	89	3,319	600	0
2018	4,005	93	3,346	563	2
2019	3,856	72	3,215	566	2
Rolling 12 Months Ending in March					
2018	16,345	426	13,408	2,500	10
2019	16,407	446	13,570	2,382	9

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Table 2.6.B. Biogenic Municipal Solid Waste: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	561	0	211	298	52
2018	476	0	188	248	40
2019	482	0	206	227	49
Rolling 12 Months Ending in March					
2018	2,040	0	791	1,052	197
2019	1,903	0	770	936	197

Notes: Beginning with the collection of Form EIA-923 in January 2008, the methodology to allocate total fuel consumption for electricity generation and consumption for useful thermal output was changed.
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Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
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Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	4,569	89	3,529	899	52
2018	4,481	93	3,534	811	43
2019	4,337	72	3,420	793	51
Rolling 12 Months Ending in March					
2018	18,385	426	14,200	3,552	208
2019	18,310	446	14,340	3,318	206

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 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2009-March 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
Year to Date					
2017	90,799	12,286	38,091	131	40,292
2018	90,600	12,187	35,703	141	42,569
2019	86,319	12,009	33,285	182	40,844
Rolling 12 Months Ending in March					
2018	363,772	42,708	149,489	469	171,105
2019	346,882	44,934	133,586	561	167,801

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 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	257,308	3,412	6,083	1,254	246,559
2018	257,314	2,685	6,216	1,420	246,993
2019	248,534	3,044	5,599	1,457	238,434
Rolling 12 Months Ending in March					
2018	1,036,432	10,929	23,119	4,688	997,697
2019	1,027,630	11,235	22,496	4,844	989,056

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

Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2009-March 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
Year to Date					
2017	348,107	15,698	44,173	1,386	286,851
2018	347,914	14,872	41,919	1,561	289,561
2019	334,853	15,053	38,883	1,639	279,278
Rolling 12 Months Ending in March					
2018	1,400,204	53,636	172,608	5,157	1,168,802
2019	1,374,512	56,168	156,082	5,404	1,156,858

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

Census Division and State	All Sectors			Electric Power Sector: Electric Utilities		Electric Power Sector: Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	26	18	46.0%	12	16	13	1	0	0	NM	NM
Connecticut	12	0	--	0	0	12	0	0	0	0	0
Maine	2	1	44.0%	0	0	2	1	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	12	16	-26.0%	12	16	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	1,907	1,969	-3.2%	0	0	1,902	1,963	0	0	5	6
New Jersey	39	38	1.0%	0	0	39	38	0	0	0	0
New York	27	49	-44.0%	0	0	27	48	0	0	0	1
Pennsylvania	1,841	1,882	-2.2%	0	0	1,836	1,877	0	0	5	5
East North Central	10,718	11,666	-8.1%	6,328	6,857	4,327	4,734	2	1	61	73
Illinois	2,717	3,001	-9.5%	191	159	2,480	2,789	NM	1	44	52
Indiana	2,855	3,134	-8.9%	2,702	2,955	152	178	1	0	0	0
Michigan	2,008	1,697	18.0%	2,005	1,673	1	19	0	0	2	5
Ohio	1,891	2,324	-19.0%	198	576	1,693	1,748	0	0	0	0
Wisconsin	1,247	1,510	-17.0%	1,232	1,495	0	0	0	0	15	15
West North Central	8,376	8,508	-1.5%	8,305	8,404	0	0	3	2	68	101
Iowa	1,133	864	31.0%	1,095	820	0	0	2	2	36	41
Kansas	801	766	4.6%	801	766	0	0	0	0	0	0
Minnesota	730	986	-26.0%	713	958	0	0	0	0	16	28
Missouri	2,592	2,605	-0.5%	2,592	2,605	0	0	1	0	0	0
Nebraska	1,103	1,206	-8.5%	1,090	1,178	0	0	0	0	13	28
North Dakota	1,834	1,934	-5.1%	1,832	1,930	0	0	0	0	NM	4
South Dakota	183	148	24.0%	183	148	0	0	0	0	0	0
South Atlantic	4,700	5,772	-19.0%	4,053	4,618	631	1,132	2	1	14	22
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	590	680	-13.0%	589	679	0	0	0	0	1	1
Georgia	867	889	-2.5%	865	885	0	0	0	0	2	4
Maryland	217	563	-61.0%	0	0	215	561	0	0	2	2
North Carolina	833	931	-11.0%	827	925	2	2	1	0	2	3
South Carolina	350	511	-32.0%	350	511	0	0	0	0	0	0
Virginia	130	416	-69.0%	116	377	7	27	0	0	7	12
West Virginia	1,712	1,782	-3.9%	1,305	1,240	407	542	0	0	0	0
East South Central	4,162	3,720	12.0%	3,844	3,528	309	179	0	0	9	13
Alabama	976	1,174	-17.0%	975	1,173	0	0	0	0	1	1
Kentucky	2,077	1,758	18.0%	2,077	1,758	0	0	0	0	0	0
Mississippi	394	187	110.0%	85	9	309	179	0	0	0	0
Tennessee	715	600	19.0%	707	588	0	0	0	0	8	12
West South Central	7,029	5,919	19.0%	3,641	3,140	3,383	2,767	0	0	6	12
Arkansas	1,045	755	38.0%	853	508	192	247	0	0	0	1
Louisiana	408	319	28.0%	165	100	242	220	0	0	0	0
Oklahoma	588	608	-3.2%	583	542	0	54	0	0	6	11
Texas	4,987	4,236	18.0%	2,039	1,990	2,948	2,246	0	0	0	0
Mountain	6,408	6,709	-4.5%	5,357	5,688	1,044	1,010	0	0	8	10
Arizona	1,002	1,287	-22.0%	1,002	1,287	0	0	0	0	0	0
Colorado	1,215	1,159	4.8%	1,214	1,159	0	0	0	0	0	0
Idaho	NM	NM	NM	0	0	0	0	0	0	NM	NM
Montana	939	893	5.1%	27	24	912	870	0	0	0	0
Nevada	85	57	50.0%	36	0	49	57	0	0	0	0
New Mexico	413	471	-12.0%	413	471	0	0	0	0	0	0
Utah	919	845	8.8%	880	807	39	37	0	0	0	0
Wyoming	1,836	1,997	-8.1%	1,784	1,941	44	47	0	0	7	9
Pacific Contiguous	533	5	NM	91	0	436	0	0	0	6	5
California	5	5	8.1%	0	0	0	0	0	0	5	5
Oregon	91	0	--	91	0	0	0	0	0	0	0
Washington	437	1	NM	0	0	436	0	0	0	1	1
Pacific Noncontiguous	113	103	10.0%	NM	NM	70	78	3	3	0	0
Alaska	54	39	39.0%	NM	NM	NM	14	3	3	0	0
Hawaii	59	64	-7.5%	0	0	59	64	0	0	0	0
U.S. Total	43,971	44,388	-0.9%	31,669	32,273	12,115	11,864	9	8	177	243

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	126	281	-55.0%	75	160	50	120	0	0	NM	NM
Connecticut	46	116	-60.0%	0	0	46	116	0	0	0	0
Maine	5	6	-9.4%	0	0	4	4	0	0	NM	NM
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	75	160	-53.0%	75	160	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	6,221	6,605	-5.8%	0	0	6,208	6,585	0	0	13	20
New Jersey	120	153	-22.0%	0	0	120	153	0	0	0	0
New York	141	157	-10.0%	0	0	141	154	0	0	0	4
Pennsylvania	5,960	6,295	-5.3%	0	0	5,947	6,279	0	0	13	16
East North Central	33,925	37,564	-9.7%	19,773	22,588	13,956	14,752	6	7	190	217
Illinois	9,031	9,369	-3.6%	611	570	8,280	8,646	4	5	136	148
Indiana	8,726	9,762	-11.0%	8,230	9,265	494	495	2	2	0	0
Michigan	6,117	6,086	0.5%	6,077	6,015	33	55	0	0	6	15
Ohio	5,831	7,201	-19.0%	683	1,646	5,148	5,555	0	0	0	0
Wisconsin	4,219	5,146	-18.0%	4,172	5,093	0	0	0	0	47	54
West North Central	29,013	29,302	-1.0%	28,748	28,967	0	0	7	7	257	328
Iowa	3,993	3,421	17.0%	3,874	3,296	0	0	5	5	114	120
Kansas	3,223	3,133	2.9%	3,223	3,133	0	0	0	0	0	0
Minnesota	2,878	3,429	-16.0%	2,829	3,335	0	0	0	0	48	94
Missouri	9,100	9,358	-2.8%	9,098	9,356	0	0	1	1	0	0
Nebraska	3,639	3,677	-1.0%	3,553	3,574	0	0	0	0	86	104
North Dakota	5,680	5,826	-2.5%	5,670	5,815	0	0	0	0	9	10
South Dakota	501	458	9.3%	501	458	0	0	0	0	0	0
South Atlantic	15,369	20,988	-27.0%	13,436	17,766	1,874	3,148	6	5	53	69
Delaware	25	49	-48.0%	0	0	25	49	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,940	2,893	-33.0%	1,937	2,887	0	0	0	0	3	5
Georgia	2,664	3,559	-25.0%	2,656	3,548	0	0	0	0	8	11
Maryland	647	1,495	-57.0%	0	0	642	1,489	0	0	5	5
North Carolina	2,104	3,317	-37.0%	2,086	3,297	6	8	5	4	7	8
South Carolina	1,457	1,835	-21.0%	1,456	1,833	0	0	0	0	1	2
Virginia	433	1,312	-67.0%	382	1,197	22	78	1	1	28	37
West Virginia	6,097	6,529	-6.6%	4,919	5,005	1,178	1,524	0	0	0	0
East South Central	13,216	14,353	-7.9%	12,553	13,636	635	675	0	0	29	41
Alabama	3,687	4,235	-13.0%	3,683	4,232	0	0	0	0	4	3
Kentucky	6,843	6,345	7.8%	6,843	6,345	0	0	0	0	0	0
Mississippi	824	882	-6.6%	189	207	635	675	0	0	0	0
Tennessee	1,862	2,890	-36.0%	1,838	2,852	0	0	0	0	24	38
West South Central	22,822	23,986	-4.9%	12,385	13,004	10,411	10,943	0	0	26	39
Arkansas	3,641	3,451	5.5%	3,078	2,714	560	735	0	0	3	3
Louisiana	1,339	1,761	-24.0%	782	1,026	557	735	0	0	0	0
Oklahoma	1,840	2,517	-27.0%	1,777	2,255	39	225	0	0	24	36
Texas	16,002	16,257	-1.6%	6,748	7,009	9,255	9,248	0	0	0	0
Mountain	21,840	20,666	5.7%	18,753	17,728	3,063	2,909	0	0	25	28
Arizona	3,501	4,067	-14.0%	3,501	4,067	0	0	0	0	0	0
Colorado	3,902	3,640	7.2%	3,902	3,639	0	0	0	0	1	1
Idaho	1	1	-18.0%	0	0	0	0	0	0	1	1
Montana	2,724	2,586	5.3%	77	65	2,647	2,520	0	0	1	1
Nevada	504	148	240.0%	330	0	174	148	0	0	0	0
New Mexico	1,886	1,234	53.0%	1,886	1,234	0	0	0	0	0	0
Utah	3,275	2,852	15.0%	3,163	2,741	112	111	0	0	0	0
Wyoming	6,046	6,137	-1.5%	5,894	5,983	130	130	0	0	22	25
Pacific Contiguous	1,865	516	261.0%	483	0	1,365	499	0	0	17	17
California	15	15	0.9%	0	0	0	0	0	0	15	15
Oregon	483	0	--	483	0	0	0	0	0	0	0
Washington	1,367	501	173.0%	0	0	1,365	499	0	0	2	2
Pacific Noncontiguous	326	300	8.6%	116	63	200	227	9	10	0	0
Alaska	160	110	46.0%	116	63	35	37	9	10	0	0
Hawaii	165	190	-13.0%	0	0	165	190	0	0	0	0
U.S. Total	144,722	154,560	-6.4%	106,323	113,913	37,761	39,858	27	29	610	760

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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, March 2019 and March 2018 (Thousand Barrels)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	38	51	-25.0%	8	6	26	41	3	4	2	1
Connecticut	19	14	33.0%	NM	1	17	13	NM	NM	1	0
Maine	4	1	180.0%	0	0	3	0	0	0	NM	1
Massachusetts	9	29	-70.0%	NM	NM	NM	25	NM	2	0	0
New Hampshire	4	4	-4.8%	2	3	NM	NM	2	2	0	0
Rhode Island	2	NM	NM	0	0	NM	NM	0	0	0	0
Vermont	NM	NM	NM	NM	NM	0	0	0	0	0	0
Middle Atlantic	59	62	-5.4%	16	12	37	42	NM	3	4	5
New Jersey	NM	4	NM	0	0	NM	4	0	0	0	0
New York	30	30	0.3%	16	12	11	13	NM	NM	2	4
Pennsylvania	25	28	-12.0%	0	0	22	24	0	2	2	1
East North Central	80	99	-20.0%	49	70	29	27	1	1	1	1
Illinois	8	9	-9.7%	NM	1	7	8	NM	0	0	0
Indiana	27	19	43.0%	27	18	0	0	0	0	0	1
Michigan	14	40	-64.0%	14	39	0	0	1	1	NM	0
Ohio	25	26	-6.5%	NM	9	21	18	0	0	0	0
Wisconsin	NM	NM	NM	NM	NM	0	1	0	0	NM	NM
West North Central	65	50	32.0%	65	47	NM	3	0	0	0	0
Iowa	20	17	17.0%	20	17	NM	0	0	0	0	0
Kansas	7	11	-42.0%	7	11	0	0	0	0	0	0
Minnesota	NM	NM	NM	NM	NM	NM	NM	0	0	0	0
Missouri	21	10	115.0%	21	10	0	0	0	0	0	0
Nebraska	NM	NM	NM	NM	NM	0	0	0	0	0	0
North Dakota	11	5	153.0%	11	5	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	171	142	20.0%	127	111	28	20	8	3	8	9
Delaware	NM	NM	NM	0	0	NM	NM	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	39	24	59.0%	37	21	NM	1	0	0	2	2
Georgia	18	14	29.0%	12	11	NM	NM	0	0	4	3
Maryland	16	11	41.0%	0	0	16	11	NM	NM	0	0
North Carolina	32	34	-6.5%	31	32	NM	NM	NM	NM	NM	1
South Carolina	18	11	61.0%	16	9	0	0	NM	NM	1	2
Virginia	31	25	21.0%	15	17	8	6	7	2	NM	1
West Virginia	16	20	-16.0%	16	20	0	0	0	0	0	0
East South Central	46	35	31.0%	44	32	0	0	0	0	1	2
Alabama	2	3	-21.0%	2	2	0	NM	0	0	1	NM
Kentucky	13	16	-21.0%	13	16	0	0	0	0	0	0
Mississippi	4	2	94.0%	4	1	0	0	0	0	0	2
Tennessee	26	14	91.0%	26	14	0	0	0	0	0	0
West South Central	19	19	1.8%	13	16	5	2	0	0	1	0
Arkansas	8	8	-3.4%	5	8	3	0	0	0	0	0
Louisiana	NM	2	NM	NM	2	0	0	0	0	0	0
Oklahoma	2	2	-15.0%	2	2	0	0	0	0	0	0
Texas	9	6	38.0%	6	4	2	2	0	0	0	0
Mountain	33	26	25.0%	32	24	1	3	NM	0	0	0
Arizona	6	7	-12.0%	6	7	0	0	NM	0	0	0
Colorado	NM	NM	NM	NM	NM	0	0	0	0	0	0
Idaho	0	0	56.0%	0	0	0	0	0	0	0	0
Montana	3	3	33.0%	3	NM	NM	3	0	0	0	0
Nevada	2	0	NM	1	0	1	0	0	0	0	0
New Mexico	8	NM	NM	8	NM	0	0	0	0	0	0
Utah	5	5	6.9%	5	5	0	0	0	0	0	0
Wyoming	6	8	-18.0%	6	8	0	0	0	0	0	0
Pacific Contiguous	10	7	29.0%	NM	NM	2	1	NM	NM	2	1
California	NM	6	NM	NM	5	1	0	0	NM	1	0
Oregon	1	NM	NM	1	0	0	0	NM	NM	0	0
Washington	3	1	80.0%	NM	NM	1	0	0	0	1	1
Pacific Noncontiguous	878	918	-4.3%	689	735	166	159	2	1	21	22
Alaska	109	111	-2.0%	104	105	0	0	1	1	5	5
Hawaii	769	806	-4.7%	585	630	166	159	2	1	16	17
U.S. Total	1,398	1,409	-0.8%	1,049	1,058	294	297	16	12	39	42

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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 March 2019 and March 2018 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	205	1,683	-88.0%	28	295	156	1,353	14	22	6	13
Connecticut	75	422	-82.0%	NM	NM	69	416	3	NM	1	1
Maine	12	265	-95.0%	0	0	7	251	2	2	4	12
Massachusetts	85	657	-87.0%	NM	NM	69	526	3	NM	1	1
New Hampshire	19	243	-92.0%	12	157	NM	79	5	7	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	693	3,053	-77.0%	269	900	403	2,115	NM	NM	15	19
New Jersey	62	325	-81.0%	3	3	59	319	0	2	0	1
New York	520	2,025	-74.0%	266	895	241	1,104	NM	NM	9	14
Pennsylvania	111	703	-84.0%	0	2	104	691	2	5	5	NM
East North Central	227	342	-34.0%	131	199	89	135	2	2	5	7
Illinois	25	NM	NM	NM	NM	22	NM	NM	0	0	0
Indiana	67	61	10.0%	64	54	0	1	0	0	3	5
Michigan	42	68	-39.0%	40	67	0	0	1	1	0	0
Ohio	74	145	-49.0%	10	55	62	89	0	0	1	1
Wisconsin	20	NM	NM	NM	NM	5	2	1	0	NM	NM
West North Central	180	213	-16.0%	173	186	NM	NM	1	1	0	0
Iowa	35	42	-16.0%	35	42	NM	NM	0	0	0	0
Kansas	26	NM	NM	26	NM	0	0	0	0	0	0
Minnesota	21	NM	NM	14	8	NM	NM	1	1	0	0
Missouri	54	73	-26.0%	54	73	0	0	0	0	0	0
Nebraska	NM	5	NM	NM	5	0	0	0	0	0	0
North Dakota	31	13	140.0%	31	13	0	0	0	0	0	0
South Dakota	NM	NM	NM	NM	NM	0	0	NM	NM	0	0
South Atlantic	576	3,206	-82.0%	395	2,142	137	978	21	45	23	41
Delaware	19	207	-91.0%	0	12	19	196	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	70	349	-80.0%	64	320	NM	NM	0	0	5	NM
Georgia	48	231	-79.0%	34	NM	NM	NM	1	4	10	18
Maryland	67	391	-83.0%	1	5	64	380	NM	NM	1	2
North Carolina	129	682	-81.0%	123	635	NM	NM	NM	NM	2	NM
South Carolina	46	329	-86.0%	40	NM	3	42	NM	NM	3	5
Virginia	150	923	-84.0%	86	697	43	189	20	33	2	NM
West Virginia	47	93	-49.0%	47	76	1	17	0	0	0	0
East South Central	146	215	-32.0%	141	151	1	57	0	0	4	7
Alabama	11	94	-89.0%	8	32	1	57	0	0	2	NM
Kentucky	45	50	-9.9%	45	50	0	0	0	0	0	0
Mississippi	7	NM	NM	7	NM	0	0	0	0	1	2
Tennessee	82	60	37.0%	81	60	0	0	0	0	1	0
West South Central	58	NM	NM	42	NM	14	NM	0	0	2	3
Arkansas	22	NM	NM	13	NM	8	1	0	0	1	2
Louisiana	NM	NM	NM	NM	NM	0	0	0	0	0	0
Oklahoma	10	7	52.0%	10	7	0	0	0	0	0	0
Texas	21	NM	NM	13	NM	6	NM	0	0	1	1
Mountain	96	84	15.0%	89	77	7	7	NM	0	0	0
Arizona	24	28	-13.0%	24	28	0	0	NM	0	0	0
Colorado	9	9	-6.3%	9	9	0	0	0	0	0	0
Idaho	0	0	56.0%	0	0	0	0	0	0	0	0
Montana	8	6	42.0%	NM	NM	5	6	0	0	0	0
Nevada	6	1	609.0%	5	0	1	1	0	0	0	0
New Mexico	20	8	157.0%	20	8	0	0	0	0	0	0
Utah	13	16	-17.0%	13	15	0	0	0	0	0	0
Wyoming	16	17	-2.6%	16	17	0	0	0	0	0	0
Pacific Contiguous	30	30	-1.2%	18	17	6	2	NM	NM	5	11
California	21	26	-19.0%	15	16	2	1	0	NM	3	9
Oregon	NM	NM	NM	2	0	0	0	NM	NM	0	0
Washington	7	4	65.0%	NM	NM	3	NM	0	0	3	2
Pacific Noncontiguous	2,843	2,886	-1.5%	2,312	2,441	459	374	8	5	65	65
Alaska	379	394	-3.7%	362	375	0	0	3	3	14	16
Hawaii	2,464	2,492	-1.1%	1,950	2,067	459	374	5	2	51	48
U.S. Total	5,054	11,824	-57.0%	3,598	6,509	1,278	5,057	53	94	125	165

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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, March 2019 and March 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 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	0	0	82.0%	0	0	0	0	0	0	0	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	74	65	13.0%	45	45	24	20	0	0	4	1
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	47	41	13.0%	42	40	0	0	0	0	4	1
Ohio	24	20	24.0%	0	0	24	20	0	0	0	0
Wisconsin	3	5	-33.0%	3	5	0	0	0	0	0	0
West North Central	0	1	-76.0%	0	0	0	0	0	0	0	1
Iowa	0	1	-76.0%	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	32	30	7.0%	30	27	0	0	0	0	2	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	30	27	8.9%	30	27	0	0	0	0	0	0
Georgia	2	NM	NM	0	0	0	0	0	0	2	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	123	132	-6.9%	118	126	0	0	0	0	5	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	118	128	-8.0%	118	126	0	0	0	0	0	3
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	5	4	30.0%	0	0	0	0	0	0	5	4
Mountain	16	15	3.1%	0	0	16	15	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	16	15	3.1%	0	0	16	15	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	247	245	0.6%	193	198	40	35	0	0	13	12

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	6	6	-1.3%	0	0	0	0	0	0	6	6
New Jersey	2	2	-7.9%	0	0	0	0	0	0	2	2
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	4	NM	NM	0	0	0	0	0	0	4	NM
East North Central	229	232	-1.3%	148	166	70	61	0	0	12	5
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	148	158	-6.5%	136	153	0	0	0	0	12	5
Ohio	70	61	13.0%	0	0	70	61	0	0	0	0
Wisconsin	12	13	-7.8%	12	13	0	0	0	0	0	0
West North Central	1	4	-76.0%	0	0	0	0	1	1	0	3
Iowa	1	4	-76.0%	0	0	0	0	1	1	0	3
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	137	153	-10.0%	128	143	0	0	0	0	9	10
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	128	143	-10.0%	128	143	0	0	0	0	0	0
Georgia	9	10	-8.0%	0	0	0	0	0	0	9	10
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	411	433	-5.1%	398	419	0	0	0	0	13	14
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	399	425	-6.0%	398	419	0	0	0	0	1	6
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	12	8	44.0%	0	0	0	0	0	0	12	8
Mountain	44	42	6.0%	0	0	44	42	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	44	42	6.0%	0	0	44	42	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	828	869	-4.7%	674	728	114	103	1	1	39	37

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 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, March 2019 and March 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	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	26,960	28,591	-5.7%	NM	NM	25,851	27,384	388	410	645	685
Connecticut	10,411	10,775	-3.4%	31	26	9,953	10,281	167	176	260	292
Maine	1,020	1,542	-34.0%	0	0	875	1,403	12	11	134	128
Massachusetts	10,077	12,278	-18.0%	NM	NM	9,724	11,861	191	204	121	128
New Hampshire	1,572	261	503.0%	2	1	1,550	241	4	3	16	17
Rhode Island	3,877	3,734	3.8%	0	0	3,749	3,598	14	16	NM	NM
Vermont	3	1	138.0%	2	1	0	0	1	1	0	0
Middle Atlantic	95,872	89,742	6.8%	6,398	5,919	87,680	81,918	607	688	1,186	1,218
New Jersey	19,859	22,238	-11.0%	NM	NM	19,485	21,849	65	104	183	183
New York	25,956	25,911	0.2%	6,270	5,811	18,832	19,244	478	514	376	343
Pennsylvania	50,057	41,593	20.0%	1	6	49,364	40,825	65	70	628	692
East North Central	85,998	80,066	7.4%	29,145	26,738	54,017	50,368	692	664	2,144	2,296
Illinois	10,045	11,419	-12.0%	326	412	9,271	10,365	221	223	226	419
Indiana	16,957	12,946	31.0%	6,622	4,077	9,032	7,653	70	69	1,233	1,146
Michigan	17,672	21,650	-18.0%	5,406	6,953	11,666	14,071	279	272	322	355
Ohio	29,306	22,929	28.0%	5,925	4,970	23,219	17,821	76	52	87	87
Wisconsin	12,017	11,122	8.0%	10,866	10,327	829	458	46	48	276	290
West North Central	16,070	16,138	-0.4%	13,365	13,790	2,245	1,962	127	114	333	273
Iowa	3,834	3,470	10.0%	3,602	3,274	0	0	31	36	201	160
Kansas	1,136	1,840	-38.0%	1,081	1,825	0	0	0	0	55	16
Minnesota	5,584	5,391	3.6%	4,829	4,640	652	649	43	33	60	69
Missouri	4,005	4,028	-0.6%	2,353	2,662	1,593	1,313	48	38	11	15
Nebraska	572	424	35.0%	567	415	0	0	4	8	0	0
North Dakota	549	542	1.3%	542	530	0	0	0	0	7	12
South Dakota	391	443	-12.0%	391	443	0	0	0	0	0	0
South Atlantic	202,463	195,719	3.4%	166,758	161,716	32,353	31,286	947	762	2,406	1,954
Delaware	2,792	3,736	-25.0%	3	1	2,284	3,426	0	0	506	310
District of Columbia	65	71	-8.1%	0	0	0	0	65	71	0	0
Florida	94,431	92,334	2.3%	91,106	88,476	2,658	3,211	9	8	658	638
Georgia	24,992	27,041	-7.6%	18,557	21,988	6,128	4,748	0	0	307	304
Maryland	11,071	7,160	55.0%	3,627	1,264	6,621	5,260	782	599	41	37
North Carolina	25,364	27,924	-9.2%	20,206	24,535	5,010	3,257	79	73	69	58
South Carolina	11,238	10,126	11.0%	10,631	7,844	544	2,205	0	0	63	77
Virginia	31,850	26,991	18.0%	22,438	17,501	8,886	9,011	11	10	516	468
West Virginia	659	337	96.0%	192	106	221	NM	0	0	246	63
East South Central	77,202	73,050	5.7%	50,964	49,355	24,957	22,550	70	85	1,211	1,059
Alabama	33,653	29,488	14.0%	12,117	10,226	20,950	18,711	0	0	587	551
Kentucky	9,093	9,426	-3.5%	8,576	8,623	428	733	0	0	89	70
Mississippi	24,075	26,649	-9.7%	20,315	23,375	3,566	3,088	0	0	194	187
Tennessee	10,382	7,486	39.0%	9,956	7,132	13	18	70	85	342	251
West South Central	177,162	167,792	5.6%	65,413	58,928	80,369	80,471	428	271	30,952	28,121
Arkansas	8,820	10,204	-14.0%	7,998	9,379	638	671	NM	NM	152	123
Louisiana	35,331	28,758	23.0%	20,319	17,118	1,767	1,995	57	52	13,188	9,593
Oklahoma	20,580	16,369	26.0%	13,358	9,749	6,885	6,390	0	0	337	231
Texas	112,431	112,461	0.0%	23,738	22,684	71,080	71,416	338	186	17,275	18,175
Mountain	61,923	47,534	30.0%	48,117	39,338	12,453	6,721	197	196	1,156	1,280
Arizona	22,783	12,839	77.0%	17,552	12,082	5,181	703	50	54	0	0
Colorado	9,788	8,490	15.0%	7,431	7,076	2,329	1,386	0	0	29	28
Idaho	1,404	1,211	16.0%	353	NM	976	944	13	15	62	64
Montana	320	273	17.0%	201	256	120	NM	0	0	0	0
Nevada	13,416	13,599	-1.3%	12,114	12,479	1,002	830	24	22	276	268
New Mexico	6,825	6,909	-1.2%	3,980	4,028	2,799	2,795	46	46	0	39
Utah	6,846	3,757	82.0%	6,271	3,183	45	46	64	59	467	469
Wyoming	540	458	18.0%	214	NM	3	0	0	0	322	411
Pacific Contiguous	63,234	69,182	-8.6%	25,871	28,968	30,965	33,461	827	925	5,571	5,828
California	43,867	52,036	-16.0%	16,261	20,070	21,324	25,353	804	897	5,479	5,716
Oregon	13,112	11,289	16.0%	6,150	6,175	6,896	5,040	16	19	49	54
Washington	6,255	5,857	6.8%	3,460	2,723	2,745	3,068	7	9	43	57
Pacific Noncontiguous	3,080	3,045	1.2%	3,053	3,017	0	0	0	0	27	28
Alaska	3,080	3,045	1.2%	3,053	3,017	0	0	0	0	27	28
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	809,964	770,858	5.1%	409,158	387,882	350,891	336,121	4,285	4,114	45,631	42,741

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

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	81,205	84,977	-4.4%	NM	NM	77,829	81,536	1,217	1,142	1,955	1,905
Connecticut	32,434	30,239	7.3%	87	90	30,982	28,853	518	488	847	808
Maine	3,190	4,796	-33.0%	0	0	2,813	4,411	36	33	341	352
Massachusetts	32,187	37,610	-14.0%	NM	NM	31,113	36,389	607	564	358	360
New Hampshire	3,464	1,439	141.0%	6	5	3,400	1,376	13	9	45	49
Rhode Island	9,925	10,889	-8.9%	0	0	9,521	10,508	40	45	364	336
Vermont	6	3	98.0%	4	1	0	0	2	2	0	0
Middle Atlantic	295,344	258,331	14.0%	20,250	21,169	269,513	231,878	1,910	1,922	3,671	3,362
New Jersey	61,602	58,865	4.6%	NM	NM	60,641	57,570	177	278	510	521
New York	81,734	81,286	0.6%	19,965	20,644	59,174	58,322	1,543	1,429	1,052	891
Pennsylvania	152,008	118,180	29.0%	12	28	149,698	115,986	190	216	2,108	1,950
East North Central	256,637	235,359	9.0%	85,729	82,220	162,059	144,629	2,097	2,001	6,752	6,509
Illinois	30,110	34,257	-12.0%	904	1,321	27,514	31,112	692	637	1,000	1,187
Indiana	51,593	41,940	23.0%	19,782	17,322	28,048	21,117	199	227	3,563	3,274
Michigan	53,531	56,745	-5.7%	15,421	18,083	36,279	36,867	811	802	1,019	993
Ohio	86,318	71,084	21.0%	16,797	15,927	68,950	54,664	258	230	314	262
Wisconsin	35,086	31,334	12.0%	32,825	29,566	1,268	869	137	104	856	794
West North Central	46,173	46,813	-1.4%	38,506	40,899	6,210	4,682	409	362	1,048	869
Iowa	11,387	9,379	21.0%	10,658	8,813	0	NM	113	126	616	440
Kansas	3,577	4,466	-20.0%	3,393	4,312	0	0	0	0	184	154
Minnesota	16,622	13,899	20.0%	14,207	11,855	2,072	1,742	161	115	182	187
Missouri	10,274	15,189	-32.0%	5,972	12,096	4,138	2,940	128	102	36	50
Nebraska	1,330	1,193	11.0%	1,323	1,175	0	0	7	18	0	0
North Dakota	1,703	1,417	20.0%	1,673	1,379	0	0	0	0	30	39
South Dakota	1,281	1,270	0.8%	1,281	1,270	0	0	0	0	0	0
South Atlantic	600,782	566,168	6.1%	500,869	468,402	90,383	89,684	2,699	2,161	6,832	5,921
Delaware	6,123	8,597	-29.0%	6	2	4,785	7,767	0	0	1,333	829
District of Columbia	179	180	-0.4%	0	0	0	0	179	180	0	0
Florida	271,536	265,474	2.3%	261,105	252,789	8,375	10,774	29	29	2,027	1,883
Georgia	82,956	85,144	-2.6%	64,786	68,070	17,267	16,131	0	0	903	943
Maryland	25,637	19,568	31.0%	9,218	4,053	14,084	13,704	2,225	1,697	110	113
North Carolina	76,611	74,753	2.5%	61,689	65,056	14,468	9,281	242	233	212	182
South Carolina	35,784	28,305	26.0%	31,581	23,183	3,998	4,913	0	1	205	208
Virginia	100,365	82,929	21.0%	72,029	54,818	26,787	26,678	23	21	1,525	1,412
West Virginia	1,591	1,218	31.0%	454	430	619	NM	0	0	518	352
East South Central	213,893	230,250	-7.1%	145,256	162,021	64,799	64,815	224	282	3,613	3,132
Alabama	87,155	86,245	1.1%	31,332	29,995	54,061	54,561	0	0	1,762	1,689
Kentucky	24,703	31,592	-22.0%	23,319	29,324	1,123	2,031	0	0	261	237
Mississippi	73,457	88,652	-17.0%	63,305	79,881	9,577	8,180	0	33	575	558
Tennessee	28,578	23,762	20.0%	27,300	22,822	38	44	224	249	1,016	647
West South Central	550,296	529,919	3.8%	199,531	183,331	253,576	254,582	1,285	957	95,904	91,049
Arkansas	27,790	31,098	-11.0%	25,379	28,703	1,874	1,867	NM	NM	435	428
Louisiana	107,640	97,761	10.0%	61,152	56,221	5,666	6,406	176	162	40,646	34,972
Oklahoma	66,834	52,221	28.0%	42,307	29,898	23,665	21,666	0	0	862	657
Texas	348,033	348,839	-0.2%	70,692	68,509	222,373	224,643	1,007	694	53,960	54,993
Mountain	186,958	142,344	31.0%	145,951	116,157	37,054	22,140	584	572	3,369	3,476
Arizona	65,017	36,907	76.0%	49,230	33,085	15,634	3,672	153	151	0	0
Colorado	30,911	28,213	9.6%	24,959	23,265	5,858	4,876	7	0	86	71
Idaho	6,661	3,978	67.0%	3,416	1,167	2,999	2,585	40	44	206	181
Montana	1,422	903	58.0%	822	764	593	133	0	0	7	6
Nevada	40,678	41,077	-1.0%	36,398	36,954	3,564	3,394	68	64	648	664
New Mexico	21,650	18,068	20.0%	13,245	10,546	8,269	7,344	136	139	0	39
Utah	18,957	11,755	61.0%	17,262	10,126	131	132	180	174	1,384	1,325
Wyoming	1,663	1,444	15.0%	618	249	6	5	0	0	1,038	1,189
Pacific Contiguous	210,158	190,288	10.0%	83,671	81,921	107,899	89,395	2,445	2,831	16,142	16,141
California	150,561	145,352	3.6%	53,488	57,758	78,841	69,016	2,370	2,744	15,863	15,833
Oregon	39,257	28,978	35.0%	17,878	15,360	21,169	13,417	54	59	156	142
Washington	20,340	15,957	27.0%	12,306	8,803	7,889	6,962	21	27	124	165
Pacific Noncontiguous	9,428	8,357	13.0%	9,349	8,292	0	0	0	2	79	64
Alaska	9,428	8,357	13.0%	9,349	8,292	0	0	0	2	79	64
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	2,450,873	2,292,806	6.9%	1,229,318	1,164,807	1,069,323	983,341	12,869	12,231	139,364	132,427

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	910	906	0.4%	0	0	889	882	22	24	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	315	329	-4.2%	0	0	315	329	0	0	0	0
New Hampshire	99	102	-3.4%	0	0	NM	NM	22	24	0	0
Rhode Island	371	344	7.9%	0	0	371	344	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	4,574	4,939	-7.4%	0	0	4,369	4,699	96	NM	108	136
New Jersey	713	717	-0.5%	0	0	681	683	NM	NM	0	0
New York	1,456	1,535	-5.1%	0	0	1,456	1,535	0	0	0	0
Pennsylvania	2,404	2,687	-11.0%	0	0	2,232	2,481	NM	NM	108	136
East North Central	5,410	5,571	-2.9%	719	819	4,626	4,694	42	36	22	22
Illinois	794	883	-10.0%	NM	86	713	797	0	0	0	0
Indiana	737	838	-12.0%	637	733	99	105	0	0	0	0
Michigan	1,950	1,892	3.1%	0	0	1,950	1,892	0	0	0	0
Ohio	939	938	0.2%	0	0	939	938	0	0	0	0
Wisconsin	990	1,021	-3.1%	0	0	925	962	42	36	22	22
West North Central	853	1,094	-22.0%	372	392	482	702	0	0	0	0
Iowa	152	224	-32.0%	0	0	152	224	0	0	0	0
Kansas	NM	NM	NM	0	0	NM	NM	0	0	0	0
Minnesota	222	341	-35.0%	NM	NM	NM	244	0	0	0	0
Missouri	213	248	-14.0%	NM	NM	NM	NM	0	0	0	0
Nebraska	146	156	-6.4%	146	156	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	4,584	4,827	-5.0%	457	465	3,816	4,043	147	150	164	169
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	749	787	-4.9%	145	139	604	648	0	0	0	0
Georgia	661	692	-4.6%	0	0	656	689	0	0	5	3
Maryland	251	282	-11.0%	0	0	NM	NM	98	NM	0	0
North Carolina	955	967	-1.2%	0	0	926	937	NM	NM	0	0
South Carolina	492	514	-4.3%	306	320	NM	NM	0	0	149	155
Virginia	1,361	1,464	-7.0%	7	5	1,335	1,437	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	509	525	-3.0%	207	219	301	306	0	0	0	0
Alabama	NM	NM	NM	0	0	NM	NM	0	0	0	0
Kentucky	235	239	-1.7%	207	219	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	1,208	1,236	-2.3%	0	0	1,153	1,177	55	58	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	1,031	1,051	-1.9%	0	0	976	993	55	58	0	0
Mountain	573	620	-7.5%	NM	NM	521	548	28	47	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	2	18	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	26	29	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,652	5,486	-15.0%	NM	685	3,294	3,446	1,238	1,355	0	0
California	4,078	4,573	-11.0%	NM	247	2,871	3,014	1,198	1,312	0	0
Oregon	462	500	-7.6%	NM	NM	312	338	NM	NM	0	0
Washington	NM	412	NM	0	318	NM	NM	0	0	0	0
Pacific Noncontiguous	64	72	-11.0%	0	0	0	0	64	72	0	0
Alaska	64	72	-11.0%	0	0	0	0	64	72	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	23,336	25,276	-7.7%	1,898	2,604	19,451	20,497	1,692	1,847	294	327

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	2,555	2,616	-2.3%	0	0	2,490	2,559	65	58	0	0
Connecticut	NM	NM	NM	0	0	NM	NM	0	0	0	0
Maine	NM	195	NM	0	0	NM	195	0	0	0	0
Massachusetts	909	963	-5.6%	0	0	909	963	0	0	0	0
New Hampshire	284	287	-1.3%	0	0	218	230	65	58	0	0
Rhode Island	1,004	983	2.1%	0	0	1,004	983	0	0	0	0
Vermont	NM	NM	NM	0	0	NM	NM	0	0	0	0
Middle Atlantic	13,229	14,211	-6.9%	0	0	12,697	13,542	267	289	264	381
New Jersey	2,043	2,094	-2.4%	0	0	1,951	1,996	93	97	0	0
New York	4,221	4,357	-3.1%	0	0	4,221	4,357	0	0	0	0
Pennsylvania	6,964	7,760	-10.0%	0	0	6,526	7,189	174	191	264	381
East North Central	15,321	16,327	-6.2%	2,063	2,351	13,081	13,806	111	105	67	65
Illinois	2,275	2,846	-20.0%	215	243	2,060	2,603	0	0	0	0
Indiana	2,132	2,396	-11.0%	1,848	2,108	284	289	0	0	0	0
Michigan	5,500	5,457	0.8%	0	0	5,500	5,457	0	0	0	0
Ohio	2,682	2,738	-2.0%	0	0	2,682	2,738	0	0	0	0
Wisconsin	2,733	2,888	-5.4%	0	0	2,555	2,718	111	105	67	65
West North Central	2,569	3,193	-20.0%	1,048	1,143	1,521	2,050	0	0	0	0
Iowa	565	652	-13.0%	0	0	565	652	0	0	0	0
Kansas	349	368	-5.2%	0	0	349	368	0	0	0	0
Minnesota	635	997	-36.0%	255	282	379	715	0	0	0	0
Missouri	600	727	-17.0%	372	411	NM	315	0	0	0	0
Nebraska	421	449	-6.4%	421	449	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	13,253	14,356	-7.7%	1,309	1,348	11,019	12,071	432	441	495	497
Delaware	330	351	-5.8%	0	0	302	322	0	0	29	NM
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,180	2,284	-4.6%	420	391	1,760	1,893	0	0	0	0
Georgia	1,841	2,127	-13.0%	0	0	1,814	2,112	0	0	27	15
Maryland	729	830	-12.0%	0	0	439	541	290	289	0	0
North Carolina	2,745	2,874	-4.5%	0	0	2,662	2,786	83	NM	0	0
South Carolina	1,413	1,504	-6.0%	869	939	NM	NM	0	0	439	453
Virginia	4,016	4,387	-8.5%	20	18	3,936	4,305	NM	NM	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	1,459	1,532	-4.8%	600	639	859	893	0	0	0	0
Alabama	265	278	-4.8%	0	0	265	278	0	0	0	0
Kentucky	665	696	-4.4%	600	639	NM	NM	0	0	0	0
Mississippi	NM	NM	NM	0	0	NM	NM	0	0	0	0
Tennessee	467	493	-5.3%	0	0	467	493	0	0	0	0
West South Central	3,455	3,757	-8.0%	0	0	3,292	3,608	164	148	0	0
Arkansas	398	416	-4.5%	0	0	398	416	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	2,940	3,216	-8.6%	0	0	2,777	3,068	164	148	0	0
Mountain	1,723	1,803	-4.5%	NM	NM	1,529	1,609	128	122	0	0
Arizona	NM	253	NM	0	0	NM	253	0	0	0	0
Colorado	277	290	-4.6%	0	0	277	290	0	0	0	0
Idaho	203	231	-12.0%	NM	NM	NM	NM	38	54	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	459	490	-6.2%	0	0	459	490	0	0	0	0
New Mexico	NM	NM	NM	0	0	NM	NM	0	0	0	0
Utah	516	506	2.0%	0	0	426	437	90	69	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	13,566	16,012	-15.0%	350	2,019	9,556	10,075	3,660	3,918	0	0
California	11,884	13,338	-11.0%	NM	724	8,317	8,821	3,541	3,793	0	0
Oregon	1,362	1,451	-6.2%	325	347	918	980	119	125	0	0
Washington	321	1,223	-74.0%	0	948	321	275	0	0	0	0
Pacific Noncontiguous	173	210	-17.0%	0	0	0	0	173	210	0	0
Alaska	173	210	-17.0%	0	0	0	0	173	210	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	67,305	74,017	-9.1%	5,435	7,570	56,044	60,214	5,000	5,290	826	943

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

Table 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, March 2019 and March 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	294	295	-0.3%	0	0	280	278	14	17	0	0
Connecticut	102	91	12.0%	0	0	102	91	0	0	0	0
Maine	22	26	-14.0%	0	0	8	9	14	17	0	0
Massachusetts	159	170	-6.6%	0	0	159	170	0	0	0	0
New Hampshire	11	8	36.0%	0	0	11	8	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	401	443	-9.6%	0	0	317	354	83	89	0	0
New Jersey	106	121	-12.0%	0	0	79	89	28	31	0	0
New York	144	167	-14.0%	0	0	103	129	40	39	0	0
Pennsylvania	151	155	-3.0%	0	0	135	136	15	19	0	0
East North Central	17	18	-3.5%	3	2	0	0	14	15	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	1	2	-15.0%	0	0	0	0	1	2	0	0
Michigan	13	14	-6.3%	0	0	0	0	13	14	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	3	2	20.0%	3	2	0	0	0	0	0	0
West North Central	31	58	-47.0%	18	37	13	21	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	31	58	-47.0%	18	37	13	21	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	452	461	-1.9%	0	0	416	423	36	38	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	300	307	-2.3%	0	0	300	307	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	54	52	3.1%	0	0	54	52	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	99	103	-3.4%	0	0	63	64	36	38	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	-18.0%	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	-18.0%	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	62	62	-0.7%	0	0	62	62	0	0	0	0
California	37	40	-6.5%	0	0	37	40	0	0	0	0
Oregon	10	9	14.0%	0	0	10	9	0	0	0	0
Washington	15	14	6.2%	0	0	15	14	0	0	0	0
Pacific Noncontiguous	41	39	6.6%	0	0	0	0	41	39	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	41	39	6.6%	0	0	0	0	41	39	0	0
U.S. Total	1,299	1,377	-5.7%	21	40	1,088	1,138	189	198	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 March 2019 and March 2018 (Thousand Tons)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	827	880	-6.0%	0	0	784	826	43	54	0	0
Connecticut	266	282	-5.8%	0	0	266	282	0	0	0	0
Maine	71	84	-15.0%	0	0	28	30	43	54	0	0
Massachusetts	458	485	-5.6%	0	0	458	485	0	0	0	0
New Hampshire	31	29	8.1%	0	0	31	29	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	1,244	1,271	-2.1%	0	0	988	1,011	256	260	0	0
New Jersey	324	353	-8.1%	0	0	240	265	84	88	0	0
New York	446	453	-1.6%	0	0	334	342	112	111	0	0
Pennsylvania	474	465	1.9%	0	0	414	404	61	61	0	0
East North Central	55	55	-0.6%	9	7	0	0	47	48	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	5	5	-4.7%	0	0	0	0	5	5	0	0
Michigan	42	43	-3.1%	0	0	0	0	42	43	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	9	7	17.0%	9	7	0	0	0	0	0	0
West North Central	114	144	-21.0%	64	86	50	58	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	114	144	-21.0%	64	86	50	58	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,328	1,374	-3.4%	0	0	1,223	1,273	105	101	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	884	942	-6.2%	0	0	884	942	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	148	154	-3.6%	0	0	148	154	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	296	279	6.3%	0	0	191	177	105	101	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	2	2	-2.3%	0	0	0	0	0	0	2	2
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	2	2	-2.3%	0	0	0	0	0	0	2	2
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	170	178	-4.4%	0	0	170	178	0	0	0	0
California	101	111	-9.3%	0	0	101	111	0	0	0	0
Oregon	30	28	6.9%	0	0	30	28	0	0	0	0
Washington	40	39	1.6%	0	0	40	39	0	0	0	0
Pacific Noncontiguous	115	100	15.0%	0	0	0	0	115	100	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	115	100	15.0%	0	0	0	0	115	100	0	0
U.S. Total	3,856	4,005	-3.7%	72	93	3,215	3,346	566	563	2	2

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	3,818	4,450	-14.0%	472	868	2,884	3,151	1	1	461	430
Connecticut	203	202	0.8%	0	0	203	202	0	0	0	0
Maine	1,562	1,640	-4.7%	0	0	1,101	1,210	0	0	461	430
Massachusetts	NM	186	NM	0	0	NM	186	0	0	0	0
New Hampshire	1,529	1,821	-16.0%	268	446	1,261	1,375	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	365	602	-39.0%	204	422	NM	179	1	1	0	0
Middle Atlantic	818	1,062	-23.0%	0	0	534	525	0	0	284	537
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	624	616	1.3%	0	0	534	525	0	0	90	92
Pennsylvania	194	446	-57.0%	0	0	0	0	0	0	194	446
East North Central	1,982	2,024	-2.1%	416	376	947	990	0	0	619	658
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,244	1,287	-3.3%	0	0	935	979	0	0	309	308
Ohio	100	109	-8.7%	0	0	12	11	0	0	87	98
Wisconsin	639	628	1.7%	416	376	0	0	0	0	223	252
West North Central	601	1,008	-40.0%	144	166	114	499	59	24	285	319
Iowa	1	0	692.0%	0	0	0	0	1	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	579	984	-41.0%	144	166	114	499	36	0	285	319
Missouri	21	24	-11.0%	0	0	0	0	21	24	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	9,689	10,612	-8.7%	2,220	2,258	2,190	2,919	12	10	5,267	5,425
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	1,395	1,840	-24.0%	561	522	NM	590	0	0	714	727
Georgia	2,677	2,995	-11.0%	0	0	663	874	0	0	2,014	2,121
Maryland	70	49	41.0%	0	0	0	0	12	10	57	39
North Carolina	1,237	1,282	-3.5%	0	0	703	673	0	0	533	609
South Carolina	1,424	1,594	-11.0%	159	235	469	551	0	0	795	808
Virginia	2,888	2,853	1.2%	1,500	1,500	234	232	0	0	1,153	1,121
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,893	2,999	-3.6%	0	0	170	177	0	0	2,723	2,822
Alabama	1,967	2,025	-2.8%	0	0	170	177	0	0	1,797	1,847
Kentucky	150	153	-2.0%	0	0	0	0	0	0	150	153
Mississippi	448	451	-0.6%	0	0	0	0	0	0	448	451
Tennessee	328	371	-12.0%	0	0	0	0	0	0	328	371
West South Central	2,496	2,479	0.7%	0	0	295	33	0	0	2,201	2,445
Arkansas	602	601	0.2%	0	0	0	0	0	0	602	601
Louisiana	1,078	1,300	-17.0%	0	0	0	0	0	0	1,078	1,300
Oklahoma	166	172	-3.2%	0	0	0	0	0	0	166	172
Texas	649	406	60.0%	0	0	295	33	0	0	355	372
Mountain	477	473	0.8%	0	0	317	312	0	0	160	162
Arizona	187	207	-9.4%	0	0	187	207	0	0	0	0
Colorado	110	81	36.0%	0	0	110	81	0	0	0	0
Idaho	158	165	-4.1%	0	0	20	24	0	0	139	141
Montana	21	20	4.1%	0	0	0	0	0	0	21	20
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,973	4,901	1.5%	317	342	2,765	2,936	0	0	1,891	1,623
California	3,334	3,213	3.8%	0	0	2,576	2,748	0	0	758	464
Oregon	597	581	2.8%	0	0	189	187	0	0	408	394
Washington	1,041	1,107	-6.0%	317	342	0	0	0	0	724	765
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	27,746	30,009	-7.5%	3,568	4,010	10,216	11,542	72	36	13,890	14,422

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 March 2019 and March 2018 (Billion Btus)

				Electric Power Sector							
Census Division and State	All Sectors			Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	13,123	13,576	-3.3%	2,164	2,621	9,650	9,641	3	11	1,307	1,304
Connecticut	647	648	-0.1%	0	0	647	648	0	0	0	0
Maine	5,018	5,120	-2.0%	0	0	3,711	3,807	0	9	1,307	1,304
Massachusetts	539	526	2.6%	0	0	539	526	0	0	0	0
New Hampshire	5,364	5,419	-1.0%	1,153	1,287	4,211	4,132	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	1,554	1,863	-17.0%	1,010	1,334	541	527	3	2	0	0
Middle Atlantic	2,364	3,280	-28.0%	0	0	1,536	1,665	0	0	828	1,614
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	1,793	1,943	-7.7%	0	0	1,536	1,664	0	0	257	278
Pennsylvania	571	1,337	-57.0%	0	0	0	1	0	0	571	1,336
East North Central	6,182	6,306	-2.0%	1,275	1,319	3,077	3,081	0	0	1,829	1,907
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	3,960	3,968	-0.2%	0	0	3,041	3,045	0	0	918	923
Ohio	280	305	-8.3%	0	0	36	35	0	0	244	270
Wisconsin	1,942	2,033	-4.5%	1,275	1,319	0	0	0	0	667	714
West North Central	1,697	2,613	-35.0%	469	489	332	1,259	141	95	754	770
Iowa	16	1	NM	0	0	0	0	16	1	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	1,603	2,532	-37.0%	469	489	332	1,259	47	14	754	770
Missouri	78	80	-2.8%	0	0	0	0	78	80	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	30,149	31,962	-5.7%	7,048	6,724	7,735	9,044	37	35	15,328	16,159
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	5,399	5,465	-1.2%	2,072	1,609	1,358	1,686	0	0	1,969	2,170
Georgia	7,898	9,042	-13.0%	0	0	2,037	2,777	0	0	5,861	6,266
Maryland	190	169	12.0%	0	0	0	0	37	35	153	134
North Carolina	3,634	4,020	-9.6%	0	0	2,051	2,262	0	0	1,583	1,758
South Carolina	4,421	4,620	-4.3%	497	510	1,545	1,574	0	0	2,379	2,536
Virginia	8,606	8,645	-0.5%	4,479	4,604	744	746	0	0	3,384	3,295
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	8,764	9,076	-3.4%	0	0	504	529	0	0	8,260	8,547
Alabama	5,850	5,984	-2.2%	0	0	504	529	0	0	5,346	5,455
Kentucky	427	446	-4.3%	0	0	0	0	0	0	427	446
Mississippi	1,472	1,533	-4.0%	0	0	0	0	0	0	1,472	1,533
Tennessee	1,015	1,113	-8.8%	0	0	0	0	0	0	1,015	1,113
West South Central	6,958	7,480	-7.0%	0	0	295	413	0	0	6,664	7,067
Arkansas	1,763	1,754	0.5%	0	0	0	0	0	0	1,763	1,754
Louisiana	3,403	3,719	-8.5%	0	0	0	0	0	0	3,403	3,719
Oklahoma	434	477	-9.1%	0	0	0	0	0	0	434	477
Texas	1,359	1,529	-11.0%	0	0	295	413	0	0	1,064	1,116
Mountain	1,434	1,432	0.1%	0	0	998	950	0	0	437	483
Arizona	630	616	2.2%	0	0	630	616	0	0	0	0
Colorado	300	259	16.0%	0	0	300	259	0	0	0	0
Idaho	443	498	-11.0%	0	0	68	75	0	0	375	424
Montana	62	59	4.2%	0	0	0	0	0	0	62	59
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	15,648	14,876	5.2%	1,053	1,036	9,157	9,122	0	0	5,437	4,718
California	10,802	9,851	9.6%	0	0	8,556	8,520	0	0	2,246	1,332
Oregon	1,713	1,748	-2.0%	0	0	601	602	0	0	1,112	1,146
Washington	3,133	3,277	-4.4%	1,053	1,036	0	0	0	0	2,080	2,241
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	86,319	90,600	-4.7%	12,009	12,187	33,285	35,703	182	141	40,844	42,569

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.

Chapter 3

Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2009 - March 2019

	Electric Power Sector			Electric Utilities			Independent Power Producers		
Period	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)	Coal (Thousand Tons)	Petroluem Liquids (Thousand Barrels)	Petroleum Coke (Thousand Tons)
End of Year Stocks									
2009	189,467	39,210	1,394	154,815	25,811	1,194	34,652	13,399	201
2010	174,917	35,706	1,019	143,744	24,798	850	31,173	10,908	168
2011	172,387	34,847	508	142,103	25,648	404	30,284	9,198	104
2012	185,116	32,224	495	150,942	23,875	414	34,174	8,349	81
2013	147,884	31,673	390	120,792	22,494	303	27,092	9,179	86
2014	151,548	33,505	827	116,684	22,487	686	34,864	11,018	142
2015	195,548	32,884	1,340	153,226	21,443	1,163	42,322	11,441	177
2016	162,009	31,839	845	130,885	21,013	603	31,124	10,827	241
2017	137,687	29,294	864	114,782	20,253	692	22,905	9,041	171
2018	102,786	25,082	541	84,605	16,729	522	18,181	8,353	19
Year 2017, End of Month Stocks									
January	156,214	31,761	768	125,221	20,912	540	30,994	10,849	228
February	160,502	31,500	756	128,051	20,731	544	32,451	10,769	212
March	161,815	32,174	785	128,645	21,565	558	33,170	10,609	227
April	163,937	31,969	844	130,461	21,531	622	33,475	10,438	221
May	162,542	31,578	772	129,300	21,123	562	33,242	10,455	210
June	158,014	31,208	742	126,564	21,038	535	31,450	10,171	207
July	145,811	31,033	724	117,584	20,901	544	28,228	10,132	180
August	141,204	30,750	749	114,228	20,687	569	26,976	10,064	181
Sept	139,571	30,346	798	113,247	20,516	624	26,324	9,830	173
October	141,463	30,227	862	114,939	20,336	683	26,524	9,891	179
November	143,424	30,501	859	117,758	20,626	677	25,666	9,875	182
December	137,687	29,294	864	114,782	20,253	692	22,905	9,041	171
Year 2018, End of Month Stocks									
January	123,723	26,506	721	104,206	18,503	579	19,517	8,003	141
February	121,019	27,239	689	101,983	18,924	562	19,035	8,315	127
March	126,532	27,126	717	106,845	18,987	614	19,687	8,140	103
April	129,071	26,979	710	108,308	18,935	648	20,763	8,045	62
May	128,454	27,053	715	107,594	18,978	649	20,859	8,075	66
June	121,529	26,578	583	101,926	18,547	527	19,603	8,031	55
July	110,794	25,962	643	93,478	17,978	615	17,316	7,984	28
August	104,172	24,828	607	88,284	17,129	581	15,888	7,698	26
Sept	100,781	24,594	576	85,004	16,898	558	15,777	7,696	19
October	105,209	24,502	517	87,660	16,668	513	17,549	7,833	5
November	104,324	24,537	546	86,379	16,527	542	17,946	8,010	5
December	102,786	25,082	541	84,605	16,729	522	18,181	8,353	19
Year 2019, End of Month Stocks									
January	99,201	24,935	529	81,392	16,691	520	17,809	8,244	9
February	98,744	24,958	507	81,099	16,717	497	17,645	8,242	11
March	97,127	24,920	500	79,490	16,770	484	17,637	8,150	16

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, March 2019 and 2018

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	March 2019	March 2018	Percentage Change	March 2019	March 2018	Percentage Change	March 2019	March 2018	Percentage Change
New England	484	702	-31.1%	2,951	2,976	-0.8%	0	0	--
Connecticut	W	W	W	859	991	-13.4%	0	0	--
Maine	0	0	--	287	233	23.2%	0	0	--
Massachusetts	W	W	W	1,269	1,319	-3.8%	0	0	--
New Hampshire	W	W	W	362	247	46.2%	0	0	--
Rhode Island	W	W	W	134	139	-4.0%	0	0	--
Vermont	0	0	--	41	46	-11.2%	0	0	--
Middle Atlantic	3,536	3,406	3.8%	4,839	4,686	3.3%	0	0	--
New Jersey	W	142	W	609	656	-7.1%	0	0	--
New York	W	W	W	3,032	3,022	0.4%	0	0	--
Pennsylvania	3,332	W	W	1,197	1,009	18.7%	0	0	--
East North Central	16,435	23,541	-30.2%	990	1,092	-9.3%	70	146	-52.1%
Illinois	4,142	5,646	-26.6%	91	77	17.4%	0	0	--
Indiana	6,251	7,733	-19.2%	89	106	-15.4%	W	W	W
Michigan	1,664	3,357	-50.4%	288	330	-12.8%	W	W	W
Ohio	2,541	3,534	-28.1%	332	371	-10.6%	0	W	W
Wisconsin	1,837	3,271	-43.8%	191	209	-8.4%	W	W	W
West North Central	15,552	26,424	-41.1%	830	917	-9.5%	0	0	--
Iowa	2,243	6,168	-63.6%	118	137	-13.5%	0	0	--
Kansas	2,778	4,027	-31.0%	98	104	-6.3%	0	0	--
Minnesota	2,273	3,154	-27.9%	120	123	-2.3%	0	0	--
Missouri	5,305	8,316	-36.2%	324	355	-8.9%	0	0	--
Nebraska	1,600	2,934	-45.5%	104	117	-11.4%	0	0	--
North Dakota	W	W	W	26	32	-16.8%	0	0	--
South Dakota	W	W	W	40	49	-18.0%	0	0	--
South Atlantic	20,499	21,445	-4.4%	9,543	11,116	-14.2%	W	W	W
Delaware	W	W	W	351	392	-10.4%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,450	3,767	-8.4%	3,891	5,269	-26.1%	W	W	W
Georgia	4,371	4,835	-9.6%	667	724	-7.9%	0	0	--
Maryland	1,725	1,020	69.2%	669	612	9.3%	0	0	--
North Carolina	3,836	3,656	4.9%	1,096	1,172	-6.5%	0	0	--
South Carolina	2,163	3,519	-38.5%	514	586	-12.2%	0	0	--
Virginia	1,061	760	39.6%	2,195	2,224	-1.3%	0	0	--
West Virginia	W	W	W	159	138	15.2%	W	W	W
East South Central	9,655	11,581	-16.6%	1,423	1,621	-12.2%	0	W	W
Alabama	W	2,824	W	209	195	7.2%	0	0	--
Kentucky	5,212	5,404	-3.6%	233	249	-6.2%	0	W	W
Mississippi	W	1,032	W	168	487	-65.4%	0	0	--
Tennessee	2,106	2,321	-9.3%	813	691	17.8%	0	0	--
West South Central	15,296	19,366	-21.0%	1,389	1,623	-14.4%	W	W	W
Arkansas	2,985	3,233	-7.7%	143	171	-16.0%	0	0	--
Louisiana	2,320	2,383	-2.6%	326	376	-13.4%	W	W	W
Oklahoma	2,684	4,070	-34.1%	89	96	-6.5%	0	0	--
Texas	7,306	9,680	-24.5%	830	980	-15.3%	0	0	--
Mountain	15,004	18,815	-20.3%	355	398	-10.7%	W	W	W
Arizona	3,128	3,132	-0.1%	138	136	1.2%	0	0	--
Colorado	3,756	4,496	-16.5%	118	135	-12.2%	0	0	--
Idaho	0	0	--	0	0	-29.3%	0	0	--
Montana	W	W	W	14	20	-26.8%	W	W	W
Nevada	W	W	W	3	3	7.3%	0	0	--
New Mexico	W	W	W	NM	38	NM	0	0	--
Utah	2,710	4,589	-40.9%	41	32	27.5%	0	0	--
Wyoming	3,457	4,219	-18.1%	25	34	-25.8%	0	0	--
Pacific Contiguous	W	W	W	334	333	0.5%	0	0	--
California	0	0	--	166	157	6.0%	0	0	--
Oregon	W	W	W	69	75	-7.8%	0	0	--
Washington	W	W	W	98	100	-1.8%	0	0	--
Pacific Noncontiguous	W	W	W	2,265	2,366	-4.2%	0	0	--
Alaska	0	0	--	50	193	-74.0%	0	0	--
Hawaii	W	W	W	2,215	2,173	2.0%	0	0	--
U.S. Total	97,127	126,532	-23.2%	24,920	27,126	-8.1%	500	717	-30.2%

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.
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, March 2019 and 2018

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**March 2019**	**March 2018**	**Percentage Change**	**March 2019**	**March 2018**	**March 2019**	**March 2018**
Coal (Thousand Tons)							
New England	484	702	-31.1%	W	W	W	W
Middle Atlantic	3,536	3,406	3.8%	0	W	3,536	W
East North Central	16,435	23,541	-30.2%	10,815	16,122	5,619	7,419
West North Central	15,552	26,424	-41.1%	15,552	26,424	0	0
South Atlantic	20,499	21,445	-4.4%	17,825	19,614	2,674	1,832
East South Central	9,655	11,581	-16.6%	9,655	11,581	0	0
West South Central	15,296	19,366	-21.0%	11,081	14,255	4,215	5,110
Mountain	15,004	18,815	-20.3%	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	**97,127**	**126,532**	**-23.2%**	**79,490**	**106,845**	**17,637**	**19,687**
Petroleum Liquids (Thousand Barrels)							
New England	2,951	2,976	-0.8%	463	445	2,488	2,531
Middle Atlantic	4,839	4,686	3.3%	1,954	1,814	2,885	2,872
East North Central	990	1,092	-9.3%	669	756	321	336
West North Central	830	917	-9.5%	807	904	23	13
South Atlantic	9,543	11,116	-14.2%	7,658	9,323	1,886	1,793
East South Central	1,423	1,621	-12.2%	1,332	1,547	92	74
West South Central	1,389	1,623	-14.4%	1,076	1,273	313	350
Mountain	355	398	-10.7%	327	366	28	32
Pacific Contiguous	334	333	0.5%	257	230	77	103
Pacific Noncontiguous	2,265	2,366	-4.2%	2,228	2,329	37	37
U.S. Total	**24,920**	**27,126**	**-8.1%**	**16,770**	**18,987**	**8,150**	**8,140**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	70	146	-52.1%	70	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	**500**	**717**	**-30.2%**	**484**	**614**	**16**	**103**

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 - March 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

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 - March 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
Year to Date												
2017	3,095,765	161,948	2.07	39.61	1.30	98.6	28,159	4,706	11.75	70.34	0.51	83.7
2018	2,740,829	143,659	2.06	39.31	1.28	90.7	47,889	7,954	13.38	80.85	0.47	61.9
2019	2,671,485	138,757	2.09	40.19	1.37	93.6	24,012	3,958	13.21	80.13	0.47	68.3
Rolling 12 Months Ending in March												
2018	11,906,093	624,075	2.05	39.19	1.28	92.8	116,707	19,375	12.52	75.52	0.47	62.6
2019	11,288,177	589,780	2.07	39.59	1.33	92.3	94,996	15,721	14.41	87.07	0.41	68.7

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

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

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

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

Table 4.1. Receipts, Average Cost, and Quality of Fossil Fuels: Total (All Sectors), 2009 - March 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
Year to Date												
2017	23,280	831	2.06	57.83	5.59	72.2	2,079,205	2,011,592	3.67	3.80	89.6	2.73
2018	22,619	806	2.45	68.86	5.45	75.6	2,216,950	2,146,370	3.97	4.10	82.4	2.97
2019	13,659	477	2.24	64.15	5.94	46.5	2,447,568	2,367,069	3.70	3.83	85.3	2.88
Rolling 12 Months Ending in March												
2018	92,175	3,284	2.23	62.62	5.52	74.9	10,089,560	9,763,511	3.44	3.55	88.5	2.71
2019	76,162	2,681	2.51	71.28	5.86	65.3	10,596,761	10,259,931	3.50	3.61	83.7	2.78

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

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

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

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

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - March 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
Year to Date												
2017	2,242,033	116,420	2.12	40.91	1.18	98.2	21,920	3,649	11.46	68.84	0.50	92.4
2018	2,027,510	106,019	2.09	40.04	1.15	92.5	25,590	4,226	13.30	80.62	0.43	64.4
2019	1,948,796	100,891	2.15	41.54	1.23	94.3	18,027	2,957	13.21	80.50	0.44	81.5
Rolling 12 Months Ending in March												
2018	8,797,106	457,194	2.11	40.61	1.15	94.6	74,092	12,217	12.23	74.21	0.44	66.9
2019	8,307,462	432,895	2.12	40.74	1.19	92.4	67,321	11,056	14.30	87.05	0.37	74.3

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

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

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

Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2009 - March 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
Year to Date												
2017	23,280	831	2.06	57.83	5.59	113.2	987,308	955,545	3.88	4.00	96.5	2.71
2018	22,619	806	2.45	68.86	5.45	110.3	1,077,668	1,044,046	4.18	4.31	88.9	2.89
2019	13,659	477	2.24	64.15	5.94	70.4	1,162,237	1,124,206	3.89	4.02	90.7	2.85
Rolling 12 Months Ending in March												
2018	89,819	3,199	2.25	63.11	5.52	116.8	4,884,743	4,729,328	3.69	3.81	95.0	2.72
2019	74,251	2,610	2.53	71.92	5.86	96.7	5,060,662	4,902,859	3.63	3.75	87.5	2.75

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - March 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
Year to Date												
2017	803,941	43,171	1.90	35.34	1.64	102.9	5,812	989	12.92	76.03	0.47	89.7
2018	669,000	35,515	1.93	36.37	1.67	88.3	21,471	3,596	13.53	81.32	0.47	69.3
2019	683,050	35,965	1.87	35.63	1.77	94.5	5,477	918	13.19	78.68	0.50	67.7
Rolling 12 Months Ending in March												
2018	2,921,274	157,911	1.86	34.36	1.64	89.7	40,363	6,798	13.09	78.04	0.47	69.6
2019	2,819,961	149,137	1.88	35.58	1.72	94.1	25,677	4,343	14.73	87.15	0.45	83.8

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2009 - March 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
Year to Date												
2017	0	0	--	--	--	0.0	883,969	854,629	3.52	3.64	93.9	2.70
2018	0	0	--	--	--	0.0	949,964	918,615	3.84	3.97	86.1	3.09
2019	0	0	--	--	--	0.0	1,080,905	1,044,542	3.52	3.65	90.4	2.85
Rolling 12 Months Ending in March												
2018	0	0	--	--	--	0.0	4,412,151	4,265,559	3.15	3.26	92.1	2.62
2019	0	0	--	--	--	0.0	4,738,952	4,582,509	3.34	3.45	88.5	2.77

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

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

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2009 - March 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
Year to Date												
2017	307	13	2.77	63.15	2.99	6.9	0	0	--	--	--	0.0
2018	130	6	2.92	66.44	3.13	3.3	0	0	--	--	--	0.0
2019	113	5	2.90	65.75	2.96	3.0	0	0	--	--	--	0.0
Rolling 12 Months Ending in March												
2018	371	16	2.83	64.54	3.04	2.8	0	0	--	--	--	0.0
2019	272	12	2.93	66.24	2.96	2.1	0	0	--	--	--	0.0

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

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

Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2009 - March 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
Year to Date												
2017	0	0	--	--	--	0.0	1,988	1,924	3.99	4.13	5.0	3.83
2018	0	0	--	--	--	0.0	2,321	2,252	3.64	3.76	5.8	3.61
2019	0	0	--	--	--	0.0	2,389	2,308	3.38	3.49	5.8	3.35
Rolling 12 Months Ending in March												
2018	0	0	--	--	--	0.0	8,174	7,920	3.73	3.85	5.1	3.69
2019	0	0	--	--	--	0.0	9,158	8,879	3.42	3.52	5.7	3.40

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - March 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
Year to Date												
2017	49,484	2,344	2.52	53.18	1.30	67.3	426	68	11.21	69.80	1.22	15.5
2018	44,190	2,119	2.49	52.00	1.20	60.6	829	132	12.35	77.29	1.29	15.6
2019	39,526	1,896	2.61	54.45	1.26	62.4	508	83	13.53	82.93	1.43	12.7
Rolling 12 Months Ending in March												
2018	187,342	8,954	2.48	51.99	1.33	68.9	2,253	361	11.60	72.35	1.42	15.3
2019	160,482	7,736	2.52	52.17	1.25	64.4	1,998	322	13.94	86.44	1.41	14.2

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:
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 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2009 - March 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
Year to Date												
2017	0	0	--	--	--	0.0	205,941	199,495	3.24	3.34	65.0	3.11
2018	0	0	--	--	--	0.0	186,998	181,458	3.29	3.39	56.2	3.17
2019	0	0	--	--	--	0.0	202,037	196,013	3.46	3.57	57.9	3.34
Rolling 12 Months Ending in March												
2018	2,356	85	1.59	44.08	5.84	8.5	784,492	760,704	3.19	3.29	59.8	3.07
2019	1,911	71	1.75	47.47	5.74	7.8	787,989	765,684	3.40	3.50	57.7	3.27

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

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	8	6	44.0%	0	0	8	6	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	8	6	44.0%	0	0	8	6	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,889	1,755	7.6%	0	0	1,877	1,744	0	0	11	11
New Jersey	58	56	2.9%	0	0	58	56	0	0	0	0
New York	0	12	-100.0%	0	0	0	12	0	0	0	0
Pennsylvania	1,831	1,686	8.6%	0	0	1,820	1,675	0	0	11	11
East North Central	9,095	11,617	-22.0%	4,916	6,690	4,013	4,755	0	0	166	172
Illinois	2,541	3,967	-36.0%	332	863	2,044	2,932	0	0	166	171
Indiana	2,772	2,613	6.1%	2,558	2,446	214	167	0	0	0	0
Michigan	1,040	1,148	-9.5%	1,040	1,148	0	0	0	0	0	1
Ohio	2,041	2,130	-4.2%	286	474	1,755	1,656	0	0	0	0
Wisconsin	701	1,759	-60.0%	701	1,759	0	0	0	0	0	0
West North Central	7,013	8,980	-22.0%	6,787	8,719	0	0	2	0	224	260
Iowa	848	1,044	-19.0%	684	858	0	0	0	0	165	186
Kansas	707	873	-19.0%	707	873	0	0	0	0	0	0
Minnesota	766	1,238	-38.0%	766	1,238	0	0	0	0	0	0
Missouri	1,756	2,580	-32.0%	1,753	2,580	0	0	2	0	0	0
Nebraska	893	999	-11.0%	834	925	0	0	0	0	59	74
North Dakota	1,911	2,065	-7.4%	1,911	2,065	0	0	0	0	0	0
South Dakota	132	180	-27.0%	132	180	0	0	0	0	0	0
South Atlantic	6,142	6,529	-5.9%	5,346	5,553	715	889	0	0	81	87
Delaware	12	0	--	0	0	12	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	618	783	-21.0%	609	777	0	0	0	0	10	6
Georgia	1,077	986	9.3%	1,062	975	0	0	0	0	16	11
Maryland	333	308	8.2%	0	0	314	290	0	0	19	17
North Carolina	1,125	1,107	1.6%	1,091	1,079	12	3	0	0	22	25
South Carolina	553	485	14.0%	553	482	0	0	0	0	0	3
Virginia	275	410	-33.0%	227	353	34	33	0	0	15	24
West Virginia	2,148	2,451	-12.0%	1,804	1,888	344	563	0	0	0	0
East South Central	4,272	5,158	-17.0%	3,904	4,904	309	178	0	0	60	76
Alabama	943	1,469	-36.0%	943	1,469	0	0	0	0	0	0
Kentucky	2,684	2,997	-10.0%	2,684	2,997	0	0	0	0	0	0
Mississippi	405	299	35.0%	96	121	309	178	0	0	0	0
Tennessee	240	394	-39.0%	180	318	0	0	0	0	60	76
West South Central	6,573	7,223	-9.0%	3,323	4,196	3,229	2,986	0	0	22	41
Arkansas	853	1,110	-23.0%	684	868	162	232	0	0	7	10
Louisiana	471	447	5.4%	406	266	65	181	0	0	0	0
Oklahoma	313	934	-67.0%	298	785	0	118	0	0	15	30
Texas	4,936	4,732	4.3%	1,936	2,276	3,001	2,456	0	0	0	0
Mountain	6,370	7,246	-12.0%	5,427	6,299	942	947	0	0	0	0
Arizona	1,319	1,516	-13.0%	1,319	1,516	0	0	0	0	0	0
Colorado	1,166	1,408	-17.0%	1,166	1,408	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	812	826	-1.7%	27	24	786	802	0	0	0	0
Nevada	159	60	165.0%	86	0	74	60	0	0	0	0
New Mexico	488	470	3.9%	488	470	0	0	0	0	0	0
Utah	784	964	-19.0%	745	927	39	37	0	0	0	0
Wyoming	1,641	2,001	-18.0%	1,597	1,954	44	47	0	0	0	0
Pacific Contiguous	476	180	164.0%	75	0	335	104	0	0	66	76
California	66	76	-13.0%	0	0	0	0	0	0	66	76
Oregon	75	0	--	75	0	0	0	0	0	0	0
Washington	335	104	220.0%	0	0	335	104	0	0	0	0
Pacific Noncontiguous	157	77	104.0%	36	17	121	59	0	0	0	0
Alaska	36	17	109.0%	36	17	0	0	0	0	0	0
Hawaii	121	59	103.0%	0	0	121	59	0	0	0	0
U.S. Total	41,993	48,770	-14.0%	29,813	36,379	11,549	11,669	2	0	629	722

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	24	68	-65.0%	0	45	24	23	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	24	23	4.1%	0	0	24	23	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	45	-100.0%	0	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	5,363	5,262	1.9%	0	0	5,352	5,231	0	0	11	30
New Jersey	181	177	1.9%	0	0	181	177	0	0	0	0
New York	69	172	-60.0%	0	0	69	163	0	0	0	9
Pennsylvania	5,114	4,912	4.1%	0	0	5,102	4,891	0	0	11	22
East North Central	29,024	31,672	-8.4%	16,151	18,497	12,409	12,674	0	0	464	502
Illinois	9,118	10,869	-16.0%	1,660	2,141	6,994	8,228	0	0	464	501
Indiana	7,805	7,370	5.9%	7,275	6,914	531	456	0	0	0	0
Michigan	3,300	3,297	0.1%	3,300	3,296	0	0	0	0	0	1
Ohio	5,604	5,443	3.0%	719	1,453	4,885	3,990	0	0	0	0
Wisconsin	3,196	4,693	-32.0%	3,196	4,693	0	0	0	0	0	0
West North Central	24,479	28,408	-14.0%	23,739	27,625	0	0	5	6	735	777
Iowa	3,144	3,397	-7.5%	2,596	2,841	0	0	0	0	548	556
Kansas	2,540	3,013	-16.0%	2,540	3,013	0	0	0	0	0	0
Minnesota	2,493	3,093	-19.0%	2,493	3,093	0	0	0	0	0	0
Missouri	7,191	9,126	-21.0%	7,186	9,120	0	0	5	6	0	0
Nebraska	2,886	3,052	-5.4%	2,699	2,831	0	0	0	0	187	221
North Dakota	5,839	6,279	-7.0%	5,839	6,279	0	0	0	0	0	0
South Dakota	385	448	-14.0%	385	448	0	0	0	0	0	0
South Atlantic	19,362	18,493	4.7%	16,993	15,535	2,112	2,680	0	0	257	277
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	2,329	2,544	-8.5%	2,306	2,520	0	0	0	0	23	24
Georgia	3,798	3,251	17.0%	3,763	3,211	0	0	0	0	36	40
Maryland	919	1,053	-13.0%	0	0	860	995	0	0	58	57
North Carolina	2,953	2,875	2.7%	2,877	2,787	15	18	0	0	61	70
South Carolina	2,326	1,335	74.0%	2,319	1,332	0	0	0	0	8	3
Virginia	718	1,179	-39.0%	547	984	101	112	0	0	70	83
West Virginia	6,247	6,255	-0.1%	5,183	4,701	1,065	1,554	0	0	0	0
East South Central	13,109	13,888	-5.6%	12,312	12,957	634	674	0	0	162	256
Alabama	3,285	3,953	-17.0%	3,285	3,953	0	0	0	0	0	0
Kentucky	7,809	7,359	6.1%	7,809	7,359	0	0	0	0	0	0
Mississippi	970	1,037	-6.4%	337	362	634	674	0	0	0	0
Tennessee	1,044	1,539	-32.0%	882	1,283	0	0	0	0	162	256
West South Central	24,543	24,359	0.8%	13,346	13,668	11,115	10,578	0	0	81	114
Arkansas	4,175	4,014	4.0%	3,564	3,253	589	736	0	0	22	24
Louisiana	1,634	1,667	-2.0%	1,242	1,044	392	624	0	0	0	0
Oklahoma	1,609	2,899	-44.0%	1,535	2,549	14	259	0	0	60	90
Texas	17,125	15,780	8.5%	7,004	6,821	10,121	8,958	0	0	0	0
Mountain	20,844	20,461	1.9%	17,899	17,642	2,946	2,820	0	0	0	0
Arizona	4,105	4,184	-1.9%	4,105	4,184	0	0	0	0	0	0
Colorado	3,693	3,731	-1.0%	3,693	3,731	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	2,590	2,493	3.9%	77	65	2,513	2,428	0	0	0	0
Nevada	479	151	216.0%	289	0	190	151	0	0	0	0
New Mexico	1,919	1,221	57.0%	1,919	1,221	0	0	0	0	0	0
Utah	2,733	2,824	-3.2%	2,620	2,714	112	111	0	0	0	0
Wyoming	5,326	5,856	-9.1%	5,196	5,727	130	130	0	0	0	0
Pacific Contiguous	1,728	814	112.0%	349	0	1,193	651	0	0	186	163
California	186	163	14.0%	0	0	0	0	0	0	186	163
Oregon	349	0	--	349	0	0	0	0	0	0	0
Washington	1,193	651	83.0%	0	0	1,193	651	0	0	0	0
Pacific Noncontiguous	282	235	20.0%	102	50	180	184	0	0	0	0
Alaska	102	50	103.0%	102	50	0	0	0	0	0	0
Hawaii	180	184	-2.4%	0	0	180	184	0	0	0	0
U.S. Total	138,757	143,659	-3.4%	100,891	106,019	35,965	35,515	5	6	1,896	2,119

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	10	3	254.0%	1	2	9	1	0	0	0	0
Connecticut	2	1	202.0%	0	0	2	1	0	0	0	0
Maine	7	1	864.0%	0	0	7	1	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	1	2	-15.0%	1	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	130	69	89.0%	108	1	16	61	0	0	6	8
New Jersey	0	3	-94.0%	0	0	0	3	0	0	0	0
New York	111	8	NM	108	1	3	6	0	0	0	1
Pennsylvania	19	58	-68.0%	0	0	13	52	0	0	6	7
East North Central	72	77	-6.9%	59	31	10	44	0	0	2	2
Illinois	6	8	-25.0%	1	1	6	8	0	0	0	0
Indiana	22	17	29.0%	22	17	0	0	0	0	0	0
Michigan	7	9	-19.0%	7	8	0	0	0	0	0	1
Ohio	29	41	-30.0%	23	4	4	36	0	0	2	1
Wisconsin	7	1	455.0%	7	1	0	0	0	0	0	0
West North Central	40	33	21.0%	40	33	0	0	0	0	0	0
Iowa	15	18	-17.0%	15	18	0	0	0	0	0	0
Kansas	0	6	-100.0%	0	6	0	0	0	0	0	0
Minnesota	4	1	649.0%	4	1	0	0	0	0	0	0
Missouri	14	6	130.0%	14	6	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	7	2	210.0%	7	2	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	97	276	-65.0%	78	180	7	68	0	0	12	28
Delaware	0	31	-100.0%	0	0	0	31	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6	70	-92.0%	2	60	0	0	0	0	4	10
Georgia	18	19	-6.8%	10	15	1	0	0	0	6	4
Maryland	5	37	-87.0%	0	0	5	37	0	0	0	0
North Carolina	18	25	-30.0%	16	18	0	0	0	0	1	7
South Carolina	10	9	8.4%	10	4	0	0	0	0	0	5
Virginia	8	65	-87.0%	6	63	1	1	0	0	1	1
West Virginia	33	20	68.0%	33	20	0	0	0	0	0	0
East South Central	25	14	80.0%	25	14	0	0	0	0	0	0
Alabama	2	4	-52.0%	2	4	0	0	0	0	0	0
Kentucky	14	7	98.0%	14	7	0	0	0	0	0	0
Mississippi	4	1	606.0%	4	1	0	0	0	0	0	0
Tennessee	5	2	147.0%	5	2	0	0	0	0	0	0
West South Central	26	10	177.0%	15	4	11	5	0	0	0	0
Arkansas	7	5	37.0%	5	4	2	1	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1	0	--	1	0	0	0	0	0	0	0
Texas	18	4	336.0%	10	0	9	4	0	0	0	0
Mountain	21	18	19.0%	20	17	1	1	0	0	0	0
Arizona	7	10	-29.0%	7	10	0	0	0	0	0	0
Colorado	2	0	--	2	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1	1	49.0%	0	0	1	1	0	0	0	0
Nevada	2	0	--	2	0	0	0	0	0	0	0
New Mexico	5	2	164.0%	5	2	0	0	0	0	0	0
Utah	2	3	-49.0%	2	3	0	0	0	0	0	0
Wyoming	3	3	15.0%	3	3	0	0	0	0	0	0
Pacific Contiguous	7	0	--	6	0	1	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	7	0	--	6	0	1	0	0	0	0	0
Pacific Noncontiguous	719	711	1.2%	564	546	156	165	0	0	0	0
Alaska	2	0	--	2	0	0	0	0	0	0	0
Hawaii	718	711	1.0%	562	546	156	165	0	0	0	0
U.S. Total	1,148	1,210	-5.1%	917	827	210	345	0	0	21	38

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	186	1,005	-82.0%	6	114	179	891	0	0	0	0
Connecticut	6	105	-94.0%	0	0	6	105	0	0	0	0
Maine	123	250	-51.0%	0	0	123	250	0	0	0	0
Massachusetts	51	368	-86.0%	0	12	51	356	0	0	0	0
New Hampshire	6	182	-96.0%	6	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	567	2,277	-75.0%	295	637	254	1,609	0	0	18	30
New Jersey	22	136	-84.0%	0	0	22	136	0	0	0	0
New York	375	1,659	-77.0%	295	637	80	1,010	0	0	0	11
Pennsylvania	170	482	-65.0%	0	0	151	463	0	0	18	19
East North Central	234	212	10.0%	134	121	88	83	0	0	12	8
Illinois	26	20	29.0%	1	1	25	19	0	0	0	0
Indiana	57	53	6.4%	57	53	0	1	0	0	0	0
Michigan	33	28	20.0%	31	26	0	0	0	0	2	2
Ohio	103	85	22.0%	37	26	56	52	0	0	10	6
Wisconsin	16	26	-41.0%	8	16	8	11	0	0	0	0
West North Central	141	134	4.5%	141	134	0	0	0	0	0	0
Iowa	30	44	-32.0%	30	44	0	0	0	0	0	0
Kansas	17	19	-8.9%	17	19	0	0	0	0	0	0
Minnesota	11	3	231.0%	11	3	0	0	0	0	0	0
Missouri	44	51	-13.0%	44	51	0	0	0	0	0	0
Nebraska	6	1	391.0%	6	1	0	0	0	0	0	0
North Dakota	33	17	98.0%	33	17	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	354	2,061	-83.0%	268	1,384	36	584	0	0	50	93
Delaware	1	69	-99.0%	0	0	1	69	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	36	159	-77.0%	20	143	0	0	0	0	17	16
Georgia	59	124	-52.0%	42	75	1	25	0	0	16	24
Maryland	24	350	-93.0%	0	0	24	350	0	0	0	0
North Carolina	87	586	-85.0%	77	572	0	0	0	0	10	14
South Carolina	21	234	-91.0%	20	163	0	43	0	0	1	28
Virginia	56	438	-87.0%	39	351	10	76	0	0	7	11
West Virginia	69	101	-31.0%	69	80	0	20	0	0	0	0
East South Central	86	138	-38.0%	75	80	8	58	0	0	2	1
Alabama	14	88	-84.0%	6	30	8	58	0	0	0	0
Kentucky	42	27	56.0%	42	27	0	0	0	0	0	0
Mississippi	6	6	13.0%	6	6	0	0	0	0	0	0
Tennessee	23	18	27.0%	20	17	0	0	0	0	2	1
West South Central	44	25	75.0%	25	16	18	9	0	0	0	0
Arkansas	16	8	88.0%	8	7	8	1	0	0	0	0
Louisiana	0	3	-100.0%	0	3	0	0	0	0	0	0
Oklahoma	4	1	391.0%	4	1	0	0	0	0	0	0
Texas	24	12	91.0%	13	5	11	8	0	0	0	0
Mountain	106	63	68.0%	99	60	7	3	0	0	0	0
Arizona	40	26	53.0%	40	26	0	0	0	0	0	0
Colorado	2	2	16.0%	2	2	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	6	2	305.0%	0	0	6	2	0	0	0	0
Nevada	7	1	898.0%	7	0	1	1	0	0	0	0
New Mexico	11	8	32.0%	11	8	0	0	0	0	0	0
Utah	29	15	93.0%	29	14	0	0	0	0	0	0
Wyoming	10	9	10.0%	10	9	0	0	0	0	0	0
Pacific Contiguous	9	0	--	6	0	3	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	9	0	--	6	0	3	0	0	0	0	0
Pacific Noncontiguous	2,233	2,038	9.5%	1,909	1,678	324	360	0	0	0	0
Alaska	4	0	--	4	0	0	0	0	0	0	0
Hawaii	2,229	2,038	9.3%	1,905	1,678	324	360	0	0	0	0
U.S. Total	3,958	7,954	-50.0%	2,957	4,226	918	3,596	0	0	83	132

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

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

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

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 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	5	66	-93.0%	5	66	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	62	-100.0%	0	62	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	5	4	10.0%	5	4	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	39	117	-66.0%	39	117	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	39	117	-66.0%	39	117	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	86	98	-13.0%	86	98	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	86	98	-13.0%	86	98	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	--	0	0	0	0	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	130	281	-54.0%	130	281	0	0	0	0	0	0

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

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

Table 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) March 2019 and 2018 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 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	40	179	-78.0%	40	179	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	29	161	-82.0%	29	161	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	11	18	-41.0%	11	18	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	115	294	-61.0%	115	294	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	115	294	-61.0%	115	294	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	322	333	-3.1%	322	333	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	322	333	-3.1%	322	333	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	477	806	-41.0%	477	806	0	0	0	0	0	0

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

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

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

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	23,063	24,242	-4.9%	2	18	23,061	24,224	0	0	0	0
Connecticut	9,673	10,061	-3.9%	0	0	9,673	10,061	0	0	0	0
Maine	634	1,069	-41.0%	0	0	634	1,069	0	0	0	0
Massachusetts	8,713	10,703	-19.0%	0	17	8,713	10,686	0	0	0	0
New Hampshire	1,556	247	530.0%	2	1	1,554	246	0	0	0	0
Rhode Island	2,486	2,163	15.0%	0	0	2,486	2,163	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	90,331	83,106	8.7%	6,029	5,282	83,482	76,991	0	0	820	832
New Jersey	19,069	21,213	-10.0%	0	0	19,069	21,213	0	0	0	0
New York	23,510	22,731	3.4%	6,029	5,282	16,794	16,879	0	0	687	570
Pennsylvania	47,751	39,162	22.0%	0	0	47,619	38,900	0	0	133	262
East North Central	78,263	66,593	18.0%	26,380	23,427	49,961	41,187	655	567	1,267	1,412
Illinois	5,003	5,335	-6.2%	298	341	4,705	4,992	0	0	0	2
Indiana	15,501	9,542	62.0%	6,308	3,445	9,193	6,097	0	0	0	0
Michigan	18,166	22,703	-20.0%	4,286	6,020	12,633	15,444	655	567	592	672
Ohio	28,600	19,137	49.0%	5,601	4,520	22,532	14,147	0	0	467	469
Wisconsin	10,993	9,875	11.0%	9,887	9,099	899	507	0	0	207	269
West North Central	13,366	13,147	1.7%	11,401	11,416	1,345	1,205	157	179	463	348
Iowa	4,709	4,278	10.0%	4,254	3,942	0	0	0	0	455	336
Kansas	932	1,607	-42.0%	932	1,607	0	0	0	0	0	0
Minnesota	3,755	3,577	5.0%	3,737	3,550	9	15	1	1	8	12
Missouri	3,549	3,496	1.5%	2,057	2,127	1,336	1,190	156	178	0	0
Nebraska	275	113	143.0%	275	113	0	0	0	0	0	0
North Dakota	145	76	90.0%	145	76	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	193,455	185,146	4.5%	161,088	154,257	29,262	27,957	0	0	3,105	2,931
Delaware	2,178	3,250	-33.0%	0	0	2,178	3,250	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	89,903	88,092	2.1%	88,063	85,706	1,440	2,018	0	0	400	368
Georgia	23,258	24,999	-7.0%	17,057	20,248	5,486	3,982	0	0	715	769
Maryland	10,340	5,127	102.0%	3,646	0	6,443	4,943	0	0	252	185
North Carolina	24,739	27,088	-8.7%	19,933	24,233	4,542	2,612	0	0	264	243
South Carolina	11,483	10,038	14.0%	11,069	7,777	344	2,173	0	0	70	88
Virginia	30,644	25,988	18.0%	21,161	16,198	8,695	8,924	0	0	788	867
West Virginia	911	563	62.0%	159	95	135	55	0	0	616	413
East South Central	74,384	71,028	4.7%	46,978	46,611	25,078	22,611	0	0	2,328	1,806
Alabama	30,820	27,896	10.0%	9,744	9,112	21,076	18,785	0	0	0	0
Kentucky	8,643	9,011	-4.1%	8,215	8,277	428	733	0	0	0	0
Mississippi	23,019	25,698	-10.0%	19,446	22,605	3,574	3,094	0	0	0	0
Tennessee	11,902	8,423	41.0%	9,574	6,617	0	0	0	0	2,328	1,806
West South Central	200,938	188,360	6.7%	56,539	50,237	90,854	90,082	0	0	53,545	48,041
Arkansas	8,821	10,063	-12.0%	7,319	8,664	1,220	1,235	0	0	281	163
Louisiana	38,195	31,524	21.0%	18,008	14,718	2,063	2,371	0	0	18,124	14,435
Oklahoma	18,981	15,373	23.0%	11,903	8,728	6,524	6,372	0	0	555	273
Texas	134,941	131,400	2.7%	19,309	18,127	81,047	80,103	0	0	34,585	33,170
Mountain	53,227	40,398	32.0%	43,515	36,151	9,712	4,189	0	0	0	58
Arizona	19,971	11,559	73.0%	14,819	10,870	5,152	688	0	0	0	0
Colorado	9,171	7,803	18.0%	7,296	6,782	1,875	1,021	0	0	0	0
Idaho	188	0	--	188	0	0	0	0	0	0	0
Montana	158	211	-25.0%	158	211	0	0	0	0	0	0
Nevada	12,043	12,491	-3.6%	12,043	12,491	0	0	0	0	0	0
New Mexico	5,884	5,418	8.6%	3,202	2,939	2,682	2,479	0	0	0	0
Utah	5,603	2,888	94.0%	5,603	2,830	0	0	0	0	0	58
Wyoming	208	28	648.0%	205	28	3	0	0	0	0	0
Pacific Contiguous	49,951	53,048	-5.8%	19,490	21,751	28,284	28,753	0	0	2,178	2,544
California	35,615	40,519	-12.0%	13,691	16,399	19,745	21,576	0	0	2,178	2,544
Oregon	10,778	9,209	17.0%	3,941	4,224	6,837	4,986	0	0	0	0
Washington	3,558	3,320	7.2%	1,857	1,128	1,702	2,192	0	0	0	0
Pacific Noncontiguous	54	65	-16.0%	54	65	0	0	0	0	0	0
Alaska	54	65	-16.0%	54	65	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	777,031	725,132	7.2%	371,475	349,214	341,038	317,199	812	746	63,706	57,973

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

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

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

Table 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) March 2019 and 2018 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	70,143	67,393	4.1%	20	22	70,123	67,370	0	0	0	0
Connecticut	30,487	27,161	12.0%	0	0	30,487	27,161	0	0	0	0
Maine	2,201	1,823	21.0%	0	0	2,201	1,823	0	0	0	0
Massachusetts	28,266	31,248	-9.5%	14	17	28,252	31,231	0	0	0	0
New Hampshire	3,422	1,396	145.0%	6	5	3,416	1,391	0	0	0	0
Rhode Island	5,767	5,764	0.0%	0	0	5,767	5,764	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	282,676	227,721	24.0%	19,849	17,770	260,145	207,335	0	0	2,682	2,617
New Jersey	59,913	52,780	14.0%	0	0	59,913	52,780	0	0	0	0
New York	76,777	66,046	16.0%	19,849	17,770	54,940	46,484	0	0	1,987	1,792
Pennsylvania	145,986	108,895	34.0%	0	0	145,292	108,071	0	0	694	825
East North Central	234,584	198,771	18.0%	77,187	71,237	151,414	121,646	1,842	1,778	4,141	4,110
Illinois	15,167	13,057	16.0%	838	508	14,325	12,544	0	0	4	5
Indiana	47,445	33,636	41.0%	18,600	14,293	28,845	19,344	0	0	0	0
Michigan	54,967	59,718	-8.0%	11,896	15,333	39,408	40,689	1,842	1,778	1,820	1,918
Ohio	84,903	63,882	33.0%	16,017	14,368	67,214	48,087	0	0	1,672	1,426
Wisconsin	32,102	28,478	13.0%	29,836	26,735	1,622	982	0	0	644	761
West North Central	37,936	32,472	17.0%	32,342	28,337	3,686	2,708	465	474	1,443	953
Iowa	13,457	11,036	22.0%	12,047	10,098	0	0	0	0	1,410	939
Kansas	3,216	3,749	-14.0%	3,216	3,749	0	0	0	0	0	0
Minnesota	10,889	7,632	43.0%	10,775	7,558	80	58	2	2	33	15
Missouri	9,489	9,610	-1.3%	5,420	6,488	3,606	2,650	463	472	0	0
Nebraska	481	330	46.0%	481	330	0	0	0	0	0	0
North Dakota	403	115	251.0%	403	115	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	576,861	531,083	8.6%	485,331	445,408	82,222	76,575	0	0	9,308	9,100
Delaware	4,549	7,213	-37.0%	0	0	4,549	7,213	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	258,445	250,231	3.3%	252,653	242,235	4,786	7,161	0	0	1,006	834
Georgia	78,479	79,487	-1.3%	60,720	63,503	15,642	13,620	0	0	2,118	2,365
Maryland	23,633	10,784	119.0%	9,305	0	13,621	10,149	0	0	708	635
North Carolina	74,908	72,415	3.4%	61,049	64,240	13,070	7,415	0	0	789	759
South Carolina	36,343	27,936	30.0%	32,113	23,069	3,916	4,578	0	0	315	288
Virginia	97,936	80,801	21.0%	69,058	52,013	26,207	26,294	0	0	2,671	2,493
West Virginia	2,568	2,216	16.0%	434	347	431	143	0	0	1,702	1,726
East South Central	208,820	222,094	-6.0%	136,476	152,747	65,305	64,481	0	0	7,039	4,866
Alabama	81,013	80,131	1.1%	26,425	25,876	54,588	54,255	0	0	0	0
Kentucky	23,367	29,508	-21.0%	22,244	27,477	1,123	2,031	0	0	0	0
Mississippi	71,004	86,881	-18.0%	61,410	78,686	9,595	8,195	0	0	0	0
Tennessee	33,435	25,575	31.0%	26,396	20,708	0	0	0	0	7,039	4,866
West South Central	625,540	592,500	5.6%	176,254	157,059	284,837	282,871	0	0	164,449	152,570
Arkansas	28,215	30,132	-6.4%	23,816	25,939	3,588	3,513	0	0	811	679
Louisiana	115,761	106,077	9.1%	53,882	49,271	6,843	7,619	0	0	55,036	49,187
Oklahoma	64,014	48,839	31.0%	39,183	26,924	23,519	21,171	0	0	1,312	744
Texas	417,550	407,452	2.5%	59,372	54,925	250,887	250,567	0	0	107,290	101,959
Mountain	164,039	122,717	34.0%	136,271	108,007	27,746	14,520	0	0	22	189
Arizona	60,562	32,775	85.0%	45,076	29,137	15,485	3,638	0	0	0	0
Colorado	28,729	26,900	6.8%	24,331	22,896	4,398	4,004	0	0	0	0
Idaho	2,907	356	716.0%	2,907	356	0	0	0	0	0	0
Montana	689	649	6.3%	689	649	0	0	0	0	0	0
Nevada	36,094	36,811	-1.9%	36,094	36,811	0	0	0	0	0	0
New Mexico	18,464	15,440	20.0%	10,608	8,566	7,856	6,873	0	0	0	0
Utah	15,996	9,572	67.0%	15,973	9,382	0	0	0	0	22	189
Wyoming	599	215	179.0%	593	210	6	5	0	0	0	0
Pacific Contiguous	166,283	151,249	9.9%	60,290	63,087	99,064	81,110	0	0	6,929	7,052
California	121,497	119,045	2.1%	41,422	48,678	73,146	63,315	0	0	6,929	7,052
Oregon	32,591	23,391	39.0%	11,609	10,081	20,982	13,310	0	0	0	0
Washington	12,195	8,813	38.0%	7,259	4,328	4,936	4,484	0	0	0	0
Pacific Noncontiguous	186	370	-50.0%	186	370	0	0	0	0	0	0
Alaska	186	370	-50.0%	186	370	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	2,367,069	2,146,370	10.0%	1,124,206	1,044,046	1,044,542	918,615	2,308	2,252	196,013	181,458

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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, March 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.00	2.13	-6.1%	--	--	2.00	2.13
New Jersey	W	W	W	--	--	W	W
New York	--	W	W	--	--	--	W
Pennsylvania	W	2.06	W	--	--	W	2.06
East North Central	2.00	1.95	2.6%	2.14	2.09	1.83	1.76
Illinois	W	1.74	W	1.89	1.85	W	1.71
Indiana	W	W	W	2.16	2.13	W	W
Michigan	2.14	2.12	0.9%	2.14	2.12	--	--
Ohio	1.88	W	W	2.01	1.73	1.86	W
Wisconsin	2.26	2.25	0.4%	2.26	2.25	--	--
West North Central	1.63	1.75	-6.9%	1.63	1.75	--	--
Iowa	1.59	1.74	-8.6%	1.59	1.74	--	--
Kansas	1.65	1.68	-1.8%	1.65	1.68	--	--
Minnesota	2.08	2.11	-1.4%	2.08	2.11	--	--
Missouri	1.70	1.88	-9.6%	1.70	1.88	--	--
Nebraska	1.17	1.27	-7.9%	1.17	1.27	--	--
North Dakota	1.53	1.55	-1.3%	1.53	1.55	--	--
South Dakota	1.78	1.83	-2.7%	1.78	1.83	--	--
South Atlantic	2.63	2.56	2.7%	2.65	2.64	2.45	2.14
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.92	2.81	3.9%	2.92	2.81	--	--
Georgia	2.74	2.65	3.4%	2.74	2.65	--	--
Maryland	2.70	2.40	13.0%	--	--	2.70	2.40
North Carolina	W	W	W	2.90	3.08	W	W
South Carolina	3.41	3.33	2.4%	3.41	3.33	--	--
Virginia	W	W	W	2.86	2.66	W	W
West Virginia	W	W	W	2.12	2.14	W	W
East South Central	W	W	W	2.10	2.09	W	W
Alabama	2.42	2.29	5.7%	2.42	2.29	--	--
Kentucky	1.96	1.96	0.0%	1.96	1.96	--	--
Mississippi	W	W	W	3.30	2.86	W	W
Tennessee	2.10	2.24	-6.3%	2.10	2.24	--	--
West South Central	1.90	1.89	0.5%	2.18	1.99	1.60	1.74
Arkansas	W	W	W	1.99	2.01	W	W
Louisiana	W	W	W	3.25	2.05	W	W
Oklahoma	1.79	W	W	1.79	1.72	--	W
Texas	W	1.87	W	2.08	2.08	W	1.67
Mountain	W	W	W	2.09	1.99	W	W
Arizona	2.62	2.45	6.9%	2.62	2.45	--	--
Colorado	1.81	1.61	12.0%	1.81	1.61	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.94	1.81	W	W
Nevada	W	W	W	2.89	--	W	W
New Mexico	1.74	2.29	-24.0%	1.74	2.29	--	--
Utah	2.03	2.03	0.0%	2.03	2.03	--	--
Wyoming	W	W	W	1.91	1.76	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	3.41	3.24	W	W
Alaska	3.41	3.24	5.2%	3.41	3.24	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.07	2.04	1.5%	2.14	2.10	1.88	1.85

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	W	W	W	--	3.61	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	3.61	--	--	3.61	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.07	2.46	-16.0%	--	--	2.07	2.46
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	W	2.39	W	--	--	W	2.39
East North Central	2.01	1.97	2.0%	2.13	2.08	1.85	1.81
Illinois	1.83	1.75	4.6%	2.00	1.82	1.79	1.73
Indiana	W	W	W	2.16	2.11	W	W
Michigan	2.08	2.17	-4.1%	2.08	2.17	--	--
Ohio	W	W	W	1.88	1.78	W	W
Wisconsin	2.25	2.21	1.8%	2.25	2.21	--	--
West North Central	1.64	1.72	-4.7%	1.64	1.72	--	--
Iowa	1.58	1.70	-7.1%	1.58	1.70	--	--
Kansas	1.66	1.68	-1.2%	1.66	1.68	--	--
Minnesota	2.07	2.10	-1.4%	2.07	2.10	--	--
Missouri	1.70	1.87	-9.1%	1.70	1.87	--	--
Nebraska	1.21	1.25	-3.2%	1.21	1.25	--	--
North Dakota	1.55	1.48	4.7%	1.55	1.48	--	--
South Dakota	1.93	1.89	2.1%	1.93	1.89	--	--
South Atlantic	2.68	2.64	1.5%	2.72	2.71	2.40	2.25
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.90	2.91	-0.3%	2.90	2.91	--	--
Georgia	2.73	2.80	-2.5%	2.73	2.80	--	--
Maryland	2.75	2.56	7.4%	--	--	2.75	2.56
North Carolina	W	W	W	3.24	3.06	W	W
South Carolina	3.26	3.39	-3.8%	3.26	3.39	--	--
Virginia	W	W	W	2.80	2.67	W	W
West Virginia	W	W	W	2.11	2.18	W	W
East South Central	W	W	W	2.10	2.12	W	W
Alabama	2.32	2.30	0.9%	2.32	2.30	--	--
Kentucky	1.96	1.99	-1.5%	1.96	1.99	--	--
Mississippi	W	W	W	3.18	2.81	W	W
Tennessee	2.29	2.17	5.5%	2.29	2.17	--	--
West South Central	1.92	1.86	3.2%	2.12	1.97	1.67	1.72
Arkansas	W	W	W	2.03	1.95	W	W
Louisiana	W	W	W	2.95	2.08	W	W
Oklahoma	W	W	W	1.80	1.75	W	W
Texas	W	1.83	W	2.09	2.05	W	1.65
Mountain	W	W	W	2.14	2.00	W	W
Arizona	2.64	2.43	8.6%	2.64	2.43	--	--
Colorado	1.79	1.66	7.8%	1.79	1.66	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	1.97	1.86	W	W
Nevada	W	W	W	2.94	--	W	W
New Mexico	2.41	2.28	5.7%	2.41	2.28	--	--
Utah	1.99	2.04	-2.5%	1.99	2.04	--	--
Wyoming	W	W	W	1.90	1.79	W	W
Pacific Contiguous	W	W	W	2.17	--	W	W
California	--	--	--	--	--	--	--
Oregon	2.17	--	--	2.17	--	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.46	3.29	W	W
Alaska	3.46	3.29	5.2%	3.46	3.29	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.08	2.05	1.5%	2.15	2.09	1.87	1.93

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018
New England	13.46	W	W	17.51	13.91	12.88	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	--	W	--	--	W	--
New Hampshire	17.51	13.91	26.0%	17.51	13.91	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	13.54	14.51	-6.7%	13.26	15.91	15.46	14.49
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	13.26	15.91	W	W
Pennsylvania	W	14.80	W	--	--	W	14.80
East North Central	15.58	14.73	5.8%	15.58	14.60	15.60	14.83
Illinois	W	14.99	W	15.97	14.37	W	15.05
Indiana	15.41	14.71	4.8%	15.41	14.71	--	--
Michigan	15.16	14.38	5.4%	15.16	14.38	--	--
Ohio	W	14.79	W	15.97	14.85	W	14.78
Wisconsin	15.20	13.98	8.7%	15.20	13.98	--	--
West North Central	15.24	15.86	-3.9%	15.24	15.86	--	--
Iowa	15.47	16.63	-7.0%	15.47	16.63	--	--
Kansas	--	15.19	--	--	15.19	--	--
Minnesota	15.60	14.87	4.9%	15.60	14.87	--	--
Missouri	15.33	14.67	4.5%	15.33	14.67	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	14.38	14.64	-1.8%	14.38	14.64	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	W	14.18	W	15.61	14.22	W	14.00
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	15.88	15.19	4.5%	15.88	15.19	--	--
Georgia	14.73	14.03	5.0%	14.73	14.03	--	--
Maryland	W	W	W	--	--	W	W
North Carolina	15.16	14.57	4.0%	15.16	14.57	--	--
South Carolina	15.67	14.70	6.6%	15.67	14.70	--	--
Virginia	W	W	W	15.78	12.79	W	W
West Virginia	16.02	15.61	2.6%	16.02	15.61	--	--
East South Central	14.83	14.89	-0.4%	14.83	14.89	--	--
Alabama	15.49	15.55	-0.4%	15.49	15.55	--	--
Kentucky	14.99	14.54	3.1%	14.99	14.54	--	--
Mississippi	14.53	14.60	-0.5%	14.53	14.60	--	--
Tennessee	14.33	14.92	-4.0%	14.33	14.92	--	--
West South Central	W	14.86	W	13.70	14.36	W	15.31
Arkansas	W	W	W	15.08	14.36	W	W
Louisiana	--	--	--	--	--	--	--
Oklahoma	15.92	--	--	15.92	--	--	--
Texas	W	W	W	12.86	--	W	W
Mountain	W	W	W	15.91	16.24	W	W
Arizona	15.43	14.56	6.0%	15.43	14.56	--	--
Colorado	17.06	--	--	17.06	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	--	W	14.89	--	W	--
New Mexico	15.36	15.03	2.2%	15.36	15.03	--	--
Utah	15.59	16.98	-8.2%	15.59	16.98	--	--
Wyoming	18.09	22.59	-20.0%	18.09	22.59	--	--
Pacific Contiguous	W	--	W	16.52	--	W	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	--	W	16.52	--	W	--
Pacific Noncontiguous	W	W	W	13.82	12.51	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	13.81	12.51	W	W
U.S. Total	14.29	13.42	6.5%	14.15	13.19	14.88	14.02

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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) March 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	W	W	W	17.71	11.39	W	W
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	15.00	W	W
New Hampshire	17.71	W	W	17.71	11.00	--	W
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	12.69	13.27	-4.4%	11.93	11.47	13.61	14.22
New Jersey	W	W	W	--	--	W	W
New York	12.56	12.87	-2.4%	11.93	11.47	14.99	13.85
Pennsylvania	W	W	W	--	--	W	W
East North Central	14.85	15.86	-6.4%	14.64	15.99	15.15	15.65
Illinois	W	W	W	15.97	14.37	W	W
Indiana	14.73	W	W	14.73	15.60	--	W
Michigan	13.17	15.10	-13.0%	13.17	15.10	--	--
Ohio	14.61	15.82	-7.6%	15.68	16.05	13.88	15.70
Wisconsin	W	18.65	W	14.76	18.65	W	--
West North Central	14.43	15.53	-7.1%	14.43	15.53	--	--
Iowa	14.74	15.96	-7.6%	14.74	15.96	--	--
Kansas	14.66	15.40	-4.8%	14.66	15.40	--	--
Minnesota	14.95	15.33	-2.5%	14.95	15.33	--	--
Missouri	14.28	15.50	-7.9%	14.28	15.50	--	--
Nebraska	14.52	15.36	-5.5%	14.52	15.36	--	--
North Dakota	14.04	14.72	-4.6%	14.04	14.72	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	14.38	14.47	-0.6%	14.47	14.73	13.72	13.77
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	14.64	15.49	-5.5%	14.64	15.49	--	--
Georgia	W	W	W	14.20	15.19	W	W
Maryland	W	14.12	W	--	--	W	14.12
North Carolina	14.52	17.14	-15.0%	14.52	17.14	--	--
South Carolina	14.94	16.84	-11.0%	14.94	16.84	--	--
Virginia	W	W	W	12.84	9.95	W	W
West Virginia	15.33	W	W	15.33	16.11	--	W
East South Central	W	W	W	14.22	15.28	W	W
Alabama	W	W	W	14.90	15.59	W	W
Kentucky	14.32	15.16	-5.5%	14.32	15.16	--	--
Mississippi	14.04	14.72	-4.6%	14.04	14.72	--	--
Tennessee	13.88	15.11	-8.1%	13.88	15.11	--	--
West South Central	W	14.65	W	14.49	14.59	W	14.77
Arkansas	W	W	W	14.66	14.60	W	W
Louisiana	--	13.95	--	--	13.95	--	--
Oklahoma	15.26	15.16	0.7%	15.26	15.16	--	--
Texas	W	W	W	14.13	14.92	W	W
Mountain	W	16.34	W	16.15	16.36	W	15.95
Arizona	14.92	15.13	-1.4%	14.92	15.13	--	--
Colorado	17.06	15.64	9.1%	17.06	15.64	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	14.66	--	W	W
New Mexico	17.79	18.09	-1.7%	17.79	18.09	--	--
Utah	17.61	W	W	17.61	16.86	--	W
Wyoming	15.96	17.53	-9.0%	15.96	17.53	--	--
Pacific Contiguous	W	--	W	16.52	--	W	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	W	--	W	16.52	--	W	--
Pacific Noncontiguous	W	W	W	12.84	12.53	W	W
Alaska	15.54	--	--	15.54	--	--	--
Hawaii	W	W	W	12.83	12.53	W	W
U.S. Total	13.20	13.40	-1.5%	13.21	13.30	13.19	13.53

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W = Withheld to avoid disclosure of individual company data.

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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, March 2019 and 2018
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.89	1.58	20.0%	1.89	1.58	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	--	1.57	--	--	1.57	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.89	1.78	6.2%	1.89	1.78	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.86	2.90	-1.4%	2.86	2.90	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.86	2.90	-1.4%	2.86	2.90	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.27	2.75	-17.0%	2.27	2.75	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.27	2.75	-17.0%	2.27	2.75	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.43	2.54	-4.3%	2.43	2.54	--	--

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.65	1.59	3.8%	1.65	1.59	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.57	1.56	0.6%	1.57	1.56	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.89	1.77	6.8%	1.89	1.77	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	2.69	2.91	-7.6%	2.69	2.91	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.69	2.91	-7.6%	2.69	2.91	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.15	2.50	-14.0%	2.15	2.50	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.15	2.50	-14.0%	2.15	2.50	--	--
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	2.45	-8.6%	2.24	2.45	--	--

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019	March 2018	Percentage Change	March 2019	March 2018	March 2019	March 2018
New England	W	4.10	W	11.00	3.66	W	4.10
Connecticut	3.98	4.13	-3.6%	--	--	3.98	4.13
Maine	W	W	W	--	--	W	W
Massachusetts	5.07	4.10	24.0%	--	3.51	5.07	4.10
New Hampshire	W	W	W	11.00	7.05	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.17	2.87	10.0%	4.03	3.48	3.11	2.82
New Jersey	3.58	2.85	26.0%	--	--	3.58	2.85
New York	3.78	3.39	12.0%	4.03	3.48	3.68	3.35
Pennsylvania	2.74	2.57	6.6%	--	--	2.74	2.57
East North Central	3.12	2.68	16.0%	3.27	2.79	3.04	2.62
Illinois	W	W	W	3.37	2.86	W	W
Indiana	W	W	W	3.31	2.73	W	W
Michigan	3.16	2.74	15.0%	3.42	2.88	3.07	2.68
Ohio	2.91	2.57	13.0%	3.04	2.62	2.88	2.55
Wisconsin	3.31	2.84	17.0%	3.31	2.84	--	--
West North Central	W	W	W	3.46	2.74	W	W
Iowa	2.55	2.38	7.1%	2.55	2.38	--	--
Kansas	5.68	2.91	95.0%	5.68	2.91	--	--
Minnesota	W	W	W	3.86	3.21	W	W
Missouri	W	W	W	3.59	2.40	W	W
Nebraska	3.86	4.30	-10.0%	3.86	4.30	--	--
North Dakota	4.38	2.75	59.0%	4.38	2.75	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.88	3.97	-2.3%	3.98	4.10	3.21	2.98
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.18	4.56	W	W
Georgia	W	W	W	3.45	3.36	W	W
Maryland	3.35	3.05	9.8%	3.31	--	3.37	3.05
North Carolina	W	W	W	4.04	3.72	W	W
South Carolina	3.47	W	W	3.47	3.27	--	W
Virginia	3.67	W	W	3.89	3.63	3.04	W
West Virginia	3.34	W	W	3.34	2.79	3.33	W
East South Central	3.24	2.92	11.0%	3.29	2.91	3.13	2.95
Alabama	W	W	W	3.24	3.01	W	W
Kentucky	W	W	W	3.58	3.01	W	W
Mississippi	W	W	W	3.27	2.87	W	W
Tennessee	3.11	2.77	12.0%	3.11	2.77	--	--
West South Central	2.93	2.69	8.9%	3.01	2.73	2.87	2.67
Arkansas	W	W	W	3.15	2.78	W	W
Louisiana	W	W	W	3.16	2.90	W	W
Oklahoma	W	W	W	3.52	2.46	W	W
Texas	2.77	2.68	3.4%	2.49	2.70	2.85	2.67
Mountain	3.47	3.55	-2.3%	3.47	3.55	3.49	3.64
Arizona	W	W	W	2.23	2.81	W	W
Colorado	W	W	W	3.98	6.69	W	W
Idaho	40.19	--	--	40.19	--	--	--
Montana	2.87	1.61	78.0%	2.87	1.61	--	--
Nevada	4.22	2.81	50.0%	4.22	2.81	--	--
New Mexico	1.45	2.48	-42.0%	1.45	2.48	--	--
Utah	4.07	2.81	45.0%	4.07	2.81	--	--
Wyoming	W	W	W	2.96	4.78	W	W
Pacific Contiguous	4.78	W	W	4.85	3.01	4.72	W
California	4.42	W	W	4.91	3.36	4.02	W
Oregon	W	W	W	3.82	1.98	W	W
Washington	W	W	W	6.64	2.89	W	W
Pacific Noncontiguous	7.72	8.44	-8.5%	7.72	8.44	--	--
Alaska	7.72	8.44	-8.5%	7.72	8.44	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.48	3.21	8.4%	3.66	3.48	3.25	2.86

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

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

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

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

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	March 2019 YTD	March 2018 YTD	Percentage Change	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	W	7.44	W	11.01	5.38	W	7.44
Connecticut	5.43	7.29	-26.0%	--	--	5.43	7.29
Maine	W	W	W	--	--	W	W
Massachusetts	W	7.70	W	10.99	3.51	W	7.70
New Hampshire	W	W	W	11.07	11.44	W	W
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.65	4.42	-17.0%	5.43	6.49	3.49	4.22
New Jersey	3.95	4.18	-5.5%	--	--	3.95	4.18
New York	4.60	5.57	-17.0%	5.43	6.49	4.24	5.16
Pennsylvania	3.08	3.85	-20.0%	--	--	3.08	3.85
East North Central	3.13	3.17	-1.3%	3.34	3.37	3.02	3.05
Illinois	W	W	W	4.08	5.03	W	W
Indiana	W	W	W	3.26	3.58	W	W
Michigan	3.15	3.14	0.3%	3.39	3.51	3.08	3.00
Ohio	2.95	2.97	-0.7%	3.10	3.06	2.92	2.95
Wisconsin	3.47	3.33	4.2%	3.47	3.33	--	--
West North Central	W	W	W	3.50	3.16	W	W
Iowa	3.17	2.91	8.9%	3.17	2.91	--	--
Kansas	4.41	3.37	31.0%	4.41	3.37	--	--
Minnesota	W	W	W	3.72	3.52	W	W
Missouri	W	W	W	3.34	2.85	W	W
Nebraska	3.79	5.06	-25.0%	3.79	5.06	--	--
North Dakota	5.07	7.15	-29.0%	5.07	7.15	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	4.15	5.07	-18.0%	4.25	5.11	3.39	4.71
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	4.42	4.73	W	W
Georgia	W	W	W	3.55	3.92	W	W
Maryland	3.88	W	W	4.26	--	3.63	W
North Carolina	W	W	W	4.26	6.07	W	W
South Carolina	W	W	W	3.66	4.49	W	W
Virginia	W	W	W	4.52	7.40	W	W
West Virginia	3.26	4.18	-22.0%	3.22	4.14	3.30	4.27
East South Central	3.35	3.40	-1.5%	3.41	3.43	3.19	3.31
Alabama	W	W	W	3.40	3.37	W	W
Kentucky	W	W	W	3.90	3.84	W	W
Mississippi	W	W	W	3.31	3.36	W	W
Tennessee	3.23	3.24	-0.3%	3.23	3.24	--	--
West South Central	2.98	3.21	-7.2%	3.03	3.28	2.94	3.16
Arkansas	W	W	W	3.06	3.16	W	W
Louisiana	W	W	W	3.19	3.43	W	W
Oklahoma	W	W	W	3.17	3.04	W	W
Texas	2.90	3.19	-9.1%	2.78	3.32	2.94	3.16
Mountain	3.74	3.45	8.4%	3.71	3.43	4.11	4.27
Arizona	W	W	W	2.85	3.21	W	W
Colorado	W	W	W	3.66	4.46	W	W
Idaho	8.11	3.32	144.0%	8.11	3.32	--	--
Montana	2.42	1.78	36.0%	2.42	1.78	--	--
Nevada	4.50	3.10	45.0%	4.50	3.10	--	--
New Mexico	2.15	3.13	-31.0%	2.15	3.13	--	--
Utah	4.55	3.06	49.0%	4.55	3.06	--	--
Wyoming	W	W	W	3.16	3.84	W	W
Pacific Contiguous	5.18	W	W	5.44	3.55	4.95	W
California	5.35	3.44	56.0%	6.01	3.87	4.83	2.98
Oregon	W	W	W	3.53	2.24	W	W
Washington	W	W	W	5.70	3.56	W	W
Pacific Noncontiguous	7.72	8.44	-8.5%	7.72	8.44	--	--
Alaska	7.72	8.44	-8.5%	7.72	8.44	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.73	4.03	-7.4%	3.89	4.18	3.52	3.84

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

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

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

Table 4.14. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Total (All Sectors) by State, March 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	8	0.76	8.8	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	8	0.76	8.8	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,490	2.69	8.6	0	--	--	0	--	--
New Jersey	58	1.79	8.2	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,432	2.72	8.6	0	--	--	0	--	--
East North Central	5,891	3.17	10.2	3,204	0.22	4.7	0	--	--
Illinois	949	3.60	19.5	1,592	0.21	4.6	0	--	--
Indiana	2,656	2.80	8.7	116	0.20	4.3	0	--	--
Michigan	199	2.50	7.7	840	0.23	4.8	0	--	--
Ohio	2,041	3.54	9.0	0	--	--	0	--	--
Wisconsin	45	2.74	7.6	656	0.24	4.9	0	--	--
West North Central	126	3.03	9.0	4,975	0.28	5.1	1,911	0.76	10.0
Iowa	59	3.33	8.1	790	0.26	4.8	0	--	--
Kansas	11	3.67	13.5	696	0.33	5.1	0	--	--
Minnesota	0	--	--	766	0.34	6.1	0	--	--
Missouri	56	2.59	9.1	1,699	0.24	4.8	0	--	--
Nebraska	0	--	--	893	0.28	4.9	0	--	--
North Dakota	0	--	--	0	--	--	1,911	0.76	10.0
South Dakota	0	--	--	132	0.35	5.4	0	--	--
South Atlantic	5,535	2.32	9.8	583	0.37	4.9	0	--	--
Delaware	12	2.64	7.7	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	618	2.32	8.5	0	--	--	0	--	--
Georgia	494	2.59	8.4	583	0.37	4.9	0	--	--
Maryland	333	2.35	10.8	0	--	--	0	--	--
North Carolina	1,125	1.78	9.5	0	--	--	0	--	--
South Carolina	553	1.73	9.4	0	--	--	0	--	--
Virginia	275	0.92	15.8	0	--	--	0	--	--
West Virginia	2,125	2.86	9.9	0	--	--	0	--	--
East South Central	3,001	2.61	9.2	963	0.30	5.2	309	0.50	13.4
Alabama	305	0.99	12.5	638	0.33	5.3	0	--	--
Kentucky	2,407	2.91	9.0	277	0.25	5.1	0	--	--
Mississippi	49	0.40	7.5	48	0.22	5.1	309	0.50	13.4
Tennessee	240	2.03	7.9	0	--	--	0	--	--
West South Central	64	2.70	9.6	4,635	0.29	5.0	1,873	1.15	17.1
Arkansas	7	0.46	9.5	846	0.22	4.8	0	--	--
Louisiana	57	2.99	9.6	309	0.28	5.0	104	0.59	15.4
Oklahoma	0	--	--	313	0.22	4.6	0	--	--
Texas	0	--	--	3,167	0.31	5.1	1,769	1.19	17.2
Mountain	1,704	0.52	12.6	4,600	0.54	8.6	27	0.51	8.7
Arizona	547	0.46	9.6	772	0.80	11.3	0	--	--
Colorado	94	0.45	10.9	1,072	0.32	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	786	0.74	9.7	27	0.51	8.7
Nevada	37	0.38	10.2	123	0.40	6.6	0	--	--
New Mexico	284	0.74	24.8	204	0.82	19.3	0	--	--
Utah	743	0.51	11.0	3	0.79	10.9	0	--	--
Wyoming	0	--	--	1,641	0.46	7.7	0	--	--
Pacific Contiguous	66	0.37	8.5	410	0.35	7.2	0	--	--
California	66	0.37	8.5	0	--	--	0	--	--
Oregon	0	--	--	75	0.26	4.9	0	--	--
Washington	0	--	--	335	0.37	7.7	0	--	--
Pacific Noncontiguous	0	--	--	121	0.21	3.8	21	0.16	10.0
Alaska	0	--	--	0	--	--	21	0.16	10.0
Hawaii	0	--	--	121	0.21	3.8	0	--	--
U.S. Total	17,885	2.52	10.0	19,491	0.34	5.9	4,141	0.91	13.4

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

Notes:
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, March 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	3,174	2.80	8.7	1,742	0.23	4.8	0	--	--
Illinois	202	3.22	9.6	130	0.20	4.5	0	--	--
Indiana	2,442	2.73	8.7	116	0.20	4.3	0	--	--
Michigan	199	2.50	7.7	840	0.23	4.8	0	--	--
Ohio	286	3.26	9.0	0	--	--	0	--	--
Wisconsin	45	2.74	7.6	656	0.24	4.9	0	--	--
West North Central	65	2.76	9.9	4,810	0.28	5.1	1,911	0.76	10.0
Iowa	0	--	--	684	0.26	4.8	0	--	--
Kansas	11	3.67	13.5	696	0.33	5.1	0	--	--
Minnesota	0	--	--	766	0.34	6.1	0	--	--
Missouri	54	2.57	9.2	1,699	0.24	4.8	0	--	--
Nebraska	0	--	--	834	0.28	4.9	0	--	--
North Dakota	0	--	--	0	--	--	1,911	0.76	10.0
South Dakota	0	--	--	132	0.35	5.4	0	--	--
South Atlantic	4,762	2.33	9.9	583	0.37	4.9	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	609	2.35	8.5	0	--	--	0	--	--
Georgia	478	2.64	8.3	583	0.37	4.9	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,091	1.81	9.6	0	--	--	0	--	--
South Carolina	553	1.73	9.4	0	--	--	0	--	--
Virginia	227	0.95	17.7	0	--	--	0	--	--
West Virginia	1,804	2.88	10.1	0	--	--	0	--	--
East South Central	2,940	2.65	9.3	963	0.30	5.2	0	--	--
Alabama	305	0.99	12.5	638	0.33	5.3	0	--	--
Kentucky	2,407	2.91	9.0	277	0.25	5.1	0	--	--
Mississippi	49	0.40	7.5	48	0.22	5.1	0	--	--
Tennessee	180	2.40	8.1	0	--	--	0	--	--
West South Central	57	2.99	9.6	2,578	0.26	4.9	687	1.71	21.5
Arkansas	0	--	--	684	0.23	4.8	0	--	--
Louisiana	57	2.99	9.6	244	0.29	5.1	104	0.59	15.4
Oklahoma	0	--	--	298	0.22	4.6	0	--	--
Texas	0	--	--	1,353	0.29	5.0	583	1.95	22.8
Mountain	1,704	0.52	12.6	3,696	0.51	8.5	27	0.51	8.7
Arizona	547	0.46	9.6	772	0.80	11.3	0	--	--
Colorado	94	0.45	10.9	1,072	0.32	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	27	0.51	8.7
Nevada	37	0.38	10.2	49	0.49	8.7	0	--	--
New Mexico	284	0.74	24.8	204	0.82	19.3	0	--	--
Utah	743	0.51	11.0	3	0.79	10.9	0	--	--
Wyoming	0	--	--	1,597	0.46	7.8	0	--	--
Pacific Contiguous	0	--	--	75	0.26	4.9	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	75	0.26	4.9	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	21	0.16	10.0
Alaska	0	--	--	0	--	--	21	0.16	10.0
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	12,703	2.30	9.8	14,448	0.34	5.9	2,646	0.97	12.7

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 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, March 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	8	0.76	8.8	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	8	0.76	8.8	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,479	2.69	8.6	0	--	--	0	--	--
New Jersey	58	1.79	8.2	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,421	2.73	8.6	0	--	--	0	--	--
East North Central	2,583	3.62	12.2	1,430	0.21	4.5	0	--	--
Illinois	614	3.80	26.9	1,430	0.21	4.5	0	--	--
Indiana	214	3.58	9.1	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	1,755	3.58	9.0	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	692	2.47	9.2	0	--	--	0	--	--
Delaware	12	2.64	7.7	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	314	2.39	10.2	0	--	--	0	--	--
North Carolina	12	0.71	5.8	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	34	0.79	8.4	0	--	--	0	--	--
West Virginia	321	2.78	8.4	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	309	0.50	13.4
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	309	0.50	13.4
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	2,042	0.32	5.1	1,187	0.87	14.8
Arkansas	0	--	--	162	0.20	4.7	0	--	--
Louisiana	0	--	--	65	0.26	4.5	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	1,814	0.33	5.2	1,187	0.87	14.8
Mountain	0	--	--	904	0.69	9.1	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	786	0.74	9.7	0	--	--
Nevada	0	--	--	74	0.34	5.1	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	44	0.52	5.8	0	--	--
Pacific Contiguous	0	--	--	335	0.37	7.7	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	335	0.37	7.7	0	--	--
Pacific Noncontiguous	0	--	--	121	0.21	3.8	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	121	0.21	3.8	0	--	--
U.S. Total	4,762	3.13	10.5	4,831	0.35	5.8	1,495	0.81	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, March 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	2	2.94	8.3	0	--	--	0	--	--
Iowa	0	--	--	0	--	--	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	2	2.94	8.3	0	--	--	0	--	--
Nebraska	0	--	--	0	--	--	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	0	--	--	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	0	--	--	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	0	--	--	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	0	--	--	0	--	--	0	--	--
Arkansas	0	--	--	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	0	--	--	0	--	--	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	2	2.94	8.3	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, March 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	134	3.50	8.4	32	0.21	5.6	0	--	--
Illinois	134	3.50	8.4	32	0.21	5.6	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	59	3.33	8.1	165	0.21	4.4	0	--	--
Iowa	59	3.33	8.1	106	0.21	4.4	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	59	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	81	1.00	10.9	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	10	0.69	7.4	0	--	--	0	--	--
Georgia	16	1.03	11.6	0	--	--	0	--	--
Maryland	19	1.72	21.5	0	--	--	0	--	--
North Carolina	22	0.79	7.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	15	0.74	7.1	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	60	1.03	7.2	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	60	1.03	7.2	0	--	--	0	--	--
West South Central	7	0.46	9.5	15	0.20	4.4	0	--	--
Arkansas	7	0.46	9.5	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	15	0.20	4.4	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	66	0.37	8.5	0	--	--	0	--	--
California	66	0.37	8.5	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	417	1.99	8.7	212	0.21	4.6	0	--	--

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 and 2019 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Chapter 5

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

Table 5.1. Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - March 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
Year to Date					
2017	333,276	316,301	233,873	1,947	885,398
2018	369,301	324,506	224,819	2,019	920,645
2019	361,684	321,725	227,411	2,026	912,846
Rolling 12 Months Ending in March					
2018	1,414,672	1,361,092	975,244	7,594	3,758,603
2019	1,456,756	1,373,960	955,668	7,745	3,794,130

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 - March 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
Year to Date					
2017	41,981	32,833	15,538	184	90,535
2018	46,499	34,198	15,309	193	96,199
2019	45,762	33,504	15,160	197	94,622
Rolling 12 Months Ending in March					
2018	182,179	145,607	67,462	737	395,986
2019	188,004	146,002	65,940	760	400,706

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

Table 5.3. Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - March 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
Year to Date					
2017	12.60	10.38	6.64	9.46	10.23
2018	12.59	10.54	6.81	9.56	10.45
2019	12.65	10.41	6.67	9.71	10.37
Rolling 12 Months Ending in March					
2018	12.88	10.70	6.92	9.71	10.54
2019	12.91	10.63	6.90	9.81	10.56

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

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

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	4,037	3,780	4,247	4,102	1,356	1,274	56	49	9,695	9,204
Connecticut	1,044	1,026	977	968	248	244	22	14	2,291	2,252
Maine	440	426	343	340	264	214	0	0	1,046	981
Massachusetts	1,752	1,547	2,126	1,975	513	485	31	32	4,423	4,039
New Hampshire	387	376	353	357	151	155	0	0	890	887
Rhode Island	235	233	288	292	65	60	2	2	589	588
Vermont	180	173	160	169	115	116	0	0	455	457
Middle Atlantic	11,024	10,769	12,638	12,587	5,896	5,832	332	324	29,890	29,512
New Jersey	2,098	2,131	3,102	3,090	567	538	26	27	5,794	5,786
New York	4,051	3,932	5,958	5,970	1,327	1,353	245	237	11,581	11,492
Pennsylvania	4,875	4,705	3,578	3,526	4,001	3,942	61	61	12,515	12,234
East North Central	15,725	14,734	15,002	14,813	15,308	15,532	86	49	46,121	45,128
Illinois	3,654	3,408	4,089	4,074	3,402	3,396	79	43	11,224	10,920
Indiana	2,792	2,604	1,918	1,896	3,520	3,513	2	2	8,231	8,016
Michigan	2,812	2,689	3,174	3,078	2,392	2,549	1	1	8,379	8,317
Ohio	4,577	4,255	3,838	3,819	4,012	4,080	4	4	12,432	12,157
Wisconsin	1,890	1,777	1,984	1,946	1,981	1,995	0	0	5,855	5,718
West North Central	9,237	8,455	8,499	8,327	7,124	7,125	5	4	24,864	23,911
Iowa	1,354	1,202	1,076	1,017	1,854	1,848	0	0	4,285	4,067
Kansas	981	933	1,210	1,195	872	847	0	0	3,063	2,975
Minnesota	2,002	1,873	1,960	1,931	1,748	1,752	2	2	5,712	5,558
Missouri	2,880	2,651	2,437	2,408	906	926	2	2	6,226	5,987
Nebraska	997	859	781	773	780	838	0	0	2,558	2,470
North Dakota	522	479	598	581	751	689	0	0	1,871	1,749
South Dakota	500	458	436	422	213	224	0	0	1,149	1,104
South Atlantic	27,196	26,585	24,353	24,672	11,312	11,615	110	103	62,971	62,974
Delaware	426	421	342	350	152	169	0	0	920	940
District of Columbia	212	206	644	703	16	15	25	27	898	950
Florida	8,567	8,224	7,273	7,277	1,307	1,329	7	6	17,154	16,836
Georgia	4,085	3,917	3,541	3,520	2,596	2,629	13	13	10,235	10,079
Maryland	2,361	2,442	2,305	2,433	309	304	46	43	5,022	5,223
North Carolina	4,507	4,437	3,734	3,711	2,178	2,246	1	0	10,421	10,394
South Carolina	2,130	2,063	1,635	1,663	2,127	2,184	0	0	5,891	5,909
Virginia	3,833	3,782	4,241	4,334	1,374	1,447	17	13	9,466	9,576
West Virginia	1,073	1,092	638	681	1,253	1,293	0	0	2,965	3,066
East South Central	9,190	8,357	6,930	6,892	7,916	8,027	0	0	24,036	23,276
Alabama	2,280	2,135	1,649	1,679	2,728	2,885	0	0	6,658	6,699
Kentucky	2,251	2,086	1,562	1,536	2,280	2,259	0	0	6,093	5,881
Mississippi	1,322	1,200	994	1,018	1,355	1,384	0	0	3,671	3,602
Tennessee	3,336	2,936	2,725	2,658	1,553	1,499	0	0	7,614	7,093
West South Central	16,029	13,960	14,640	14,599	14,790	14,019	15	15	45,474	42,594
Arkansas	1,541	1,318	891	881	1,379	1,417	0	0	3,811	3,616
Louisiana	2,117	1,902	1,809	1,829	2,684	2,628	1	1	6,611	6,360
Oklahoma	1,830	1,507	1,394	1,520	1,528	1,429	0	0	4,752	4,457
Texas	10,541	9,233	10,546	10,369	9,199	8,544	14	14	30,301	28,161
Mountain	7,125	6,821	7,597	7,623	6,579	6,379	14	13	21,316	20,836
Arizona	2,006	1,983	2,122	2,161	1,090	1,102	1	1	5,219	5,246
Colorado	1,545	1,454	1,704	1,665	1,278	1,293	9	8	4,536	4,420
Idaho	784	750	509	518	530	516	0	0	1,823	1,784
Montana	576	513	428	420	381	327	0	0	1,385	1,260
Nevada	746	748	898	952	1,012	920	1	1	2,656	2,621
New Mexico	496	467	708	702	673	627	0	0	1,877	1,796
Utah	691	646	915	889	727	734	4	4	2,338	2,273
Wyoming	281	261	312	316	888	859	0	0	1,482	1,436
Pacific Contiguous	12,448	13,072	13,062	13,801	6,353	6,615	67	68	31,929	33,555
California	6,718	7,615	9,133	9,975	3,440	3,673	57	65	19,348	21,327
Oregon	1,901	1,819	1,352	1,315	914	916	2	2	4,169	4,052
Washington	3,829	3,638	2,578	2,511	1,998	2,026	7	1	8,413	8,176
Pacific Noncontiguous	374	407	453	471	375	393	0	0	1,202	1,272
Alaska	178	190	228	236	106	113	0	0	512	539
Hawaii	196	217	225	236	269	280	0	0	690	733
U.S. Total	112,384	106,939	107,422	107,886	77,007	76,811	685	625	297,498	292,262

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 March 2019 and 2018 (Thousand Megawatthours)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	12,519	12,599	12,763	12,729	3,768	3,786	141	149	29,191	29,263
Connecticut	3,356	3,408	2,960	2,959	727	718	40	45	7,083	7,130
Maine	1,373	1,310	1,021	1,006	634	644	0	0	3,028	2,960
Massachusetts	5,192	5,299	6,347	6,288	1,438	1,438	95	96	13,072	13,121
New Hampshire	1,248	1,247	1,067	1,078	457	463	0	0	2,772	2,788
Rhode Island	753	740	876	902	167	181	7	7	1,802	1,830
Vermont	597	595	491	496	345	342	0	0	1,433	1,434
Middle Atlantic	35,252	35,444	38,605	38,814	17,691	17,667	1,034	1,087	92,583	93,012
New Jersey	6,655	6,722	9,241	9,346	1,670	1,693	80	85	17,647	17,846
New York	12,737	12,868	18,443	18,542	4,137	4,161	760	816	36,078	36,388
Pennsylvania	15,859	15,854	10,921	10,925	11,884	11,813	194	186	38,858	38,778
East North Central	50,040	49,700	44,553	44,887	44,839	44,900	202	165	139,635	139,651
Illinois	11,663	11,568	12,333	12,442	10,322	10,213	181	144	34,499	34,367
Indiana	9,089	9,144	5,776	5,834	10,095	9,939	6	6	24,965	24,923
Michigan	8,804	8,695	9,302	9,269	7,048	7,313	2	2	25,156	25,280
Ohio	14,436	14,454	11,296	11,414	11,599	11,650	13	13	37,344	37,530
Wisconsin	6,048	5,839	5,847	5,929	5,775	5,785	1	0	17,671	17,552
West North Central	29,941	29,387	25,604	25,404	21,117	20,912	15	15	76,676	75,718
Iowa	4,240	4,069	3,184	3,122	5,572	5,479	0	0	12,997	12,671
Kansas	3,309	3,260	3,684	3,640	2,620	2,608	0	0	9,614	9,508
Minnesota	6,282	6,120	5,691	5,738	5,038	5,044	8	8	17,019	16,910
Missouri	9,749	9,833	7,495	7,483	2,673	2,708	7	7	19,923	20,030
Nebraska	3,061	2,937	2,399	2,365	2,326	2,389	0	0	7,786	7,691
North Dakota	1,743	1,669	1,848	1,778	2,240	2,026	0	0	5,831	5,472
South Dakota	1,557	1,498	1,303	1,280	647	658	0	0	3,506	3,436
South Atlantic	88,250	93,576	72,088	72,956	32,991	32,967	339	317	193,668	199,817
Delaware	1,369	1,392	1,029	1,036	455	478	0	0	2,852	2,905
District of Columbia	658	663	1,896	1,987	45	42	78	75	2,677	2,768
Florida	26,030	27,185	20,987	21,182	3,774	3,851	21	18	50,812	52,237
Georgia	13,687	14,676	10,641	10,943	7,573	7,580	42	43	31,943	33,243
Maryland	7,807	7,963	6,961	7,223	886	850	141	129	15,795	16,165
North Carolina	15,077	16,368	11,202	11,333	6,223	6,213	4	1	32,507	33,914
South Carolina	7,285	8,119	4,816	4,998	6,432	6,368	0	0	18,533	19,485
Virginia	12,845	13,575	12,637	12,286	4,005	4,051	52	50	29,539	29,962
West Virginia	3,492	3,635	1,919	1,969	3,599	3,534	0	0	9,009	9,138
East South Central	30,553	33,100	21,029	21,746	23,443	23,150	0	0	75,025	77,995
Alabama	7,635	8,300	5,030	5,282	8,051	8,262	0	0	20,715	21,844
Kentucky	7,261	7,646	4,614	4,671	6,770	6,477	0	0	18,644	18,794
Mississippi	4,485	4,940	3,016	3,170	4,013	4,057	0	0	11,514	12,168
Tennessee	11,172	12,214	8,369	8,622	4,610	4,354	0	0	24,151	25,190
West South Central	51,822	54,757	45,002	45,089	44,247	42,031	47	47	141,118	141,924
Arkansas	4,933	5,164	2,709	2,750	4,117	4,129	0	0	11,759	12,042
Louisiana	7,060	7,750	5,489	5,716	8,504	8,202	3	3	21,055	21,671
Oklahoma	5,938	5,938	4,472	4,609	4,581	4,255	0	0	14,991	14,801
Texas	33,890	35,906	32,334	32,014	27,045	25,446	44	44	93,313	93,409
Mountain	23,122	21,529	22,664	22,354	19,223	18,767	49	39	65,058	62,690
Arizona	6,700	6,058	6,351	6,268	3,230	3,207	2	2	16,283	15,536
Colorado	4,751	4,578	4,978	4,878	3,740	3,751	32	23	13,502	13,230
Idaho	2,564	2,402	1,602	1,583	1,529	1,507	0	0	5,694	5,491
Montana	1,704	1,625	1,311	1,299	1,161	1,028	0	0	4,175	3,953
Nevada	2,529	2,327	2,581	2,597	2,838	2,760	2	2	7,950	7,686
New Mexico	1,689	1,604	2,088	2,058	1,996	1,802	0	0	5,774	5,464
Utah	2,289	2,093	2,801	2,714	2,134	2,160	13	13	7,237	6,980
Wyoming	896	842	952	958	2,595	2,551	0	0	4,443	4,351
Pacific Contiguous	39,005	37,973	38,044	39,102	18,995	19,473	199	201	96,243	96,750
California	21,207	20,993	26,195	27,390	10,182	10,807	179	192	57,763	59,383
Oregon	5,990	5,694	4,135	4,038	2,809	2,749	7	7	12,941	12,487
Washington	11,807	11,286	7,715	7,674	6,003	5,918	13	2	25,538	24,880
Pacific Noncontiguous	1,181	1,236	1,373	1,424	1,097	1,164	0	0	3,650	3,824
Alaska	580	599	709	722	300	347	0	0	1,588	1,669
Hawaii	602	636	663	702	797	817	0	0	2,062	2,155
U.S. Total	361,684	369,301	321,725	324,506	227,411	224,819	2,026	2,019	912,846	920,645

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, March 2019 and 2018 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	841	782	707	666	176	166	5	4	1,729	1,617
Connecticut	235	216	170	160	34	34	3	1	442	411
Maine	53	67	37	41	21	20	0	0	111	127
Massachusetts	391	348	365	336	77	70	2	2	834	755
New Hampshire	78	75	57	55	20	21	0	0	156	150
Rhode Island	54	47	52	48	10	9	0	0	117	104
Vermont	31	30	25	26	12	12	0	0	68	68
Middle Atlantic	1,682	1,673	1,458	1,469	393	387	35	36	3,569	3,565
New Jersey	335	328	373	357	58	51	2	2	767	739
New York	683	689	769	798	73	74	29	29	1,554	1,591
Pennsylvania	664	655	317	314	262	261	5	5	1,248	1,236
East North Central	2,066	1,958	1,531	1,496	1,078	1,071	6	3	4,682	4,528
Illinois	468	434	364	354	229	217	5	3	1,066	1,007
Indiana	343	316	209	199	263	250	0	0	815	766
Michigan	428	418	360	353	177	190	0	0	966	961
Ohio	556	534	384	381	259	267	0	0	1,200	1,183
Wisconsin	271	256	214	208	149	146	0	0	635	611
West North Central	1,015	969	780	775	522	503	0	0	2,317	2,247
Iowa	156	145	99	94	113	111	0	0	368	349
Kansas	126	124	124	124	65	58	0	0	315	307
Minnesota	259	238	201	191	140	129	0	0	600	559
Missouri	274	278	195	209	56	60	0	0	525	547
Nebraska	98	88	68	67	68	70	0	0	233	225
North Dakota	50	46	52	51	63	59	0	0	165	156
South Dakota	53	50	40	38	17	17	0	0	110	105
South Atlantic	3,229	3,135	2,296	2,314	713	723	9	8	6,248	6,179
Delaware	53	52	35	33	12	12	0	0	100	97
District of Columbia	29	25	76	74	1	1	3	2	109	103
Florida	1,015	967	697	693	100	104	1	0	1,812	1,765
Georgia	463	444	347	344	144	134	1	1	954	923
Maryland	317	317	239	246	24	25	3	3	584	591
North Carolina	514	496	325	320	136	130	0	0	975	947
South Carolina	272	267	169	175	123	131	0	0	564	574
Virginia	449	443	349	361	99	100	1	1	898	905
West Virginia	118	125	58	66	75	85	0	0	251	276
East South Central	1,034	962	742	740	451	454	0	0	2,226	2,155
Alabama	289	270	192	193	159	167	0	0	640	631
Kentucky	232	220	151	148	120	117	0	0	503	485
Mississippi	152	144	107	112	82	84	0	0	341	341
Tennessee	361	327	292	286	89	85	0	0	742	699
West South Central	1,751	1,555	1,205	1,226	797	752	1	1	3,754	3,534
Arkansas	148	138	78	76	81	79	0	0	307	293
Louisiana	197	186	163	171	144	150	0	0	504	507
Oklahoma	177	164	107	116	78	71	0	0	362	350
Texas	1,230	1,067	856	864	494	453	1	1	2,581	2,384
Mountain	827	797	703	712	411	389	1	1	1,942	1,899
Arizona	248	246	210	219	66	65	0	0	523	529
Colorado	187	171	169	160	93	91	1	1	450	423
Idaho	76	75	39	41	29	30	0	0	144	146
Montana	62	56	43	42	29	16	0	0	135	114
Nevada	91	94	70	77	50	50	0	0	211	221
New Mexico	62	59	69	69	39	39	0	0	170	167
Utah	70	67	73	73	46	39	0	0	190	179
Wyoming	30	29	30	30	59	60	0	0	119	119
Pacific Contiguous	1,861	1,952	1,682	1,803	554	582	6	6	4,103	4,343
California	1,296	1,406	1,332	1,462	386	434	5	5	3,019	3,307
Oregon	203	195	122	118	63	55	0	0	388	369
Washington	362	351	229	223	105	93	1	0	697	667
Pacific Noncontiguous	107	110	115	115	90	92	0	0	312	317
Alaska	40	41	46	44	17	19	0	0	103	104
Hawaii	67	70	69	71	72	73	0	0	208	213
U.S. Total	14,414	13,893	11,219	11,315	5,184	5,118	64	59	30,882	30,386

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	2,635	2,591	2,133	2,111	502	510	16	16	5,287	5,227
Connecticut	746	707	519	499	103	103	7	7	1,376	1,316
Maine	184	209	119	126	55	62	0	0	358	397
Massachusetts	1,178	1,166	1,081	1,086	214	215	8	8	2,481	2,476
New Hampshire	251	244	176	170	63	64	0	0	490	479
Rhode Island	175	159	162	155	28	29	1	1	367	343
Vermont	100	105	78	75	37	36	0	0	215	216
Middle Atlantic	5,358	5,535	4,463	4,694	1,191	1,283	113	116	11,125	11,628
New Jersey	1,062	1,048	1,108	1,126	170	176	7	7	2,346	2,358
New York	2,200	2,294	2,398	2,562	232	257	91	94	4,921	5,207
Pennsylvania	2,096	2,193	957	1,006	789	849	15	14	3,858	4,063
East North Central	6,467	6,432	4,517	4,531	3,149	3,189	14	11	14,148	14,164
Illinois	1,455	1,443	1,097	1,113	693	700	12	10	3,257	3,266
Indiana	1,094	1,054	621	601	748	711	1	1	2,464	2,366
Michigan	1,329	1,344	1,048	1,041	519	542	0	0	2,896	2,928
Ohio	1,733	1,760	1,120	1,135	750	797	1	1	3,603	3,693
Wisconsin	856	830	632	641	440	440	0	0	1,928	1,911
West North Central	3,205	3,204	2,297	2,331	1,506	1,473	1	1	7,010	7,009
Iowa	489	467	298	286	346	326	0	0	1,132	1,080
Kansas	391	413	353	374	194	192	0	0	938	979
Minnesota	800	768	570	567	389	379	1	1	1,759	1,716
Missouri	905	956	595	630	162	175	0	0	1,663	1,761
Nebraska	295	284	205	202	178	178	0	0	678	664
North Dakota	161	154	159	154	188	171	0	0	508	479
South Dakota	164	161	117	118	50	51	0	0	331	331
South Atlantic	10,328	10,908	6,808	7,013	2,052	2,157	27	24	19,215	20,102
Delaware	168	171	104	100	35	38	0	0	307	309
District of Columbia	87	83	233	230	4	3	8	7	332	324
Florida	3,096	3,258	2,027	2,083	291	308	2	2	5,416	5,650
Georgia	1,494	1,600	1,019	1,080	409	437	2	2	2,924	3,120
Maryland	1,038	1,043	731	770	71	75	11	9	1,850	1,896
North Carolina	1,707	1,775	982	991	381	382	0	0	3,070	3,148
South Carolina	903	1,035	493	544	371	403	0	0	1,767	1,982
Virginia	1,479	1,534	1,048	1,027	276	277	4	4	2,807	2,843
West Virginia	356	409	171	188	214	233	0	0	741	830
East South Central	3,394	3,595	2,251	2,285	1,340	1,329	0	0	6,985	7,210
Alabama	944	1,001	576	600	454	481	0	0	1,974	2,082
Kentucky	746	777	452	444	365	353	0	0	1,562	1,575
Mississippi	502	547	323	341	247	243	0	0	1,072	1,132
Tennessee	1,202	1,270	900	900	274	252	0	0	2,377	2,422
West South Central	5,591	5,763	3,666	3,774	2,325	2,277	3	4	11,586	11,818
Arkansas	464	506	234	236	240	239	0	0	938	981
Louisiana	641	702	486	519	430	434	0	0	1,557	1,654
Oklahoma	552	573	331	356	228	216	0	0	1,111	1,144
Texas	3,935	3,983	2,615	2,663	1,427	1,388	3	4	7,980	8,038
Mountain	2,662	2,493	2,086	2,073	1,180	1,145	5	4	5,932	5,715
Arizona	821	744	628	634	196	193	0	0	1,646	1,571
Colorado	570	534	488	463	270	265	3	2	1,331	1,264
Idaho	248	244	121	125	85	88	0	0	455	457
Montana	184	175	132	129	75	51	0	0	390	355
Nevada	302	291	203	210	142	148	0	0	647	649
New Mexico	210	196	203	200	111	105	0	0	524	501
Utah	231	218	221	220	128	122	1	1	581	561
Wyoming	96	92	89	91	173	173	0	0	358	356
Pacific Contiguous	5,794	5,649	4,940	5,046	1,650	1,680	18	17	12,402	12,393
California	4,045	3,963	3,897	4,013	1,167	1,244	16	16	9,125	9,237
Oregon	640	607	369	358	181	164	1	1	1,191	1,130
Washington	1,109	1,079	675	674	302	273	1	0	2,087	2,026
Pacific Noncontiguous	327	329	343	340	263	266	0	0	933	935
Alaska	128	128	140	135	51	59	0	0	318	323
Hawaii	199	201	203	205	213	207	0	0	615	612
U.S. Total	45,762	46,499	33,504	34,198	15,160	15,309	197	193	94,622	96,199

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.
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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, March 2019 and 2018 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	20.84	20.70	16.64	16.23	12.97	13.00	9.26	7.71	17.83	17.57
Connecticut	22.51	21.04	17.39	16.52	13.85	13.98	12.05	10.18	19.29	18.27
Maine	11.99	15.60	10.90	12.09	8.11	9.13	--	--	10.65	12.97
Massachusetts	22.29	22.49	17.18	17.00	14.94	14.41	6.48	5.97	18.87	18.70
New Hampshire	20.16	19.88	16.20	15.48	13.59	13.27	--	--	17.48	16.96
Rhode Island	23.14	20.21	18.01	16.33	16.20	15.22	19.92	16.87	19.86	17.76
Vermont	17.05	17.60	15.79	15.14	10.85	10.66	--	--	15.04	14.94
Middle Atlantic	15.26	15.54	11.54	11.67	6.66	6.64	10.70	11.05	11.94	12.08
New Jersey	15.95	15.41	12.02	11.54	10.18	9.56	8.43	8.37	13.24	12.77
New York	16.86	17.53	12.91	13.37	5.51	5.49	11.67	12.28	13.42	13.84
Pennsylvania	13.63	13.93	8.85	8.92	6.55	6.63	7.77	7.45	9.97	10.10
East North Central	13.14	13.29	10.21	10.10	7.04	6.89	6.99	6.55	10.15	10.03
Illinois	12.81	12.73	8.89	8.69	6.74	6.39	6.85	6.29	9.50	9.23
Indiana	12.29	12.13	10.88	10.52	7.48	7.12	10.94	9.88	9.91	9.55
Michigan	15.22	15.55	11.35	11.48	7.41	7.44	10.12	10.99	11.53	11.56
Ohio	12.15	12.55	10.01	9.99	6.45	6.56	7.24	7.03	9.65	9.73
Wisconsin	14.35	14.41	10.80	10.69	7.54	7.33	13.86	14.76	10.84	10.68
West North Central	10.99	11.46	9.18	9.30	7.32	7.07	8.00	8.08	9.32	9.40
Iowa	11.52	12.05	9.19	9.23	6.12	5.99	--	--	8.60	8.59
Kansas	12.84	13.34	10.28	10.39	7.47	6.84	--	--	10.30	10.30
Minnesota	12.91	12.71	10.27	9.90	8.01	7.38	9.81	8.93	10.50	10.05
Missouri	9.51	10.48	8.01	8.68	6.13	6.46	6.22	7.13	8.43	9.13
Nebraska	9.80	10.24	8.72	8.67	8.66	8.30	--	--	9.12	9.09
North Dakota	9.53	9.65	8.75	8.79	8.43	8.52	--	--	8.84	8.92
South Dakota	10.64	10.84	9.09	9.12	7.86	7.71	--	--	9.54	9.55
South Atlantic	11.88	11.79	9.43	9.38	6.30	6.22	8.08	7.35	9.92	9.81
Delaware	12.50	12.38	10.24	9.31	7.73	7.33	--	--	10.87	10.33
District of Columbia	13.66	12.18	11.80	10.54	8.41	7.93	10.55	8.79	12.14	10.81
Florida	11.84	11.75	9.59	9.53	7.62	7.82	8.53	7.89	10.56	10.48
Georgia	11.33	11.33	9.79	9.78	5.54	5.11	5.05	4.69	9.32	9.16
Maryland	13.44	12.97	10.37	10.12	7.92	8.10	7.51	6.83	11.64	11.31
North Carolina	11.41	11.17	8.71	8.64	6.23	5.81	8.49	8.75	9.36	9.11
South Carolina	12.75	12.97	10.35	10.55	5.78	6.00	--	--	9.57	9.71
Virginia	11.70	11.71	8.23	8.33	7.20	6.90	8.04	8.54	9.49	9.45
West Virginia	10.97	11.43	9.16	9.68	5.94	6.58	--	--	8.46	9.00
East South Central	11.25	11.51	10.71	10.73	5.69	5.65	--	--	9.26	9.26
Alabama	12.68	12.65	11.63	11.50	5.84	5.80	--	--	9.62	9.41
Kentucky	10.29	10.55	9.67	9.60	5.28	5.19	--	--	8.25	8.24
Mississippi	11.51	12.04	10.78	11.05	6.04	6.07	--	--	9.29	9.47
Tennessee	10.82	11.15	10.71	10.78	5.75	5.67	--	--	9.75	9.85
West South Central	10.93	11.14	8.23	8.40	5.39	5.36	6.74	8.67	8.26	8.30
Arkansas	9.59	10.47	8.77	8.64	5.88	5.55	10.37	12.64	8.06	8.09
Louisiana	9.29	9.79	9.02	9.36	5.36	5.69	9.14	9.90	7.62	7.97
Oklahoma	9.66	10.85	7.70	7.61	5.08	4.98	--	--	7.61	7.86
Texas	11.67	11.56	8.12	8.33	5.38	5.30	6.57	8.58	8.52	8.47
Mountain	11.61	11.68	9.25	9.34	6.25	6.10	9.31	9.35	9.11	9.12
Arizona	12.35	12.39	9.88	10.12	6.06	5.89	8.58	8.85	10.03	10.09
Colorado	12.10	11.72	9.92	9.63	7.29	7.04	8.89	8.76	9.92	9.56
Idaho	9.66	9.99	7.71	7.99	5.47	5.85	--	--	7.90	8.21
Montana	10.78	10.84	10.10	10.03	7.69	4.94	--	--	9.72	9.04
Nevada	12.27	12.62	7.80	8.08	4.92	5.43	7.41	7.89	7.96	8.45
New Mexico	12.58	12.67	9.73	9.89	5.78	6.18	--	--	9.07	9.32
Utah	10.17	10.44	7.94	8.21	6.34	5.26	10.57	10.67	8.11	7.90
Wyoming	10.83	11.05	9.54	9.59	6.66	6.94	--	--	8.06	8.27
Pacific Contiguous	14.95	14.93	12.88	13.06	8.72	8.80	8.38	8.43	12.85	12.94
California	19.30	18.46	14.58	14.66	11.23	11.81	8.21	8.38	15.60	15.51
Oregon	10.66	10.74	9.02	8.98	6.91	6.03	9.05	9.24	9.30	9.11
Washington	9.46	9.65	8.88	8.86	5.24	4.59	9.44	10.24	8.28	8.16
Pacific Noncontiguous	28.54	27.11	25.47	24.34	23.92	23.32	--	--	25.94	24.91
Alaska	22.53	21.45	20.19	18.75	16.33	16.81	--	--	20.21	19.29
Hawaii	33.99	32.05	30.80	29.94	26.91	25.96	--	--	30.19	29.04
U.S. Total	12.83	12.99	10.44	10.49	6.73	6.66	9.33	9.43	10.38	10.40

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

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

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD	March 2019 YTD	March 2018 YTD
New England	21.05	20.56	16.72	16.58	13.32	13.46	11.52	10.61	18.11	17.86
Connecticut	22.23	20.76	17.53	16.86	14.22	14.34	18.28	14.70	19.42	18.45
Maine	13.42	15.94	11.63	12.55	8.68	9.59	--	--	11.82	13.41
Massachusetts	22.69	22.01	17.03	17.27	14.91	14.98	8.15	8.22	18.98	18.87
New Hampshire	20.08	19.60	16.49	15.79	13.86	13.82	--	--	17.67	17.17
Rhode Island	23.29	21.42	18.45	17.14	17.04	15.99	19.35	16.79	20.34	18.76
Vermont	16.81	17.64	15.80	15.11	10.84	10.66	--	--	15.03	15.10
Middle Atlantic	15.20	15.62	11.56	12.09	6.73	7.26	10.90	10.66	12.02	12.50
New Jersey	15.96	15.60	11.98	12.05	10.18	10.41	8.59	8.59	13.30	13.21
New York	17.27	17.82	13.00	13.82	5.61	6.18	11.97	11.54	13.64	14.31
Pennsylvania	13.22	13.83	8.76	9.21	6.64	7.19	7.68	7.75	9.93	10.48
East North Central	12.92	12.94	10.14	10.10	7.02	7.10	7.01	6.84	10.13	10.14
Illinois	12.48	12.48	8.89	8.95	6.71	6.85	6.83	6.63	9.44	9.50
Indiana	12.04	11.52	10.74	10.30	7.41	7.15	10.84	10.44	9.87	9.49
Michigan	15.10	15.46	11.27	11.23	7.36	7.41	10.19	10.85	11.51	11.58
Ohio	12.00	12.18	9.91	9.94	6.46	6.84	7.00	6.95	9.65	9.84
Wisconsin	14.16	14.22	10.80	10.81	7.62	7.60	13.44	13.52	10.91	10.89
West North Central	10.71	10.90	8.97	9.17	7.13	7.04	8.03	8.08	9.14	9.26
Iowa	11.52	11.48	9.34	9.17	6.21	5.95	--	--	8.71	8.52
Kansas	11.83	12.67	9.58	10.26	7.40	7.37	--	--	9.76	10.29
Minnesota	12.73	12.55	10.02	9.89	7.71	7.52	9.63	9.17	10.34	10.15
Missouri	9.29	9.73	7.93	8.42	6.08	6.46	6.30	6.86	8.35	8.79
Nebraska	9.64	9.67	8.55	8.53	7.63	7.46	--	--	8.70	8.63
North Dakota	9.23	9.24	8.61	8.65	8.40	8.46	--	--	8.71	8.76
South Dakota	10.56	10.77	9.01	9.25	7.67	7.75	--	--	9.45	9.62
South Atlantic	11.70	11.66	9.44	9.61	6.22	6.54	7.95	7.59	9.92	10.06
Delaware	12.26	12.25	10.07	9.69	7.79	8.05	--	--	10.76	10.65
District of Columbia	13.22	12.59	12.31	11.56	8.48	8.18	10.40	9.17	12.42	11.69
Florida	11.90	11.98	9.66	9.83	7.72	8.00	8.39	8.30	10.66	10.82
Georgia	10.92	10.90	9.58	9.87	5.40	5.77	4.67	5.65	9.15	9.38
Maryland	13.29	13.09	10.51	10.66	7.99	8.78	7.46	6.93	11.71	11.73
North Carolina	11.32	10.84	8.77	8.74	6.12	6.14	8.30	8.64	9.45	9.28
South Carolina	12.40	12.74	10.23	10.89	5.77	6.33	--	--	9.53	10.17
Virginia	11.51	11.30	8.29	8.36	6.90	6.84	8.05	8.29	9.50	9.49
West Virginia	10.19	11.25	8.93	9.56	5.94	6.59	--	--	8.22	9.08
East South Central	11.11	10.86	10.71	10.51	5.72	5.74	--	--	9.31	9.24
Alabama	12.36	12.06	11.44	11.36	5.64	5.82	--	--	9.53	9.53
Kentucky	10.27	10.16	9.80	9.51	5.39	5.45	--	--	8.38	8.38
Mississippi	11.18	11.07	10.72	10.77	6.15	6.00	--	--	9.31	9.30
Tennessee	10.76	10.40	10.76	10.43	5.94	5.79	--	--	9.84	9.61
West South Central	10.79	10.53	8.15	8.37	5.26	5.42	6.70	8.51	8.21	8.33
Arkansas	9.40	9.79	8.64	8.58	5.84	5.80	11.13	11.92	7.98	8.14
Louisiana	9.08	9.05	8.85	9.08	5.05	5.29	9.02	9.97	7.39	7.63
Oklahoma	9.29	9.65	7.41	7.72	4.98	5.08	--	--	7.41	7.73
Texas	11.61	11.09	8.09	8.32	5.28	5.46	6.53	8.39	8.55	8.61
Mountain	11.51	11.58	9.20	9.27	6.14	6.10	9.51	9.43	9.12	9.12
Arizona	12.25	12.28	9.89	10.12	6.08	6.00	8.84	8.99	10.11	10.11
Colorado	12.00	11.67	9.81	9.49	7.21	7.07	9.25	8.88	9.86	9.56
Idaho	9.68	10.15	7.58	7.91	5.57	5.87	--	--	7.99	8.33
Montana	10.77	10.74	10.04	9.96	6.46	4.91	--	--	9.35	8.97
Nevada	11.95	12.50	7.88	8.09	4.99	5.37	7.38	7.97	8.14	8.45
New Mexico	12.44	12.23	9.71	9.71	5.55	5.84	--	--	9.07	9.17
Utah	10.10	10.40	7.88	8.11	5.98	5.64	10.57	10.69	8.03	8.04
Wyoming	10.66	10.91	9.38	9.47	6.68	6.80	--	--	8.06	8.18
Pacific Contiguous	14.85	14.88	12.99	12.90	8.69	8.63	8.89	8.60	12.89	12.81
California	19.07	18.88	14.88	14.65	11.46	11.51	8.83	8.57	15.80	15.55
Oregon	10.69	10.66	8.92	8.87	6.45	5.97	9.03	9.21	9.20	9.05
Washington	9.39	9.56	8.75	8.78	5.03	4.61	9.53	9.79	8.17	8.14
Pacific Noncontiguous	27.68	26.64	24.97	23.87	24.00	22.87	--	--	25.55	24.46
Alaska	22.01	21.41	19.68	18.73	16.90	17.08	--	--	20.01	19.35
Hawaii	33.14	31.57	30.62	29.16	26.67	25.33	--	--	29.83	28.42
U.S. Total	12.65	12.59	10.41	10.54	6.67	6.81	9.71	9.56	10.37	10.45

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

Table 5.7. Number of Ultimate Customers Served by Sector: 2009 - March 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
Rolling 12 Months Ending in March					
2018	132,908,064	18,405,204	829,653	85	152,143,005
2019	134,262,130	18,576,913	825,536	85	153,664,664

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: March 2019 and 2018

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	6,633,495	6,351,423	920,343	891,991	20,484	20,238	6	6	7,574,328	7,263,658
Connecticut	1,509,380	1,503,458	154,350	153,973	4,187	4,302	3	3	1,667,920	1,661,736
Maine	701,432	708,641	98,627	98,848	3,021	3,068	0	0	803,080	810,557
Massachusetts	3,033,386	2,776,444	440,687	415,882	8,216	7,816	2	2	3,482,291	3,200,144
New Hampshire	625,736	621,596	108,172	107,612	3,144	3,167	0	0	737,052	732,375
Rhode Island	447,896	426,979	61,257	58,741	1,775	1,750	1	1	510,929	487,471
Vermont	315,665	314,305	57,250	56,935	141	135	0	0	373,056	371,375
Middle Atlantic	16,246,683	16,108,779	2,356,688	2,330,161	29,435	29,756	20	20	18,632,826	18,468,716
New Jersey	3,590,645	3,534,410	524,185	513,765	11,669	11,556	6	6	4,126,505	4,059,737
New York	7,232,926	7,180,088	1,116,138	1,104,906	6,589	6,721	8	8	8,355,661	8,291,723
Pennsylvania	5,423,112	5,394,281	716,365	711,490	11,177	11,479	6	6	6,150,660	6,117,256
East North Central	20,363,560	20,241,636	2,511,085	2,499,360	46,481	46,452	10	9	22,921,136	22,787,457
Illinois	5,333,542	5,311,365	618,882	614,579	3,988	4,009	3	3	5,956,415	5,929,956
Indiana	2,882,326	2,852,518	353,000	352,043	15,079	15,188	1	1	3,250,406	3,219,750
Michigan	4,407,485	4,383,372	551,303	549,716	NM	NM	2	2	4,964,290	4,938,512
Ohio	5,008,822	4,986,088	629,910	627,256	16,980	17,057	2	2	5,655,714	5,630,403
Wisconsin	2,731,385	2,708,293	357,990	355,766	NM	NM	2	1	3,094,311	3,068,836
West North Central	9,611,840	9,521,741	1,471,658	1,458,241	110,559	109,257	3	3	11,194,060	11,089,242
Iowa	1,406,706	1,395,420	246,236	244,849	NM	NM	0	0	1,659,681	1,647,016
Kansas	1,282,624	1,269,150	236,876	234,749	24,801	24,930	0	0	1,544,301	1,528,829
Minnesota	2,431,092	2,407,523	293,408	290,964	NM	NM	1	1	2,732,612	2,706,441
Missouri	2,835,840	2,810,123	384,443	379,723	6,648	6,822	2	2	3,226,933	3,196,670
Nebraska	866,156	857,227	161,721	160,943	52,475	51,812	0	0	1,080,352	1,069,982
North Dakota	382,621	379,869	74,443	73,555	8,769	8,001	0	0	465,833	461,425
South Dakota	406,801	402,429	74,531	73,458	NM	NM	0	0	484,348	478,879
South Atlantic	28,249,381	27,926,173	3,838,338	3,801,253	78,002	78,011	13	13	32,165,734	31,805,450
Delaware	433,805	427,575	55,136	54,415	568	598	0	0	489,509	482,588
District of Columbia	280,375	272,986	26,449	26,236	1	1	3	3	306,828	299,226
Florida	9,480,908	9,404,999	1,248,896	1,241,819	20,235	20,239	2	2	10,750,041	10,667,059
Georgia	4,434,703	4,367,109	589,695	583,587	19,220	19,237	1	1	5,043,619	4,969,934
Maryland	2,349,639	2,330,698	255,015	253,140	8,772	8,730	5	5	2,613,431	2,592,573
North Carolina	4,619,857	4,546,328	713,773	701,583	9,735	9,787	1	1	5,343,366	5,257,699
South Carolina	2,325,158	2,284,350	371,402	366,372	4,156	4,220	0	0	2,700,716	2,654,942
Virginia	3,464,655	3,430,695	432,838	430,081	3,788	3,733	1	1	3,901,282	3,864,510
West Virginia	860,281	861,433	145,134	144,020	11,527	11,466	0	0	1,016,942	1,016,919
East South Central	8,530,377	8,447,287	1,410,824	1,397,775	22,023	22,701	0	0	9,963,224	9,867,763
Alabama	2,273,096	2,252,024	372,263	370,529	8,155	8,183	0	0	2,653,514	2,630,736
Kentucky	2,014,074	1,994,190	306,005	301,964	5,484	6,169	0	0	2,325,563	2,302,323
Mississippi	1,324,681	1,313,555	240,936	239,470	7,548	7,511	0	0	1,573,165	1,560,536
Tennessee	2,918,526	2,887,518	491,620	485,812	836	838	0	0	3,410,982	3,374,168
West South Central	16,390,531	16,153,137	2,241,034	2,293,613	290,029	186,581	6	6	18,921,600	18,633,337
Arkansas	1,404,418	1,392,263	194,384	191,902	29,812	29,404	2	2	1,628,616	1,613,571
Louisiana	2,105,650	2,096,263	293,706	292,561	18,341	18,461	1	1	2,417,698	2,407,286
Oklahoma	1,799,855	1,780,567	279,498	285,071	18,562	17,872	0	0	2,097,915	2,083,510
Texas	11,080,608	10,884,044	1,473,446	1,524,079	223,314	120,844	3	3	12,777,371	12,528,970
Mountain	9,941,892	9,777,545	1,406,443	1,389,484	86,251	85,575	5	5	11,434,591	11,252,609
Arizona	2,839,558	2,795,351	324,484	320,497	6,376	6,414	2	2	3,170,420	3,122,264
Colorado	2,356,409	2,315,995	366,299	362,993	14,099	13,920	1	1	2,736,808	2,692,909
Idaho	755,151	737,832	111,659	109,956	28,455	28,179	0	0	895,265	875,967
Montana	517,294	510,824	111,614	110,205	NM	NM	0	0	635,113	627,097
Nevada	1,196,113	1,173,747	166,693	163,742	NM	NM	1	1	1,366,075	1,340,763
New Mexico	909,580	900,843	140,538	139,144	8,509	8,478	0	0	1,058,627	1,048,465
Utah	1,091,644	1,069,048	126,265	124,227	9,535	9,520	1	1	1,227,445	1,202,796
Wyoming	276,143	273,905	58,891	58,720	9,804	9,723	0	0	344,838	342,348
Pacific Contiguous	18,712,179	18,661,023	2,343,081	2,349,168	199,501	203,984	19	21	21,254,780	21,214,196
California	13,835,306	13,845,845	1,701,872	1,711,230	144,932	152,322	12	13	15,682,122	15,709,410
Oregon	1,772,145	1,754,433	241,360	240,678	26,176	23,440	2	2	2,039,683	2,018,553
Washington	3,104,728	3,060,745	399,849	397,260	28,393	28,222	5	6	3,532,975	3,486,233
Pacific Noncontiguous	727,239	724,016	114,209	113,418	NM	NM	0	0	843,637	839,597
Alaska	289,766	288,048	54,422	53,593	NM	NM	0	0	345,564	343,015
Hawaii	437,473	435,968	59,787	59,825	813	789	0	0	498,073	496,582
U.S. Total	135,407,177	133,912,760	18,613,703	18,524,464	884,954	784,718	82	83	154,905,916	153,222,025

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), February 2019 to March 2019

		As of End of February 2019	Activity During March 2019 as Reported to EIA		As of End of March 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	95,110.6	1,374.5	84.1	96,401.0	1,290.4	2,135.0	7,699.7	365.8	12,384.5	0.0	0.0	365.8	12,384.5	96,766.8	108,785.5
..... Offshore Wind (Summer Capacity)	Utility Scale Facilities	29.3	0.0	0.0	29.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	29.3	29.3
..... Wind (Summer Capacity)	Utility Scale Facilities	95,139.9	1,374.5	84.1	96,430.3	1,290.4	2,135.0	7,699.7	365.8	12,384.5	0.0	0.0	365.8	12,384.5	96,796.1	108,814.8
..... Solar Photovoltaic	Utility Scale Facilities	30,360.3	831.9	55.5	31,136.7	776.4	966.2	4,560.7	219.0	6,020.9	0.0	0.0	219.0	6,020.9	31,355.7	37,157.6
..... Solar Thermal without Energy Storage	Utility Scale Facilities	1,352.5	0.0	0.0	1,352.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,352.5	1,352.5
..... Solar Thermal with Energy Storage	Utility Scale Facilities	405.4	0.0	0.0	405.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	405.4	405.4
..... Solar Subtotal	Utility Scale Facilities	32,118.2	831.9	55.5	32,894.6	776.4	966.2	4,560.7	219.0	6,020.9	0.0	0.0	219.0	6,020.9	33,113.6	38,915.5
..... Conventional Hydroelectric	Utility Scale Facilities	79,883.1	21.4	42.8	79,861.7	-21.4	-31.4	50.5	0.0	160.9	0.0	136.8	0.0	24.1	79,861.7	79,885.8
..... Wood/Wood Waste Biomass	Utility Scale Facilities	8,763.5	44.0	294.6	8,512.9	-250.6	-241.8	-307.2	0.0	202.4	12.4	24.8	-12.4	177.6	8,500.5	8,690.5
..... Landfill Gas	Utility Scale Facilities	2,052.8	0.0	0.0	2,052.8	0.0	-14.6	-21.4	2.6	9.0	0.0	7.6	2.6	1.4	2,055.4	2,054.2
..... Municipal Solid Waste	Utility Scale Facilities	2,234.1	0.0	34.8	2,199.3	-34.8	-35.7	-45.7	0.0	0.0	0.0	10.0	0.0	-10.0	2,199.3	2,189.3
..... Other Waste Biomass	Utility Scale Facilities	745.6	10.4	0.9	755.1	9.5	-18.0	-34.0	2.0	48.0	0.0	6.5	2.0	41.5	757.1	796.6
..... Biomass Sources Subtotal	Utility Scale Facilities	13,796.0	54.4	330.3	13,520.1	-275.9	-310.1	-408.3	4.6	259.4	12.4	48.9	-7.8	210.5	13,512.3	13,730.6
..... Geothermal	Utility Scale Facilities	2,431.7	0.0	0.0	2,431.7	0.0	-109.1	-67.6	7.9	7.9	0.0	0.0	7.9	7.9	2,439.6	2,439.6
... Renewable Sources Subtotal	**Utility Scale Facilities**	**223,368.9**	**2,282.2**	**512.7**	**225,138.4**	**1,769.5**	**2,650.6**	**11,835.0**	**597.3**	**18,833.6**	**12.4**	**185.7**	**584.9**	**18,647.9**	**225,723.3**	**243,786.3**
..... Natural Gas Fired Combined Cycle	Utility Scale Facilities	265,045.1	11,036.5	9,594.6	266,487.0	1,441.9	2,726.4	19,293.9	75.0	6,965.2	0.0	690.0	75.0	6,275.2	266,562.0	272,762.2
..... Natural Gas Fired Combustion Turbine	Utility Scale Facilities	127,874.7	265.7	272.8	127,867.6	-7.1	47.3	1,443.1	346.3	1,882.9	0.0	447.5	346.3	1,435.4	128,213.9	129,303.0
..... Natural Gas Steam Turbine	Utility Scale Facilities	74,165.0	126.0	1,213.0	73,078.0	-1,087.0	-1,661.2	-5,038.2	0.0	0.0	0.0	2,131.2	0.0	-2,131.2	73,078.0	70,946.8
..... Natural Gas Internal Combustion Engine	Utility Scale Facilities	4,697.9	194.4	33.8	4,858.5	160.6	224.3	464.2	22.9	253.2	0.0	12.7	22.9	240.5	4,881.4	5,099.0
..... 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	142.4	0.0	0.5	141.9	-0.5	19.9	20.1	3.7	48.1	0.0	0.0	3.7	48.1	145.6	190.0
..... Natural Gas Subtotal	Utility Scale Facilities	472,035.1	11,626.9	11,114.7	472,547.3	512.2	1,361.0	16,187.4	447.9	9,149.4	0.0	3,281.4	447.9	5,868.0	472,995.2	478,415.3
..... Conventional Steam Coal	Utility Scale Facilities	240,156.1	9.9	1,174.1	238,991.9	-1,164.2	-3,725.9	-10,358.1	0.0	82.0	146.0	3,811.6	-146.0	-3,729.6	238,845.9	235,262.3
..... 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	240,912.1	9.9	1,174.1	239,747.9	-1,164.2	-3,725.9	-10,358.1	0.0	82.0	146.0	3,811.6	-146.0	-3,729.6	239,601.9	236,018.3
..... Petroleum Coke	Utility Scale Facilities	1,524.7	7.5	0.0	1,532.2	7.5	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	31,477.6	270.3	98.2	31,649.7	172.1	123.4	-84.6	8.8	36.2	146.0	181.3	-137.2	-145.1	31,512.5	31,504.6
..... Other Gases	Utility Scale Facilities	2,367.8	0.0	0.0	2,367.8	0.0	-8.0	-8.0	0.0	10.0	0.0	0.0	0.0	10.0	2,367.8	2,377.8
... Fossil Fuels Subtotal	**Utility Scale Facilities**	**748,317.3**	**11,914.6**	**12,387.0**	**747,844.9**	**-472.4**	**-2,245.2**	**5,741.0**	**456.7**	**9,277.6**	**292.0**	**7,341.3**	**164.7**	**1,936.3**	**748,009.6**	**749,781.2**
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,857.2	0.0	0.0	22,857.2	0.0	1.8	46.8	0.0	150.6	0.0	0.0	0.0	150.6	22,857.2	23,007.8
..... 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	866.7	29.4	5.1	891.0	24.3	49.0	188.2	14.8	122.5	0.0	0.0	14.8	122.5	905.8	1,013.5
... Energy Storage Subtotal	**Utility Scale Facilities**	**23,770.9**	**29.4**	**5.1**	**23,795.2**	**24.3**	**50.8**	**235.0**	**14.8**	**273.1**	**0.0**	**0.0**	**14.8**	**273.1**	**23,810.0**	**24,068.3**
... Nuclear	**Utility Scale Facilities**	**99,445.8**	**0.1**	**68.8**	**99,377.1**	**-68.7**	**22.2**	**-275.5**	**155.0**	**155.0**	**0.0**	**1,480.0**	**155.0**	**-1,325.0**	**99,532.1**	**98,052.1**
... All Other	**Utility Scale Facilities**	**1,526.5**	**0.0**	**73.0**	**1,453.5**	**-73.0**	**-727.8**	**-720.9**	**0.0**	**47.9**	**0.0**	**0.0**	**0.0**	**47.9**	**1,453.5**	**1,501.4**
TOTAL	**UTILITY SCALE FACILITIES**	**1,096,429.4**	**14,226.3**	**13,046.6**	**1,097,609.1**	**1,179.7**	**-249.4**	**16,814.6**	**1,223.8**	**28,587.2**	**304.4**	**9,007.0**	**919.4**	**19,580.2**	**1,098,528.5**	**1,117,189.3**
..... Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	20,125.8			20,584.9	459.1	1,063.5	3,536.9								
..... Estimated Total Solar Photovoltaic	All Facilities	50,486.1			51,721.6	1,235.5	2,029.7	8,097.6								
... Estimated Total Solar	**All Facilities**	**52,244.0**			**53,479.5**	**1,235.5**	**2,029.7**	**8,097.6**								

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 - March 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

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 - March 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

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, March 2019 and 2018 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	5,887.2	5,719.7	23,234.4	21,217.2	1,797.4	1,797.4	37.8	24.7	4,001.7	4,018.2	48.0	320.9	35,006.5	33,098.1
Connecticut	410.6	389.2	7,307.5	6,113.4	29.4	29.4	1.6	1.6	2,073.1	2,087.8	26.0	298.9	9,848.2	8,920.3
Maine	2,347.1	2,345.6	2,574.8	2,536.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,960.1	4,920.3
Massachusetts	1,395.0	1,312.8	9,130.7	8,375.4	1,768.0	1,768.0	17.0	4.9	677.2	679.0	0.0	0.0	12,987.9	12,140.1
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	1,833.6	1,831.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,983.8	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	11,174.7	10,873.7	72,789.5	68,452.7	3,411.6	3,409.8	131.5	72.9	18,700.2	19,310.2	11.2	420.9	106,218.7	102,540.2
New Jersey	978.4	919.0	12,433.3	12,378.6	420.0	420.0	42.1	1.5	3,500.2	4,107.9	11.2	11.2	17,385.2	17,838.2
New York	7,340.4	7,077.9	26,944.4	25,992.3	1,408.6	1,406.8	41.0	21.0	5,403.0	5,405.3	0.0	221.7	41,137.4	40,125.0
Pennsylvania	2,855.9	2,876.8	33,411.8	30,081.8	1,583.0	1,583.0	48.4	50.4	9,797.0	9,797.0	0.0	188.0	47,696.1	44,577.0
East North Central	12,737.1	11,682.1	112,388.4	114,443.2	2,179.0	2,134.0	169.7	167.7	19,034.4	19,029.4	187.1	188.1	146,695.7	147,644.5
Illinois	4,969.7	4,432.9	29,059.2	29,000.9	0.0	0.0	112.7	112.7	11,582.4	11,577.4	78.0	78.0	45,802.0	45,201.9
Indiana	2,657.2	2,442.8	23,902.4	23,107.4	0.0	0.0	23.0	22.0	0.0	0.0	88.0	89.0	26,670.6	25,661.2
Michigan	2,823.2	2,636.1	20,468.4	20,782.1	2,179.0	2,134.0	1.0	0.0	4,122.2	4,122.2	0.0	0.0	29,593.8	29,674.4
Ohio	1,051.3	930.4	25,926.0	27,023.4	0.0	0.0	33.0	33.0	2,134.0	2,134.0	0.0	0.0	29,144.3	30,120.8
Wisconsin	1,235.7	1,239.9	13,032.4	14,529.4	0.0	0.0	0.0	0.0	1,195.8	1,195.8	21.1	21.1	15,485.0	16,986.2
West North Central	30,004.2	26,776.6	59,131.7	60,659.0	657.0	657.0	5.1	3.2	5,443.4	5,443.4	24.5	24.5	95,265.9	93,563.7
Iowa	8,972.1	7,320.8	9,801.3	9,927.5	0.0	0.0	1.1	0.0	601.4	601.4	0.0	0.0	19,375.9	17,849.7
Kansas	5,678.7	5,136.2	9,025.4	9,775.8	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	15,929.9	16,137.8
Minnesota	5,228.9	4,997.5	10,153.5	10,090.6	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,058.8	16,764.5
Missouri	1,579.0	1,567.9	17,630.0	18,391.8	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,058.2	21,808.9
Nebraska	2,327.9	1,724.6	6,196.6	6,148.4	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	9,294.5	8,643.0
North Dakota	3,740.8	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	8,379.7	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	20,509.2	19,097.5	163,585.1	158,242.7	7,905.2	7,905.2	92.5	94.5	24,652.6	24,602.6	408.7	446.7	217,153.3	210,389.2
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	28.9	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	37.9	32.0
Florida	3,145.1	2,468.5	54,262.7	51,921.9	0.0	0.0	14.0	14.0	3,572.0	3,572.0	348.7	348.7	61,342.5	58,325.1
Georgia	4,008.9	3,964.5	26,970.9	26,964.0	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	0.0	44.0	36,904.0	36,896.7
Maryland	1,196.3	1,149.4	11,828.1	10,278.7	0.0	0.0	7.0	13.0	1,725.8	1,707.8	6.0	0.0	14,763.2	13,148.9
North Carolina	6,786.7	6,148.1	22,104.9	21,644.3	86.0	86.0	1.0	1.0	5,149.6	5,117.6	54.0	54.0	34,182.2	33,051.0
South Carolina	2,217.5	2,159.7	12,164.3	11,435.2	2,716.0	2,716.0	4.0	0.0	6,576.2	6,576.2	0.0	0.0	23,678.0	22,887.1
Virginia	2,051.2	2,111.1	19,140.7	18,894.9	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	28,000.9	27,815.0
West Virginia	1,027.1	1,027.1	13,774.1	13,763.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	14,866.7	14,855.9
East South Central	8,793.2	8,769.6	63,939.9	64,377.8	1,616.3	1,616.3	1.0	1.0	11,294.1	10,984.1	1.4	1.4	85,645.9	85,750.2
Alabama	4,085.1	4,156.0	20,576.0	20,482.4	0.0	0.0	1.0	1.0	5,370.4	5,060.4	0.0	0.0	30,032.5	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	12,883.3	13,882.9	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	14,748.7	15,720.6
Tennessee	2,999.7	2,932.9	12,190.3	11,138.2	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,329.0	20,210.1
West South Central	39,165.4	35,955.2	138,953.4	139,489.0	286.0	286.0	99.8	98.3	8,910.7	8,910.7	512.5	512.7	187,927.8	185,251.9
Arkansas	1,697.1	1,694.3	11,202.7	11,183.0	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,745.6	14,723.1
Louisiana	615.5	683.2	20,012.9	20,596.7	0.0	0.0	0.5	0.5	2,132.9	2,132.9	288.5	288.7	23,050.3	23,702.0
Oklahoma	9,041.0	8,463.1	18,091.5	18,577.0	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,390.5	27,298.1
Texas	27,811.8	25,114.6	89,646.3	89,132.3	0.0	0.0	99.3	97.8	4,960.0	4,960.0	224.0	224.0	122,741.4	119,528.7
Mountain	27,350.8	26,219.3	62,072.2	62,292.8	778.8	778.8	50.6	23.6	3,937.0	3,937.0	127.2	126.3	94,316.6	93,377.8
Arizona	5,088.8	5,015.8	19,175.3	19,407.3	216.3	216.3	42.0	20.0	3,937.0	3,937.0	0.0	0.0	28,459.4	28,596.4
Colorado	4,933.6	4,362.6	11,109.2	11,119.2	562.5	562.5	5.0	1.0	0.0	0.0	9.3	9.3	16,619.6	16,054.6
Idaho	4,069.9	4,011.9	1,127.6	1,127.6	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,212.3	5,154.3
Montana	3,562.2	3,472.8	2,741.9	2,741.9	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,348.1	6,258.7
Nevada	3,726.7	3,572.5	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	11,370.6
New Mexico	2,482.7	2,388.8	5,962.1	5,966.8	0.0	0.0	3.6	2.6	0.0	0.0	0.0	0.0	8,448.4	8,358.2
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	68,306.4	67,081.4	47,530.0	48,707.9	4,225.9	4,225.9	242.8	175.2	3,403.0	3,417.0	106.3	106.3	123,814.4	123,713.7
California	31,284.3	30,150.9	38,462.1	39,630.0	3,911.9	3,911.9	231.6	162.8	2,240.0	2,240.0	106.3	106.3	76,236.2	76,201.9
Oregon	12,264.8	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	16,595.9	16,542.8
Washington	24,757.3	24,710.8	4,741.8	4,759.8	314.0	314.0	6.2	7.4	1,163.0	1,177.0	0.0	0.0	30,982.3	30,969.0
Pacific Noncontiguous	1,210.2	1,128.3	4,220.3	4,221.6	0.0	0.0	107.2	88.7	0.0	0.0	26.6	26.6	5,564.3	5,465.2
Alaska	538.2	538.2	2,162.0	2,163.3	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,746.4	2,747.7
Hawaii	672.0	590.1	2,058.3	2,058.3	0.0	0.0	61.0	42.5	0.0	0.0	26.6	26.6	2,817.9	2,717.5
U.S. Total	225,138.4	213,303.4	747,844.9	742,103.9	22,857.2	22,810.4	938.0	749.8	99,377.1	99,652.6	1,453.5	2,174.4	1,097,609.1	1,080,794.5

NM = Not meaningful due to large relative standard error.
Values are preliminary.

NOTES:
Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report. This exclusion may represent a significant portion of 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, March 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	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	1,424.8	1,402.1	972.1	826.7	0.0	0.0	1,960.1	1,960.7	1,530.2	1,530.2	0.0	0.0	5,887.2	5,719.7	2,370.5	1,897.4	3,342.6	2,724.1	3,342.6	2,724.1
Connecticut	1.0	1.0	84.8	62.5	0.0	0.0	122.2	122.2	202.6	203.5	0.0	0.0	410.6	389.2	428.5	347.6	513.3	410.1	513.3	410.1
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	47.6	35.3	53.2	40.9	53.2	40.9
Massachusetts	96.1	94.4	746.6	665.7	0.0	0.0	267.0	267.4	285.3	285.3	0.0	0.0	1,395.0	1,312.8	1,607.8	1,294.3	2,354.4	1,960.0	2,354.4	1,960.0
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	85.9	73.1	85.9	73.1	85.9	73.1
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	94.1	55.7	128.7	74.4	128.7	74.4
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	106.6	91.4	207.1	165.6	207.1	165.6
Middle Atlantic	3,362.1	3,205.6	1,061.0	893.9	0.0	0.0	5,473.2	5,469.2	1,278.4	1,305.0	0.0	0.0	11,174.7	10,873.7	3,143.1	2,642.7	4,204.1	3,536.6	4,204.1	3,536.6
New Jersey	7.6	7.6	731.2	671.8	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	978.4	919.0	1,521.0	1,313.8	2,252.2	1,985.6	2,252.2	1,985.6
New York	1,984.5	1,826.2	270.5	170.3	0.0	0.0	4,561.3	4,557.3	524.1	524.1	0.0	0.0	7,340.4	7,077.9	1,290.8	1,046.8	1,561.3	1,217.1	1,561.3	1,217.1
Pennsylvania	1,370.0	1,371.8	59.3	51.8	0.0	0.0	899.6	899.6	527.0	553.6	0.0	0.0	2,855.9	2,876.8	331.2	282.2	390.5	334.0	390.5	334.0
East North Central	10,167.5	9,152.2	455.0	402.0	0.0	0.0	856.9	857.3	1,257.7	1,270.6	0.0	0.0	12,737.1	11,682.1	429.2	317.4	884.2	719.4	884.2	719.4
Illinois	4,803.7	4,261.9	35.9	34.9	0.0	0.0	34.1	34.1	96.0	102.0	0.0	0.0	4,969.7	4,432.9	94.9	55.7	130.8	90.6	130.8	90.6
Indiana	2,309.8	2,109.4	216.2	196.7	0.0	0.0	60.4	60.4	70.8	76.3	0.0	0.0	2,657.2	2,442.8	80.9	57.2	297.1	253.9	297.1	253.9
Michigan	1,897.1	1,735.8	97.2	74.3	0.0	0.0	266.9	266.9	562.0	559.1	0.0	0.0	2,823.2	2,636.1	64.0	51.9	161.2	126.2	161.2	126.2
Ohio	718.4	605.9	83.6	75.2	0.0	0.0	101.9	101.9	147.4	147.4	0.0	0.0	1,051.3	930.4	125.8	104.6	209.4	179.8	209.4	179.8
Wisconsin	438.5	439.2	22.1	20.9	0.0	0.0	393.6	394.0	381.5	385.8	0.0	0.0	1,235.7	1,239.9	63.6	48.0	85.7	68.9	85.7	68.9
West North Central	25,379.8	22,250.2	868.3	677.3	0.0	0.0	3,291.7	3,291.7	464.4	557.4	0.0	0.0	30,004.2	26,776.6	356.6	286.0	1,224.9	963.3	1,224.9	963.3
Iowa	8,795.4	7,143.8	8.9	9.2	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	8,972.1	7,320.8	97.2	76.9	106.1	86.1	106.1	86.1
Kansas	5,658.5	5,116.0	4.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,678.7	5,136.2	20.0	12.9	24.2	17.1	24.2	17.1
Minnesota	3,854.5	3,707.9	774.1	598.7	0.0	0.0	205.9	205.9	394.4	485.0	0.0	0.0	5,228.9	4,997.5	72.5	52.2	846.6	650.9	846.6	650.9
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	158.1	137.8	220.2	186.4	220.2	186.4
Nebraska	2,018.3	1,417.4	18.0	15.6	0.0	0.0	275.9	275.9	15.7	15.7	0.0	0.0	2,327.9	1,724.6	7.7	5.5	25.7	21.1	25.7	21.1
North Dakota	3,221.0	3,073.0	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,740.8	3,592.8	0.3	0.2	0.3	0.2	0.3	0.2
South Dakota	877.8	837.8	1.0	1.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,476.8	2,436.8	0.6	0.6	1.6	1.6	1.6	1.6
South Atlantic	1,086.3	1,086.3	7,997.4	6,376.4	0.0	0.0	7,224.4	7,268.2	4,201.1	4,366.6	0.0	0.0	20,509.2	19,097.5	1,808.2	1,443.5	9,805.6	7,819.9	9,805.6	7,819.9
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	81.5	72.0	114.8	103.9	114.8	103.9
District of Columbia	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	23.0	23.0	0.0	0.0	28.9	23.0	48.6	40.8	54.5	40.8	54.5	40.8
Florida	0.0	0.0	1,909.8	1,117.2	0.0	0.0	54.5	54.5	1,180.8	1,296.8	0.0	0.0	3,145.1	2,468.5	335.1	216.0	2,244.9	1,333.2	2,244.9	1,333.2
Georgia	0.0	0.0	1,012.3	1,011.9	0.0	0.0	2,047.2	2,047.2	949.4	905.4	0.0	0.0	4,008.9	3,964.5	NM	155.1	NM	1,167.0	NM	1,167.0
Maryland	190.0	190.0	275.4	227.4	0.0	0.0	590.0	590.0	140.9	142.0	0.0	0.0	1,196.3	1,149.4	732.1	642.0	1,007.5	869.4	1,007.5	869.4
North Carolina	208.0	208.0	4,017.8	3,369.8	0.0	0.0	2,002.0	2,002.0	558.9	568.3	0.0	0.0	6,786.7	6,148.1	152.6	117.4	4,170.4	3,487.2	4,170.4	3,487.2
South Carolina	0.0	0.0	367.1	265.5	0.0	0.0	1,323.9	1,367.7	526.5	526.5	0.0	0.0	2,217.5	2,159.7	205.3	144.4	572.4	409.9	572.4	409.9
Virginia	0.0	0.0	375.8	352.7	0.0	0.0	866.0	866.0	809.4	892.4	0.0	0.0	2,051.2	2,111.1	71.2	49.9	447.0	402.6	447.0	402.6
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	7.5	6.0	7.5	6.0	7.5	6.0
East South Central	29.1	29.1	543.7	455.2	0.0	0.0	7,049.3	7,056.3	1,171.1	1,229.0	0.0	0.0	8,793.2	8,769.6	96.6	86.0	640.3	541.2	640.3	541.2
Alabama	0.0	0.0	194.0	179.3	0.0	0.0	3,290.8	3,290.8	600.3	685.9	0.0	0.0	4,085.1	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	24.0	17.7	50.3	44.0	50.3	44.0
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	7.9	6.6	168.5	167.2	168.5	167.2
Tennessee	29.1	29.1	162.8	89.0	0.0	0.0	2,611.6	2,618.6	196.2	196.2	0.0	0.0	2,999.7	2,932.9	56.9	55.7	219.7	144.7	219.7	144.7
West South Central	32,850.7	30,281.9	2,080.4	1,374.4	0.0	0.0	2,991.4	2,987.5	1,242.9	1,311.4	0.0	0.0	39,165.4	35,955.2	683.4	531.5	2,763.8	1,905.9	2,763.8	1,905.9
Arkansas	0.0	0.0	100.0	100.0	0.0	0.0	1,265.8	1,263.9	331.3	330.4	0.0	0.0	1,697.1	1,694.3	17.4	12.1	117.4	112.1	117.4	112.1
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	422.4	490.1	0.0	0.0	615.5	683.2	142.9	131.4	144.0	132.5	144.0	132.5
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	7.9	5.9	38.4	36.4	38.4	36.4
Texas	24,780.0	22,787.1	1,948.8	1,242.8	0.0	0.0	670.0	670.0	413.0	414.7	0.0	0.0	27,811.8	25,114.6	515.3	382.1	2,464.1	1,624.9	2,464.1	1,624.9
Mountain	9,541.8	8,917.0	5,910.5	5,495.4	473.9	473.9	10,643.4	10,575.9	174.3	174.3	606.9	582.8	27,350.8	26,219.3	2,598.6	2,098.1	8,509.1	7,593.5	8,983.0	8,067.4
Arizona	267.3	267.3	1,774.5	1,701.5	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,088.8	5,015.8	1,465.9	1,157.6	3,240.4	2,859.1	3,535.8	3,154.5
Colorado	3,679.7	3,185.7	537.8	460.8	0.0	0.0	687.4	687.4	28.7	28.7	0.0	0.0	4,933.6	4,362.6	363.7	336.7	901.5	797.5	901.5	797.5
Idaho	970.4	970.5	240.0	240.0	0.0	0.0	2,765.6	2,707.5	83.9	83.9	10.0	10.0	4,069.9	4,011.9	30.1	16.2	270.1	256.2	270.1	256.2
Montana	783.5	703.5	17.0	17.0	0.0	0.0	2,758.7	2,749.3	3.0	3.0	0.0	0.0	3,562.2	3,472.8	14.5	11.9	31.5	28.9	31.5	28.9
Nevada	150.0	150.0	1,821.7	1,684.6	178.5	178.5	1,051.4	1,051.4	9.8	9.8	515.3	498.2	3,726.7	3,572.5	330.0	237.8	2,151.7	1,922.4	2,330.2	2,100.9
New Mexico	1,815.4	1,764.5	570.4	534.4	0.0	0.0	82.9	82.9	5.4	5.4	8.6	1.6	2,482.7	2,388.8	144.5	126.0	714.9	660.4	714.9	660.4
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	245.0	208.5	1,102.1	1,065.6	1,102.1	1,065.6
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	4.8	3.4	96.8	3.4	96.8	3.4
Pacific Contiguous	12,322.0	12,140.0	11,124.2	9,976.4	1,284.0	1,284.0	39,868.3	39,847.9	1,926.1	1,959.6	1,781.8	1,873.5	68,306.4	67,081.4	8,481.0	7,157.6	19,605.2	17,134.0	20,889.2	18,418.0
California	6,038.7	5,856.7	10,786.4	9,723.8	1,284.0	1,284.0	10,185.9	10,198.2	1,227.0	1,234.2	1,762.3	1,854.0	31,284.3	30,150.9	8,180.9	6,913.3	18,967.3	16,637.1	20,251.3	17,921.1
Oregon	3,210.2	3,210.2	318.1	252.1	0.0	0.0	8,402.3	8,423.2	314.7	314.7	19.5	19.5	12,264.8	12,219.7	160.2	140.4	478.3	392.5	478.3	392.5
Washington	3,073.1	3,073.1	19.7	0.5	0.0	0.0	21,280.1	21,226.5	384.4	410.7	0.0	0.0	24,757.3	24,710.8	139.9	103.9	159.6	104.4	159.6	104.4
Pacific Noncontiguous	266.2	266.2	124.1	98.3	0.0	0.0	503.0	496.5	273.9	224.3	43.0	43.0	1,210.2	1,128.3	617.7	587.8	741.8	686.1	741.8	686.1
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	3.3	2.2	3.3	2.2	3.3	2.2
Hawaii	205.6	205.6	124.1	98.3	0.0	0.0	32.4	25.9	266.9	217.3	43.0	43.0	672.0	590.1	614.4	585.6	738.5	683.9	738.5	683.9
U.S. Total	96,430.3	88,730.6	31,136.7	26,576.0	1,757.9	1,757.9	79,861.7	79,811.2	13,520.1	13,928.4	2,431.7	2,499.3	225,138.4	213,303.4	20,584.9	17,048.0	51,721.6	43,624.0	53,479.5	45,381.9

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, March 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	
	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018	March 2019	March 2018
New England	13,675.0	11,869.1	1,308.3	1,116.9	1,612.0	1,605.4	917.3	917.3	0.0	0.0	5,721.8	5,708.5	0.0	0.0	23,234.4	21,217.2
Connecticut	3,442.7	2,345.2	567.6	477.6	878.7	872.1	383.4	383.4	0.0	0.0	2,035.1	2,035.1	0.0	0.0	7,307.5	6,113.4
Maine	1,284.3	1,250.0	301.1	297.1	108.5	108.5	0.0	0.0	0.0	0.0	880.9	880.9	0.0	0.0	2,574.8	2,536.5
Massachusetts	5,902.8	5,255.7	429.0	331.6	199.7	199.7	0.0	0.0	0.0	0.0	2,599.2	2,588.4	0.0	0.0	9,130.7	8,375.4
New Hampshire	1,258.0	1,231.0	3.8	3.8	400.2	400.2	533.9	533.9	0.0	0.0	94.0	94.0	0.0	0.0	2,289.9	2,262.9
Rhode Island	1,787.2	1,787.2	6.8	6.8	24.9	24.9	0.0	0.0	0.0	0.0	14.7	12.2	0.0	0.0	1,833.6	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	32,812.9	26,539.8	7,792.3	7,690.6	14,380.2	15,126.1	12,105.7	13,529.8	78.6	78.6	5,494.7	5,358.6	125.1	129.2	72,789.5	68,452.7
New Jersey	8,531.1	8,157.9	2,826.3	2,845.0	46.9	497.7	609.0	609.0	11.6	11.6	385.0	234.0	23.4	23.4	12,433.3	12,378.6
New York	8,922.6	7,986.3	3,171.2	3,164.4	9,664.7	9,685.5	1,631.5	1,640.2	0.0	0.0	3,554.4	3,515.9	0.0	0.0	26,944.4	25,992.3
Pennsylvania	15,359.2	10,395.6	1,794.8	1,681.2	4,668.6	4,942.9	9,865.2	11,280.6	67.0	67.0	1,555.3	1,608.7	101.7	105.8	33,411.8	30,081.8
East North Central	21,636.5	18,862.0	26,778.5	26,702.6	4,410.2	4,212.5	55,805.5	60,684.3	247.6	247.6	2,417.2	2,641.3	1,092.9	1,092.9	112,388.4	114,443.2
Illinois	3,580.2	3,580.2	10,504.8	10,446.1	284.7	289.9	13,976.0	13,974.0	0.0	0.0	677.0	674.2	36.5	36.5	29,059.2	29,000.9
Indiana	3,810.0	2,406.0	3,353.4	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	23,902.4	23,107.4
Michigan	4,418.0	4,421.0	3,991.3	3,969.2	2,558.5	2,389.6	8,727.9	9,216.7	47.2	47.2	475.5	488.4	250.0	250.0	20,468.4	20,782.1
Ohio	7,020.4	5,704.0	5,559.2	5,559.2	189.2	189.2	12,256.0	14,605.4	142.0	142.0	572.1	636.5	187.1	187.1	25,926.0	27,023.4
Wisconsin	2,807.9	2,750.8	3,369.8	3,372.3	647.8	614.7	5,554.2	7,128.8	58.4	58.4	594.3	604.4	0.0	0.0	13,032.4	14,529.4
West North Central	6,639.7	6,633.1	11,719.1	11,528.9	3,762.8	4,464.0	33,090.5	34,116.0	39.5	32.0	3,871.7	3,876.6	8.4	8.4	59,131.7	60,659.0
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	820.8	0.0	0.0	9,801.3	9,927.5
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	550.6	0.0	0.0	9,025.4	9,775.8
Minnesota	2,172.0	2,172.0	2,670.9	2,456.4	381.6	361.1	4,157.9	4,309.4	0.0	0.0	771.1	791.7	0.0	0.0	10,153.5	10,090.6
Missouri	1,789.9	1,789.9	3,382.6	3,399.6	820.4	836.4	10,524.6	11,260.8	0.0	0.0	1,112.5	1,105.1	0.0	0.0	17,630.0	18,391.8
Nebraska	338.2	342.6	1,149.4	1,150.8	525.8	516.5	3,863.0	3,817.3	0.0	0.0	320.2	321.2	0.0	0.0	6,196.6	6,148.4
North Dakota	0.0	0.0	408.0	408.0	111.6	111.6	4,042.4	4,042.4	0.0	0.0	63.2	63.2	8.4	8.4	4,633.6	4,633.6
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.0	224.0	0.0	0.0	1,691.3	1,691.3
South Atlantic	60,891.3	53,178.6	31,905.8	31,936.1	6,859.2	7,307.0	53,225.3	55,137.3	142.8	142.8	10,425.7	10,405.9	135.0	135.0	163,585.1	158,242.7
Delaware	1,511.0	1,512.0	317.2	317.2	843.1	843.1	410.0	410.0	0.0	0.0	114.1	114.1	135.0	135.0	3,330.4	3,331.4
District of Columbia	0.0	0.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.0	9.0
Florida	31,214.8	27,953.7	7,742.1	7,889.6	2,486.2	2,479.6	7,804.0	8,570.0	59.0	59.0	4,956.6	4,970.0	0.0	0.0	54,262.7	51,921.9
Georgia	7,954.2	7,954.2	7,794.1	7,787.2	842.9	832.9	9,350.5	9,360.5	83.8	83.8	945.4	945.4	0.0	0.0	26,970.9	26,964.0
Maryland	2,849.1	976.0	1,899.9	1,957.6	1,494.2	1,414.2	4,327.0	4,712.0	0.0	0.0	1,257.9	1,218.9	0.0	0.0	11,828.1	10,278.7
North Carolina	5,210.8	4,724.8	6,050.7	6,045.1	1.0	0.0	10,504.8	10,536.8	0.0	0.0	337.6	337.6	0.0	0.0	22,104.9	21,644.3
South Carolina	3,185.0	2,399.0	2,757.9	2,814.8	546.0	546.0	5,212.0	5,212.0	0.0	0.0	463.4	463.4	0.0	0.0	12,164.3	11,435.2
Virginia	8,966.4	7,658.9	4,245.3	4,044.3	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	18,894.9
West Virginia	0.0	0.0	1,089.6	1,071.3	115.5	123.0	12,558.0	12,558.0	0.0	0.0	11.0	11.0	0.0	0.0	13,774.1	13,763.3
East South Central	21,682.0	20,632.1	12,626.1	12,646.9	4,591.8	5,921.8	24,903.2	25,015.2	0.0	0.0	117.0	142.0	19.8	19.8	63,939.9	64,377.8
Alabama	9,619.2	9,618.4	2,532.2	2,532.2	2,027.1	2,766.3	6,335.1	5,503.1	0.0	0.0	42.6	42.6	19.8	19.8	20,576.0	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	7,844.7	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	12,883.3	13,882.9
Tennessee	2,455.1	1,403.0	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	11,138.2
West South Central	60,316.8	60,487.3	14,408.9	13,977.4	31,856.9	31,660.5	30,583.1	31,575.8	954.7	957.9	177.7	174.8	655.3	655.3	138,953.4	139,489.0
Arkansas	4,586.4	4,566.0	702.8	702.8	796.0	802.0	5,105.3	5,100.0	0.0	0.0	12.2	12.2	0.0	0.0	11,202.7	11,183.0
Louisiana	7,430.6	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	20,012.9	20,596.7
Oklahoma	7,243.6	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	18,091.5	18,577.0
Texas	41,056.2	41,140.7	9,669.6	9,231.8	19,239.2	19,094.6	19,321.6	19,308.6	63.8	63.8	48.0	44.9	247.9	247.9	89,646.3	89,132.3
Mountain	22,506.5	22,483.8	8,635.6	8,638.9	3,615.9	3,838.9	26,802.5	26,815.5	52.0	52.0	351.9	356.3	103.5	107.4	62,072.2	62,292.8
Arizona	9,879.6	9,891.6	2,367.6	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	19,175.3	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	168.4	168.4	0.0	0.0	11,109.2	11,119.2
Idaho	547.7	547.7	552.0	552.0	14.0	14.0	8.5	8.5	0.0	0.0	5.4	5.4	0.0	0.0	1,127.6	1,127.6
Montana	0.0	0.0	321.6	321.6	72.2	72.2	2,294.6	2,294.6	52.0	52.0	0.0	0.0	1.5	1.5	2,741.9	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	1,460.7	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	25,847.1	26,028.1	12,066.7	11,559.9	6,924.4	8,431.1	1,982.0	1,982.0	17.0	17.0	471.4	468.4	221.4	221.4	47,530.0	48,707.9
California	19,828.6	19,999.6	11,213.5	10,706.7	6,668.4	8,175.1	57.0	57.0	17.0	17.0	456.2	453.2	221.4	221.4	38,462.1	39,630.0
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	2,600.6	2,601.9	6.4	6.4	4,220.3	4,221.6
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	728.7	730.0	0.0	0.0	2,162.0	2,163.3
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	266,487.0	247,193.1	127,867.6	126,424.5	78,188.4	82,742.3	239,747.9	250,106.0	1,532.2	1,527.9	31,649.7	31,734.3	2,367.8	2,375.8	747,844.9	742,103.9

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	IPP	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

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

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	4	60571	AEP Onsite Partners	IPP	Bloomfield Municipal Utilities Solar	IA	62607	PV	1.6	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.6
2019	4	61012	AES Distributed Energy	IPP	Williamsburg	MA	62202	WIL01	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA01	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA02	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA1C	11.8	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	11.8
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	1	0.6	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.6
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2B	0.6	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.6
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	3	1.1	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	1.1
2019	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4C	0.5	Petroleum Liquids	DFO	IC	(TS) Construction complete, but not yet in commercial operation	0.5
2019	4	61325	Aquarius Community Solar Gardens, LLC	IPP	Aquarius Community Solar	MN	61710	AQUA	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	4	61705	Boring Solar LLC	IPP	Boring Solar LLC	OR	62169	BSPV2	2.2	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.2
2019	4	62003	CMR Solar, LLC	IPP	CMR Solar LLC	NY	62486	CMRSL	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	60609	Clean Focus Renewables, Inc.	IPP	Rugged Solar LLC	CA	57960	1	80.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	80.0
2019	4	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYS	2.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.6
2019	4	61060	Cypress Creek Renewables	IPP	Cascade Solar (TX)	TX	61875	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2019	4	61567	DP-C2 Episode 1 LLC	IPP	Blackville Solar II	SC	61973	C2BV	20.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	20.0
2019	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	61404	Edenton Solar	IPP	Edenton Solar	NC	61781	EDE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	4	59735	Enerparc CA2, LLC	IPP	Cloverdale Solar Center	CA	60813	ECA02	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	4	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	1.8
2019	4	58959	Freeport LNG Development L.P	Industrial	Freeport LP Pretreatment Facility	TX	59145	65GTG	77.5	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	97.0
2019	4	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1B	1.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.5
2019	4	61549	Goldenrod Solar, LLC	IPP	Goldenrod Solar	SC	61943	9	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	4	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	4	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	4	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	4	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	4	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	4	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH2	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2019	4	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	4	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	4	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	4	61928	Jamison Solar Farm	Electric Utility	Jamison Solar Farm	SC	62396	1	1.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.1
2019	4	61550	Jessamine Solar, LLC	IPP	Jessamine Solar	SC	61944	10	1.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.9
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	(TS) Construction complete, but not yet in commercial operation	25.0
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	(TS) Construction complete, but not yet in commercial operation	25.0
2019	4	62037	MSC-Chisago02 LLC	IPP	MSC-Chisago02 LLC	MN	62538	52740	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	4	61680	MSC-Scandia01 LLC	IPP	MSC-Scandia01	MN	62144	52741	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2019	4	62035	MSC-Scott01 LLC	IPP	MSC-Scott01 LLC	MN	62535	52737	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	4	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	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA6	3.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	3.3
2019	4	13201	Naknek Electric Assn, Inc	Electric Utility	Naknek	AK	6301	NA7	3.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	3.3
2019	4	61227	Nautilus Solar Solutions	IPP	Nautilus Saint Cloud Solar CSG	MN	62031	SC	4.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.0
2019	4	61227	Nautilus Solar Solutions	IPP	Nautilus Winsted Solar CSG	MN	62032	WS	3.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.0
2019	4	61227	Nautilus Solar Solutions	IPP	Synergen Panorama, LLC CSG	MD	62327	SP	6.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	6.6
2019	4	61612	Panda Solar NC 1, LLC	IPP	Panda Solar NC 1, LLC	NC	62089	20002	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	4	61655	Panda Solar NC 2, LLC	IPP	Panda Solar NC 2, LLC	NC	62120	20003	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	4	62010	Prairie Queen Wind Farm LLC	IPP	Prairie Queen Wind Farm	KS	62488	WT	199.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	199.3
2019	4	61616	Solar Provider Group MN I LLC	IPP	Syncarpha Dodge 1	MN	62053	SPGD1	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	4	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	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB1	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB2	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	58105	University of Redlands	Commercial	Energy Center	CA	58168	TURB3	0.3	Natural Gas Internal Combustion Engine	NG	IC	(TS) Construction complete, but not yet in commercial operation	0.3
2019	4	61557	Vincent Solar, LLC	IPP	Vincent Solar	SC	61950	14	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2019	4	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	4	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	4	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	4	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	4	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	4	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	5	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	5	61012	AES Distributed Energy	IPP	Palmer	MA	62135	PAL01	3.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.5
2019	5	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	5	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	5	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	5	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	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	161.9
2019	5	59239	Bannock County Landfill	Commercial	Bannock County LFG to Energy	ID	59529	GEN 2	1.4	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.6
2019	5	60672	Birdsboro Power LLC	IPP	Birdsboro Power	PA	61035	GEN1	476.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	525.0
2019	5	58492	Chattanooga Metropolitan Airport	Commercial	Chattanooga Metropolitan Airport Solar	TN	58515	GEN3	0.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.6
2019	5	61568	Chisago Holdco LLC	IPP	Chisago Holdco LLC, CSG	MN	61968	CHIS	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2019	5	58871	Citizens Enterprises Corporation	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	16.2
2019	5	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	5	16604	City of San Antonio - (TX)	Electric Utility	Commerce ESS	TX	62609	BA1	10.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	10.0
2019	5	16604	City of San Antonio - (TX)	Electric Utility	Commerce Solar	TX	62610	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	5	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	5	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	5	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2019	5	61339	Deneb Community Solar Garden, LLC	IPP	Deneb Community Solar	MN	61715	DENE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	58970	Ecoplexus, Inc	IPP	Folsom SP and CSP Sacramento	CA	61698	FOLSM	1.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.3
2019	5	56201	Engie North America	IPP	Seymour Hills Wind Project, LLC	TX	62227	WTGS	30.2	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	30.2
2019	5	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	5	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	5	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2019	5	60251	GRP Franklin Renewable Energy Facility, LLC	IPP	GRP Franklin Renewable Energy Facility	GA	60550	GEN	93.5	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	93.5
2019	5	60846	GRP Madison Renewable Energy Facility, LLC	IPP	GRP Madison Renewable Energy Facility	GA	61213	GEN	65.0	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	65.0
2019	5	61872	Gavilan District College Solar Project	IPP	Gavilan District College Solar Project	CA	61993	GDCBA	0.5	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	5	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	5	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH3	3.7	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	3.7
2019	5	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	5	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	5	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	5	9234	Indiana Municipal Power Agency	Electric Utility	Tipton Solar Park	IN	62305	STIP	5.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.3
2019	5	62038	MSC-Chisago01 LLC	IPP	MSC-Chisago01 LLC	MN	62536	52739	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	5	62039	MSC-Rice01 LLC	IPP	MSC-Rice01 LLC	MN	62537	52738	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	5	56990	NJR Clean Energy Ventures Corporation	IPP	IFF Union Beach Project	NJ	62306	IFFUB	5.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.5
2019	5	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	5	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	5	13902	NorthWestern Energy	Electric Utility	Hauser	MT	2185	HAU7	3.4	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	3.5
2019	5	61663	Panda Solar NC 10, LLC	IPP	Panda Solar NC 10, LLC	NC	62128	20031	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	61664	Panda Solar NC 11, LLC	IPP	Panda Solar NC 11, LLC	NC	62129	20032	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	61656	Panda Solar NC 3, LLC	IPP	Panda Solar NC 3, LLC	NC	62121	20011	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	61657	Panda Solar NC 4, LLC	IPP	Panda Solar NC 4, LLC	NC	62122	20009	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	61660	Panda Solar NC 6, LLC	IPP	Panda Solar NC 6, LLC	NC	62124	20028	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	5	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	5	61661	Panda Solar NC 8, LLC	IPP	Panda Solar NC 8, LLC	NC	62126	20052	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	61662	Panda Solar NC 9, LLC	IPP	Panda Solar NC 9, LLC	NC	62127	20022	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	5	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	5	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	5	61699	SR Meridian II	IPP	Meridian II	MS	62164	MRDII	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	5	61613	Sartell Holdco LLC	IPP	Sartell Holdco CSG	MN	62036	SARTE	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	5	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	5	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	5	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	5	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	5	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	5	59598	Tooele Army Depot	IPP	Tooele Army Depot	UT	59817	PV1	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2019	5	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	5	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	5	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	5	61842	USS Webster Solar	IPP	USS Webster Solar CSG	MN	62336	USWEB	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	5	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	5	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	5	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	5	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	5	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	5	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK2	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	5	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK3	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	5	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK4	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	5	61902	Wright Kirby 1-5 CSG	IPP	Wright Kirby 1-5 CSG	MN	62365	WK5	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
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	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	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA03	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	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	WLA06	1.2	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.2
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	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BAKUP	2.5	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.5
2019	6	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	BLKST	1.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	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	(V) Under construction, more than 50 percent complete	3.5
2019	6	59474	BQ Energy LLC	IPP	Yeoman Creek	IL	61910	YEOM	8.8	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	8.8
2019	6	60366	BRE NC Solar 2, LLC	IPP	BRE NC Solar 2	NC	60626	BEAM2	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60367	BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627	BEAM3	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	60368	BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628	BEAM4	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	57449	Borrego Solar Systems Inc	Industrial	Clif Bar Bakery of Twin Falls	ID	62151	PV1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
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	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	61926	Dryden-Tompkins Solar I, LLC	IPP	Ellis Solar	NY	62413	ELLIS	18.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	18.0
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	Grandy PV 1	NC	59518	GRAND	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1A	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1B	250.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	250.0
2019	6	11241	Entergy Louisiana LLC	Electric Utility	St. Charles Power Station (LA)	LA	60926	1C	500.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	500.0
2019	6	62062	GD Richmond Buttonwoods I, LLC	IPP	GD Richmond Buttonwoods I, LLC	RI	62567	GDBUT	1.3	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.3
2019	6	60747	Gamble Solar, LLC	IPP	Gamble Solar	NC	61127	12348	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2019	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	60025	Greenbacker Renewable Energy Corporation	IPP	Blue Star	MD	62332	BLUES	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	6	60025	Greenbacker Renewable Energy Corporation	IPP	Sol Phoenix	MD	62331	SOLPH	2.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.5

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	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	57389	IKEA Property Inc	Commercial	IKEA Live Oak Rooftop PV System	TX	62152	570	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	302.4	Onshore Wind Turbine	WND	WT	(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	(V) Under construction, more than 50 percent complete	22.0
2019	6	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(U) Under construction, less than or equal to 50 percent complete	1.6
2019	6	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	6	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	6	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	6	56990	NJR Clean Energy Ventures Corporation	IPP	McCullough Road Solar Farm	NJ	62638	WASHG	7.6	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.6
2019	6	61708	NRG Canal 3 Development LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	330.0
2019	6	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	18	13.5	Petroleum Liquids	DFO	GT	(V) Under construction, more than 50 percent complete	15.4
2019	6	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	19	1.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	1.0
2019	6	59170	North American Biofuels, LLC	IPP	Morehead Generating Facility	KY	62641	M3516	1.4	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	1.4
2019	6	59300	PNM Resources	Electric Utility	Rio De Oro Solar Energy Center	NM	62597	RDO	10.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	10.0
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	501	375.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	375.7
2019	6	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	502	200.6	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	200.6
2019	6	61658	Panda Solar NC 5, LLC	IPP	Panda Solar NC 5, LLC	NC	62123	20007	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2019	6	60389	Rabbit Hill Energy Storage Project	IPP	Rabbit Hill Energy Storage Project	TX	60649	1	9.9	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	9.9
2019	6	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	237.6
2019	6	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	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	200.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	210.0
2019	6	61916	Spencer-Tioga Solar, LLC	IPP	Pasto Solar	NY	62389	PASTO	16.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	16.0
2019	6	61492	StraightUp Solar	IPP	John A Logan College Solar	IL	61878	JALC	1.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.9
2019	6	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	61533	Techren Solar II LLC	IPP	Techren Solar II LLC	NV	61930	TECH2	200.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	200.0
2019	6	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	6	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	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	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	7	58871	Citizens Enterprises Corporation	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	30.0
2019	7	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	7	61610	Delaware River Solar, LLC	IPP	Boas Rd #1 Community Solar Farm	NY	62530	496	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	7	61610	Delaware River Solar, LLC	IPP	Boas Rd #2 Community Solar Farm	NY	62531	1010	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	7	61610	Delaware River Solar, LLC	IPP	Boas Rd #3 Community Solar Farm	NY	62532	1011	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	7	61610	Delaware River Solar, LLC	IPP	Boas Rd #4 Community Solar Farm	NY	62533	1023	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	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	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	7	56201	Engie North America	IPP	Solomon Forks Wind Project, LLC	KS	61984	WTGS	275.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	275.6
2019	7	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	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	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	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	61929	Runway Solar Farm	Electric Utility	Runway Solar Farm	SC	62397	1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	7	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	7	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 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	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	7	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	7	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	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	1A	0.5	Petroleum Liquids	DFO	IC	(U) Under construction, less than or equal to 50 percent complete	0.5
2019	8	60877	Antelope DSR 3, LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(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	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
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	(T) Regulatory approvals received. Not under construction	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	58135	Ecos Energy LLC	IPP	Apple Hill Solar	VT	61037	APPL	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	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	56990	NJR Clean Energy Ventures Corporation	IPP	Milford Solar Farm (NJ) LLC	NJ	62637	MILFD	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	8	22091	New-Indy Ontario LLC	Industrial	New-Indy Ontario Mill	CA	10427	GEN2	29.4	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	31.8
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	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	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	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
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	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	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	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	(L) Regulatory approvals pending. Not under construction	300.0
2019	9	59365	Capital Power Corporation	IPP	Black Fork Wind Energy Project	OH	59907	GEN	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	9	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	150.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPBE	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Essex	VT	62383	GMPSE	4.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	4.5
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPBF	2.0	Batteries	MWH	BA	(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	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Ferrisburgh	VT	62382	GMPSF	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPBM	2.0	Batteries	MWH	BA	(T) Regulatory approvals received. Not under construction	2.0
2019	9	7601	Green Mountain Power Corp	Electric Utility	GMP Solar/Storage-Milton	VT	62381	GMPSM	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	9	61957	Kearny Mesa Storage LLC	IPP	Kearny Mesa Storage LLC	CA	62441	U1	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	9	61886	Lockett Windfarm, LLC	IPP	Lockett Windfarm	TX	62356	LOC	183.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	183.8
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	(U) Under construction, less than or equal to 50 percent complete	300.0
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	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	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	10	61608	Agilon Energy Holdings II, LLC	IPP	Victoria Port Power II LLC	TX	61966	VP2-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	50.0
2019	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	(T) Regulatory approvals received. Not under construction	59.4
2019	10	61465	Brush Solar Center	IPP	Brush Solar Center	OR	61844	BRUSH	2.8	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.8
2019	10	61060	Cypress Creek Renewables	IPP	Lampwick	TX	61872	GEN1	7.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	7.5
2019	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	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	61473	Morgan Solar Center	IPP	Morgan Solar Center	OR	61855	MORGN	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	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	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	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG4	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG5	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG6	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG7	3.5	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	10	17609	Southern California Edison Co	Electric Utility	DESI-2 Battery Storage Facility	CA	62460	DESI2	1.4	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.4
2019	10	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	61472	Vale Solar Center	IPP	Vale Solar Center	OR	61856	VALE	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	10	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	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	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	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	(T) Regulatory approvals received. Not under construction	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	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	15399	Avangrid Renewables LLC	IPP	Otter Creek Wind Farm LLC	IL	61344	WT1	129.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	129.0
2019	12	15399	Avangrid Renewables LLC	IPP	Tatanka Ridge	SD	61046	WT1	98.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	98.0
2019	12	61474	Baker City Solar	IPP	Baker City Solar	OR	61854	BAKER	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2019	12	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	60816	Boston Medical Center	Commercial	Boston Medical Center CHP Plant	MA	61186	BATT	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
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	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	GTG-1	15.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	15.0
2019	12	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	GTG-2	15.0	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	15.0
2019	12	5109	DTE Electric Company	Electric Utility	Dearborn Energy Center	MI	62289	STG-1	5.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	5.0
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

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	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	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
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	58970	Ecoplexus, Inc	IPP	E Nash PV1	NC	60002	NASH1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58970	Ecoplexus, Inc	IPP	Everett PV1	NC	60997	EVRT1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2019	12	58970	Ecoplexus, Inc	IPP	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	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	(T) Regulatory approvals received. Not under construction	300.0
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	Scituate RI Solar, LLC	RI	61841	SCITU	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	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	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG1	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	6541	Formosa Plastics Corp	Industrial	Formosa Utility Venture Ltd	TX	10554	3TBG2	97.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	102.0
2019	12	7140	Georgia Power Co	Electric Utility	Robins Air Force Base Solar	GA	61648	1	139.0	Solar Photovoltaic	SUN	PV	(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	202.7	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	202.7
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	60534	Halifax Solar LLC	IPP	Halifax Solar LLC	NC	60884	HALFX	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	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	(T) Regulatory approvals received. Not under construction	449.5
2019	12	61001	Hu Honua Bioenergy, LLC	IPP	Hu Honua Bioenergy Facility	HI	61364	HHB	32.0	Other Waste Biomass	OBS	ST	(U) Under construction, less than or equal to 50 percent complete	36.0
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 2 Solar Park	IN	62484	SCRA2	7.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.9
2019	12	9234	Indiana Municipal Power Agency	Electric Utility	Crawfordsville 3 Solar Park	IN	62485	SCRA3	4.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.8
2019	12	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
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	(L) Regulatory approvals pending. Not under construction	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	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	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	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	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
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	61480	Ontario Solar Center	IPP	Ontario Solar Center	OR	61860	ONTRO	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	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	(T) Regulatory approvals received. Not under construction	60.0
2019	12	61521	Pegasus Wind, LLC	IPP	Pegasus Wind	MI	61916	PWEC	146.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	146.1
2019	12	61758	Prevailing Wind Park, LLC	IPP	Prevailing Wind Park	SD	62247	PWPSD	220.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	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	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	(T) Regulatory approvals received. Not under construction	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	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
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	(L) Regulatory approvals pending. Not under construction	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	61668	Strauss Wind LLC	IPP	Strauss Wind Farm	CA	62113	ST-CA	98.8	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	98.8
2019	12	58658	Sunlight Partners	IPP	Eagle Solar	NC	60161	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2019	12	58658	Sunlight Partners	IPP	Tate Solar	NC	60160	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	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	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	(T) Regulatory approvals received. Not under construction	65.0
2019	12	59731	Windham Solar LLC	IPP	Lebanon Solar 1	CT	59991	LEB1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2019	12	59731	Windham Solar LLC	IPP	Lebanon Solar 2	CT	59992	LEB2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2020	1	55918	Acciona Wind Energy USA LLC	IPP	Palmas Wind, LLC	TX	61773	PW	142.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 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	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	(T) Regulatory approvals received. Not under construction	150.0
2020	1	56615	First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826	GEN01	103.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	103.4
2020	1	6452	Florida Power & Light Co	Electric Utility	Babcock Preserve	FL	62634	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5

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	1	6452	Florida Power & Light Co	Electric Utility	Blue Heron Solar	FL	62631	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Cattle Ranch	FL	62632	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Southfork Solar	FL	62493	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Sweetbay Solar Center	FL	62394	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	1	6452	Florida Power & Light Co	Electric Utility	Twin Lakes	FL	62633	1	74.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	199.9
2020	1	62085	Mesquite Star LLC	IPP	Mesquite Star	TX	62587	MESQ	418.9	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	418.9
2020	1	61910	Quitman Solar, LLC	IPP	Quitman Solar	GA	62584	QUITM	150.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	1	58658	Sunlight Partners	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2020	1	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	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
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	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	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	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	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	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	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
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	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	(T) Regulatory approvals received. Not under construction	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	(T) Regulatory approvals received. Not under construction	3.7
2020	3	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
2020	3	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
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	(T) Regulatory approvals received. Not under construction	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	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	9417	Interstate Power and Light Co	Electric Utility	Golden Plains	IA	62081	1	198.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	198.8
2020	3	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	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	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	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	1	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2
2020	3	20421	Western Minnesota Mun Pwr Agny	Electric Utility	Red Rock Hydro Plant	IA	58434	2	27.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	18.2
2020	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	10623	City of Lakeland - (FL)	Electric Utility	C D McIntosh Jr	FL	676	GT2	115.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	135.0
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB001	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	60167	Concord Blue Eagar, LLC	IPP	Concord Blue Eagar, LLC	AZ	60374	CB002	0.6	Other Waste Biomass	OBG	IC	(L) Regulatory approvals pending. Not under construction	0.6
2020	4	58695	Coronal Development Services	IPP	Casper Solar Center	MD	61320	CSPSC	36.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	36.7
2020	4	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	(T) Regulatory approvals received. Not under construction	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Hibiscus Solar Energy Center	FL	62206	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	4	6452	Florida Power & Light Co	Electric Utility	Okeechobee Solar	FL	62491	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2020	4	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	4	61592	Pleinmont Solar 1 LLC	IPP	Pleinmont Solar 1	VA	62012	PLNM1	75.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	75.0
2020	4	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	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	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	(P) Planned for installation, but regulatory approvals not initiated	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	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	5	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	5	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	5	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	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

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	5	56545	Pattern Operators LP	IPP	Willow Creek Wind Power LLC	SD	62431	1	103.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	105.0
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	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	61715	Bell Solar	IPP	Bell Solar	SC	62183	25	6.1	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.1
2020	6	61716	Big Fork Solar	IPP	Big Fork Solar	SC	62184	26	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2020	6	61717	Birch Solar	IPP	Birch Solar	SC	62185	27	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	59844	Blythe Solar III, LLC	IPP	Blythe Solar III, LLC	CA	60094	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	59845	Blythe Solar IV, LLC	IPP	Blythe Solar IV, LLC	CA	60095	BLCK1	31.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	31.2
2020	6	61718	Chapman Solar	IPP	Chapman Solar	SC	62186	28	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	58391	Chilocco Wind Farm LLC	IPP	Chilocco Wind Farm	OK	58406	1	200.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	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	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	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	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

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	61830	Shining Sun Solar	IPP	Shining Sun Solar	SC	62309	73	40.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	40.0
2020	6	61831	Shorthorn Solar	IPP	Shorthorn Solar	SC	62310	74	60.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	60.5
2020	6	61832	Snoopy Solar	IPP	Snoopy Solar	SC	62311	75	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61833	Southard Solar	IPP	Southard Solar	SC	62312	76	6.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	6.0
2020	6	61834	Stamey Solar	IPP	Stamey Solar	SC	62313	77	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61835	Tarpon Solar I	IPP	Tarpon Solar I	SC	62314	78	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61836	Tedder Solar	IPP	Tedder Solar	SC	62315	79	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61837	Ten Governors Solar	IPP	Ten Governors Solar	SC	62316	80	28.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	28.0
2020	6	61862	Thomas Solar	IPP	Thomas Solar	SC	62352	81	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61861	Topaz Solar	IPP	Topaz Solar (SC)	SC	62349	82	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61860	Trask East Solar	IPP	Trask East Solar	SC	62346	83	12.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	12.0
2020	6	61859	Ulmer Solar	IPP	Ulmer Solar	SC	62343	85	22.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	22.0
2020	6	61868	WSW Solar	IPP	WSW Solar	SC	62350	86	30.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	30.0
2020	6	61863	Washington Solar (SC)	IPP	Washington Solar (SC)	SC	62342	87	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61864	Washington Solar II (SC)	IPP	Washington Solar II (SC)	SC	62344	88	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61865	Wayfair Solar	IPP	Wayfair Solar	SC	62345	89	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	61866	Weaver Solar	IPP	Weaver Solar	SC	62347	90	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2020	6	58761	White Camp Solar LLC	IPP	White Camp Solar	TX	58888	WCAMP	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	6	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	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	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	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	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	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	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	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	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	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
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	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

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	15399	Avangrid Renewables LLC	IPP	La Joya NM	NM	61044	WT1	166.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	166.0
2020	12	15399	Avangrid Renewables LLC	IPP	Roaring Brook, LLC	NY	61041	WT1	78.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	78.0
2020	12	60560	Big Blue 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	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	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	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	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	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	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	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	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	14328	Pacific Gas & Electric Co.	Electric Utility	Elkhorn Battery Energy Storage System	CA	62564	ELKHO	182.5	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	182.5
2020	12	59137	Palmer Renewable Energy	IPP	Palmer Renewable Energy	MA	59336	PRE	42.0	Wood/Wood Waste Biomass	WDS	ST	(T) Regulatory approvals received. Not under construction	42.0
2020	12	56545	Pattern Operators LP	IPP	Summit Ridge I Wind Farm	OR	58894	SRWF	192.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	192.0
2020	12	61826	Pawcatuck Solar Center, LLC	IPP	Pawcatuck Solar Center, LLC	CT	62318	PAWCA	15.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	15.0
2020	12	59967	Phoenix Energy	IPP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(OT) Other	2.0
2020	12	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	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	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	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	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

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	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58702	Fluence	IPP	AES ES ALAMITOS, LLC	CA	61204	ALMTS	100.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	100.0
2021	1	60131	South Field Energy, LLC	IPP	South Field Energy	OH	60356	SFECC	1,060.0	Natural Gas Fired Combined Cycle	NG	CC	(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	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	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	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
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	(OT) Other	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	12	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
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	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	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	3.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	3.0
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	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
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
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	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2022	11	61906	Rye Development	IPP	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	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	02B	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(OT) Other	40.0
2022	12	56771	Black Hills Service Company LLC	Electric Utility	Cheyenne Prairie Generating Station	WY	57703	03A	40.0	Natural Gas Fired Combustion Turbine	NG	GT	(OT) Other	40.0
2022	12	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	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
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	59380	Enel Green Power NA, Inc.	IPP	Kingston Energy Storage, LLC	CA	61802	10001	50.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	50.0
2023	12	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	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	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	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	2a	0.5	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4	0.3	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	4B	0.8	Petroleum Liquids	DFO	IC
2019	5	221	Alaska Village Elec Coop, Inc	Electric Utility	Togiak	AK	6348	5A	0.8	Petroleum Liquids	DFO	IC
2019	5	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2019	5	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2019	5	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	677.2	Nuclear	NUC	ST
2019	5	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	5	60771	Marcus Hook 50 L.P	Electric CHP	Marcus Hook Refinery Cogen	PA	50074	GEN1	48.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	5	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	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	5	375.0	Conventional Steam Coal	BIT	ST
2019	6	58620	AEP Generation Resources Inc	IPP	Conesville	OH	2840	6	375.0	Conventional Steam Coal	BIT	ST
2019	6	55795	Bethlehem Renewable Energy LLC	IPP	Bethlehem Renewable Energy LLC	PA	56572	1	3.7	Landfill Gas	LFG	GT
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	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	1	1.3	Landfill Gas	LFG	IC
2019	6	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	2	1.3	Landfill Gas	LFG	IC
2019	6	55796	Eastern Landfill Gas LLC	IPP	Eastern Landfill Gas LLC	MD	56571	3	1.3	Landfill Gas	LFG	IC
2019	6	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	6	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	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	8	221	Alaska Village Elec Coop, Inc	Electric Utility	Quinhagak	AK	57057	UNIT1	0.4	Petroleum Liquids	DFO	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	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	Natural Gas Steam Turbine	NG	ST
2019	9	34672	DTE Energy Services	Electric CHP	Mobile Energy Services LLC	AL	50407	GEN6	33.2	Natural Gas Steam Turbine	NG	ST
2019	9	55951	Exelon Nuclear	IPP	Three Mile Island	PA	8011	1	802.8	Nuclear	NUC	ST
2019	9	10273	Kimberly-Clark Corp	Industrial	Chester Operations	PA	50410	5	67.0	Petroleum Coke	PC	ST
2019	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	12	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	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
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	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	59878	Clean Fuel Partners Dane	Electric CHP	Clean Fuel Dane Community Digester	WI	59559	GEN#1	1.0	Other Waste Biomass	OBG	IC
2020	1	59878	Clean Fuel Partners Dane	Electric CHP	Clean Fuel Dane Community Digester	WI	59559	GEN#2	1.0	Other Waste Biomass	OBG	IC
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	1	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	9155	Inland Empire Energy Ctr LLC	IPP	Inland Empire Energy Center	CA	55853	2	345.0	Natural Gas Fired Combined Cycle	NG	CS
2020	1	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	4	6027	Entergy Nuclear Indian Point 2	IPP	Indian Point 2	NY	2497	2	1,018.5	Nuclear	NUC	ST
2020	4	11820	Massachusetts Inst of Tech	Commercial	Mass Inst Tech Cntrl Utilities/Cogen Plt	MA	54907	CTG1	19.0	Natural Gas Fired Combustion Turbine	NG	GT
2020	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	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN18	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN19	0.4	Conventional Hydroelectric	WAT	HY
2020	5	16721	S D Warren Co.- Westbrook	Industrial	S D Warren Westbrook	ME	50447	GN20	0.4	Conventional Hydroelectric	WAT	HY
2020	6	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
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	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	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	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	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	12199	Montana-Dakota Utilities Co	Electric Utility	Lewis & Clark	MT	6089	1	53.1	Conventional Steam Coal	LIG	ST
2020	12	55269	NextEra Energy Duane Arnold LLC	IPP	Duane Arnold Energy Center	IA	1060	1	601.4	Nuclear	NUC	ST
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	4	0.8	Petroleum Liquids	DFO	IC
2020	12	61013	Northern Westchester Hospital	Commercial	Northern Westchester Hospital	NY	61378	5	0.8	Petroleum Liquids	DFO	IC
2020	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	2	90.0	Natural Gas Steam Turbine	NG	ST
2020	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	1	670.0	Conventional Steam Coal	RC	ST
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	3	21.5	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	4	14.3	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	5	45.1	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	33.7	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	27.2	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	1	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	2	6.5	Natural Gas Fired Combined Cycle	NG	CA
2021	1	3258	Central Iowa Power Cooperative	Electric Utility	Summit Lake	IA	1206	3	7.0	Natural Gas Fired Combined Cycle	NG	CA
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	1	741.0	Natural Gas Steam Turbine	NG	ST
2021	1	15908	GenOn California South, LP	IPP	Ormond Beach	CA	350	2	750.0	Natural Gas Steam Turbine	NG	ST
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2021	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2021	1	15248	Portland General Electric Co	Electric Utility	Boardman	OR	6106	1	585.0	Conventional Steam Coal	SUB	ST
2021	4	6028	Entergy Nuclear Indian Point 3	IPP	Indian Point 3	NY	8907	3	1,037.8	Nuclear	NUC	ST
2021	5	58435	Collinwood BioEnergy	Industrial	Collinwood BioEnergy Facility	OH	58439	CBE01	1.0	Other Waste Biomass	OBG	IC
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	1	907.0	Nuclear	NUC	ST
2021	5	50161	FirstEnergy Nuclear Operating Company	IPP	Perry	OH	6020	1	1,240.0	Nuclear	NUC	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	2	58.0	Conventional Steam Coal	SUB	ST
2021	6	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	3	80.0	Conventional Steam Coal	SUB	ST
2021	6	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2021	6	18454	Tampa Electric Co	Electric Utility	Big Bend	FL	645	ST2	385.0	Conventional Steam Coal	BIT	ST
2021	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	2	113.0	Natural Gas Steam Turbine	NG	ST
2021	10	50161	FirstEnergy Nuclear Operating Company	IPP	Beaver Valley	PA	6040	2	901.0	Nuclear	NUC	ST
2021	12	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	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
2021	12	15466	Public Service Co of Colorado	Electric Utility	Salida	CO	474	1	0.8	Conventional Hydroelectric	WAT	HY
2022	1	59409	Eco Services Corp.	Industrial	Houston Plant	TX	52065	GEN2	1.5	All Other	WH	ST
2022	6	56192	Entergy Nuclear Palisades LLC	IPP	Palisades	MI	1715	1	804.2	Nuclear	NUC	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	1	307.0	Conventional Steam Coal	SUB	ST
2022	7	15298	Talen Montana LLC	IPP	Colstrip	MT	6076	2	307.0	Conventional Steam Coal	SUB	ST
2022	8	6909	Gainesville Regional Utilities	Electric Utility	Deerhaven Generating Station	FL	663	1	75.0	Natural Gas Steam Turbine	NG	ST
2022	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	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	1	6.2	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	2	6.4	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	3	6.9	Conventional Hydroelectric	WAT	HY
2022	11	13781	Northern States Power Co - Minnesota	Electric Utility	Cornell	WI	6086	4	0.4	Conventional Hydroelectric	WAT	HY
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	2	140.0	Conventional Steam Coal	BIT	ST
2022	12	15470	Duke Energy Indiana, LLC	Electric Utility	R Gallagher	IN	1008	4	140.0	Conventional Steam Coal	BIT	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	1	74.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Newman	TX	3456	2	76.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	6	45.0	Natural Gas Steam Turbine	NG	ST
2022	12	5701	El Paso Electric Co	Electric Utility	Rio Grande	NM	2444	7	46.0	Natural Gas Steam Turbine	NG	ST
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	3	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	4	61.0	Petroleum Liquids	DFO	GT
2022	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	2	682.0	Conventional Steam Coal	SUB	ST
2022	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	1	325.0	Conventional Steam Coal	SUB	ST
2022	12	17718	Southwestern Public Service Co	Electric Utility	Nichols	TX	3484	1	107.0	Natural Gas Steam Turbine	NG	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	1	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	2	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	3	12.0	Conventional Steam Coal	BIT	ST
2022	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Nucla	CO	527	ST4	64.0	Conventional Steam Coal	BIT	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	1	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	2	118.0	Natural Gas Steam Turbine	NG	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	3	260.0	Conventional Steam Coal	SUB	ST
2022	12	19436	Union Electric Co - (MO)	Electric Utility	Meramec	MO	2104	4	334.0	Conventional Steam Coal	SUB	ST
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY1	0.7	Conventional Hydroelectric	WAT	HY
2023	1	11135	City of Logan - (UT)	Electric Utility	Hydro III	UT	3675	HY2	0.7	Conventional Hydroelectric	WAT	HY
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	1	1.1	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	2	0.8	Petroleum Liquids	DFO	IC
2023	1	61956	South Nassau Communities Hospital	Commercial	South Nassau Communities Hospital	NY	62447	3	1.0	Petroleum Liquids	DFO	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT1	1.5	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT2	1.8	Landfill Gas	LFG	IC
2023	3	57173	AC Landfill Energy LLC	IPP	AC Landfill Energy LLC	NJ	57845	UNIT3	1.8	Landfill Gas	LFG	IC
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTA	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTB	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	GTC	20.5	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13399	Nevada Cogeneration Assoc # 1	Electric CHP	Nevada Cogen Assoc#1 GarnetVly	NV	54350	STM	24.0	Natural Gas Fired Combined Cycle	NG	CA
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTA	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTB	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	GTC	21.7	Natural Gas Fired Combined Cycle	NG	CT
2023	3	13365	Nevada Cogeneration Assoc # 2	Electric CHP	Nevada Cogen Associates 2 Black Mountain	NV	54349	STM	28.0	Natural Gas Fired Combined Cycle	NG	CA
2023	6	18488	City of Taunton	Electric Utility	Cleary Flood	MA	1682	8	26.0	Petroleum Liquids	RFO	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	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	1	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST

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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
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	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	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	1	111.8	Natural Gas Steam Turbine	NG	ST
2024	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	2	156.3	Natural Gas Steam Turbine	NG	ST
2024	12	12384	Midwest Generations EME LLC	IPP	Will County	IL	884	4	510.0	Conventional Steam Coal	SUB	ST
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	1	0.4	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	3	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Apple River	WI	6231	4	0.5	Conventional Hydroelectric	WAT	HY
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	3	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Granite City	MN	1910	4	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2024	12	13781	Northern States Power Co - Minnesota	Electric Utility	Sherburne County	MN	6090	1	680.0	Conventional Steam Coal	SUB	ST
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	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	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	1	0.2	Conventional Hydroelectric	WAT	HY
2025	8	13781	Northern States Power Co - Minnesota	Electric Utility	White River (WI)	WI	3989	2	0.2	Conventional Hydroelectric	WAT	HY
2025	8	14328	Pacific Gas & Electric Co.	Electric Utility	Diablo Canyon	CA	6099	2	1,118.0	Nuclear	NUC	ST
2025	9	17166	Sierra Pacific Power Co	Electric Utility	Fort Churchill	NV	2330	1	113.0	Natural Gas Steam Turbine	NG	ST
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	1	0.4	Conventional Hydroelectric	WAT	HY
2025	11	13781	Northern States Power Co - Minnesota	Electric Utility	Trego	WI	4012	2	0.3	Conventional Hydroelectric	WAT	HY
2025	12	56155	Lansing Board of Water and Light	Electric Utility	Erickson Station	MI	1832	1	154.5	Conventional Steam Coal	SUB	ST
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Saxon Falls	WI	1756	2	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	1	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Superior Falls	MI	1757	2	0.5	Conventional Hydroelectric	WAT	HY
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	1	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	2	55.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	3	44.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	4	47.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	5	52.0	Petroleum Liquids	DFO	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Wheaton	WI	4014	6	48.0	Petroleum Liquids	DFO	GT
2025	12	15466	Public Service Co of Colorado	Electric Utility	Comanche (CO)	CO	470	2	335.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	1	254.0	Conventional Steam Coal	SUB	ST
2025	12	17166	Sierra Pacific Power Co	Electric Utility	North Valmy	NV	8224	2	268.0	Conventional Steam Coal	SUB	ST
2025	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	2	65.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Cunningham	NM	2454	2	183.0	Natural Gas Steam Turbine	NG	ST
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	2	61.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	17718	Southwestern Public Service Co	Electric Utility	Maddox	NM	2446	3	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	19099	TransAlta Centralia Gen LLC	IPP	Transalta Centralia Generation	WA	3845	2	670.0	Conventional Steam Coal	RC	ST
2025	12	30151	Tri-State G & T Assn, Inc	Electric Utility	Craig (CO)	CO	6021	1	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2026	6	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
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HH	0.5	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HII	0.4	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	HJC	0.2	Solar Photovoltaic	SUN	PV
2027	2	56997	Marina Energy LLC	IPP	Heller Industrial Parks	NJ	57869	UNIT1	2.7	Solar Photovoltaic	SUN	PV
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	1	900.0	Conventional Steam Coal	BIT	ST
2027	6	11208	Los Angeles Department of Water & Power	Electric Utility	Intermountain Power Project	UT	6481	2	900.0	Conventional Steam Coal	BIT	ST
2027	12	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	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	12	17718	Southwestern Public Service Co	Electric Utility	Jones	TX	3482	1	243.0	Natural Gas Steam Turbine	NG	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
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-March 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

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

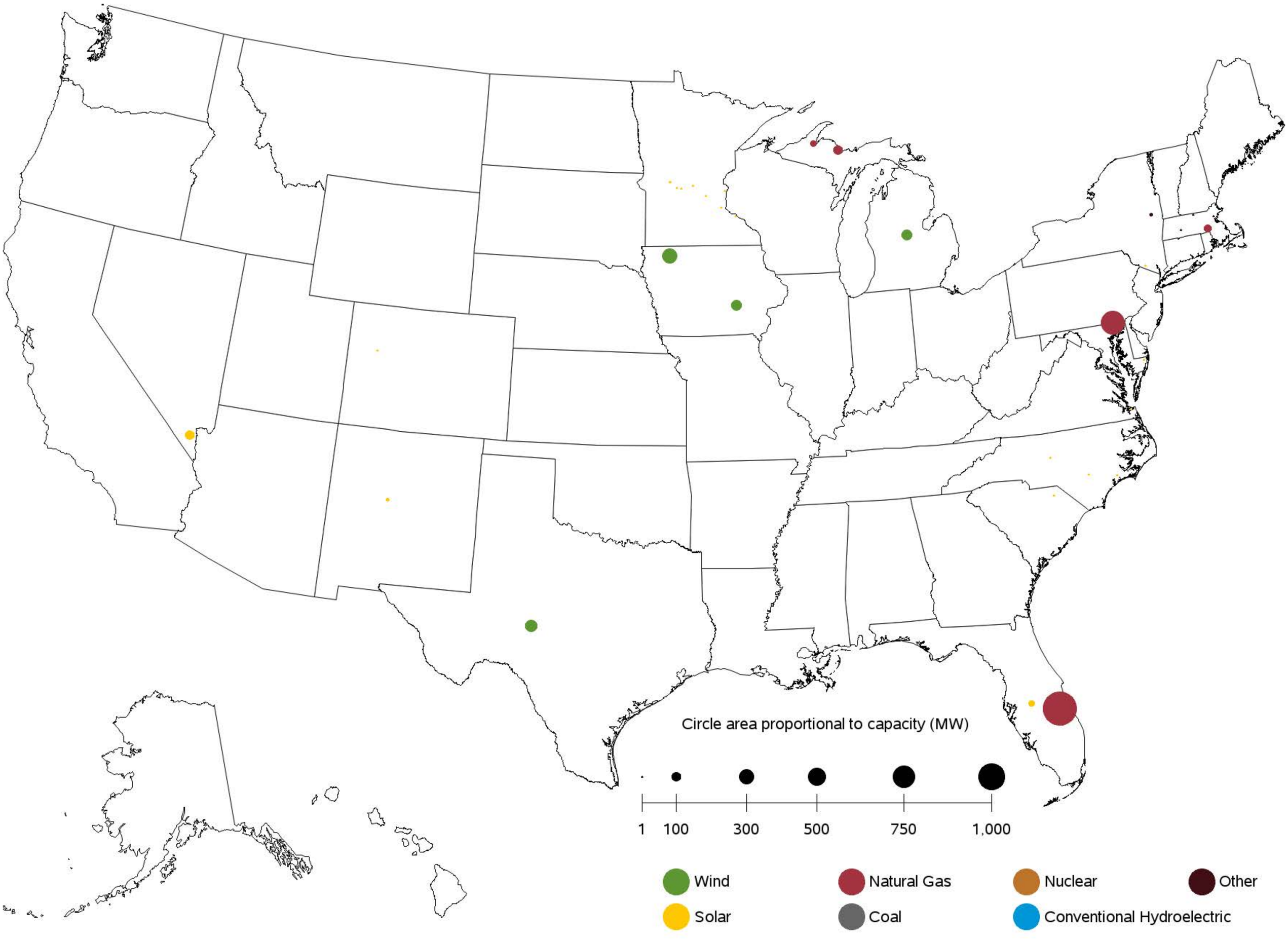
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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

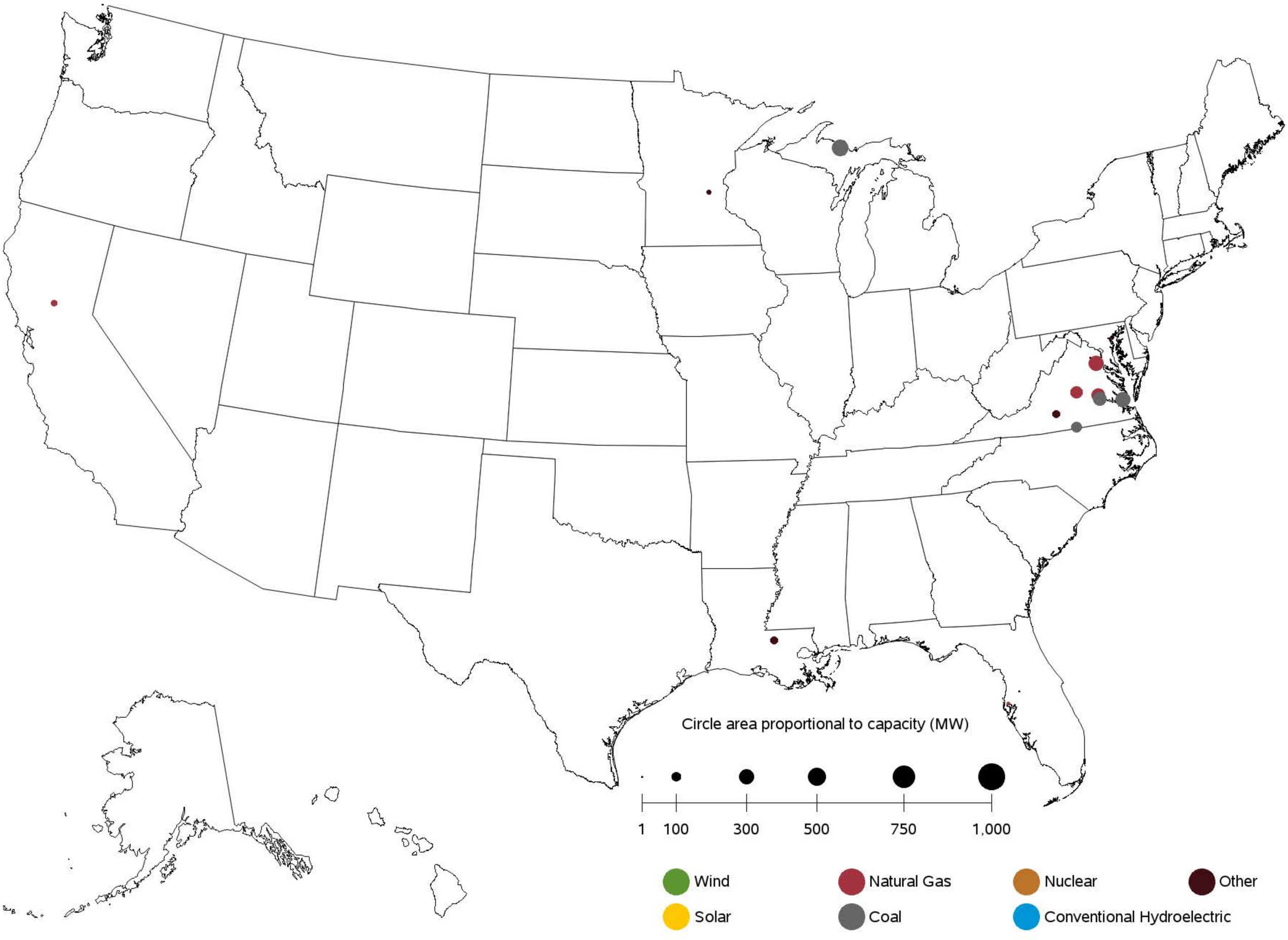
Values for 2017 and prior years are final. Values for 2018 and 2019 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations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



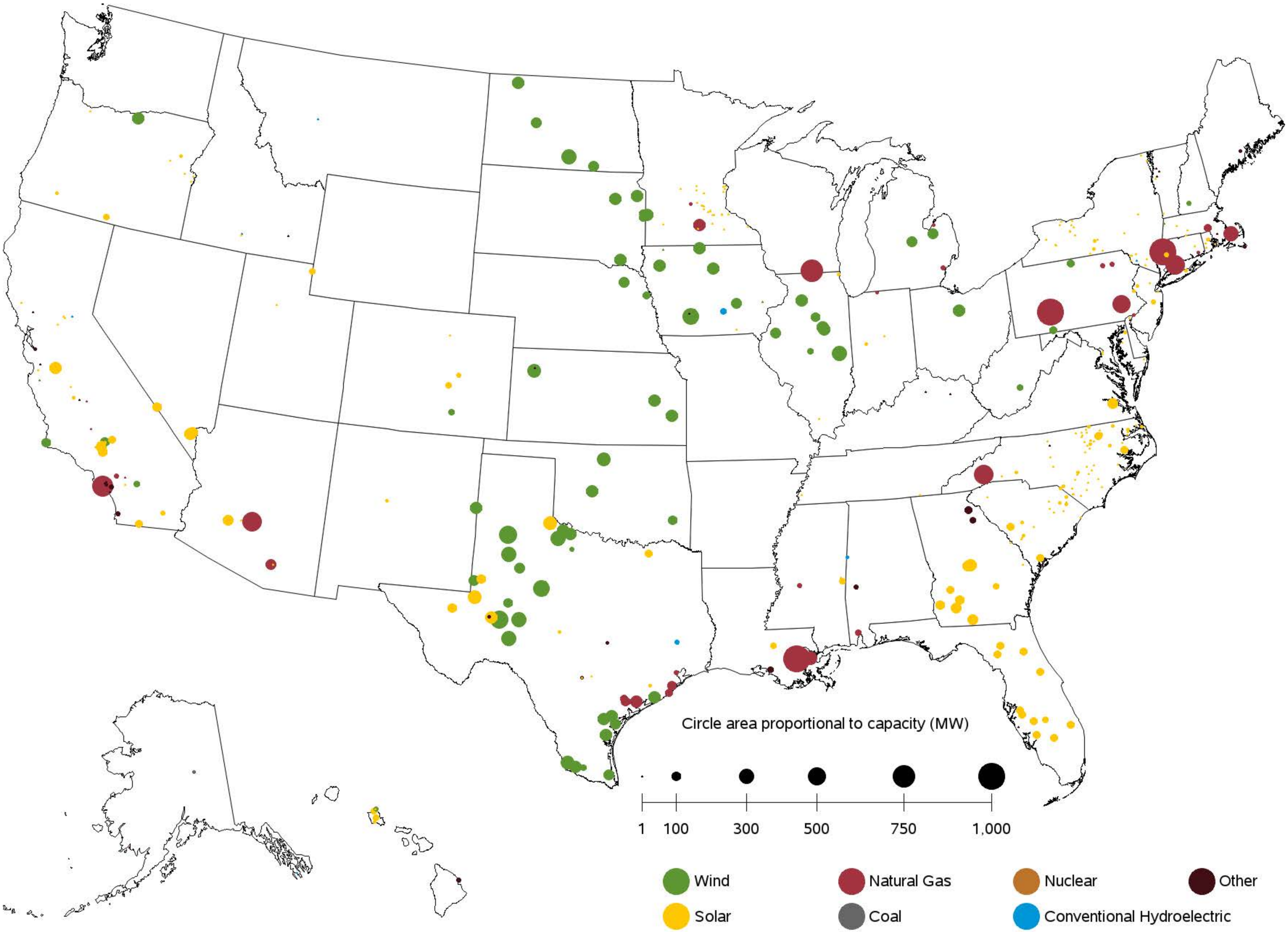
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

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



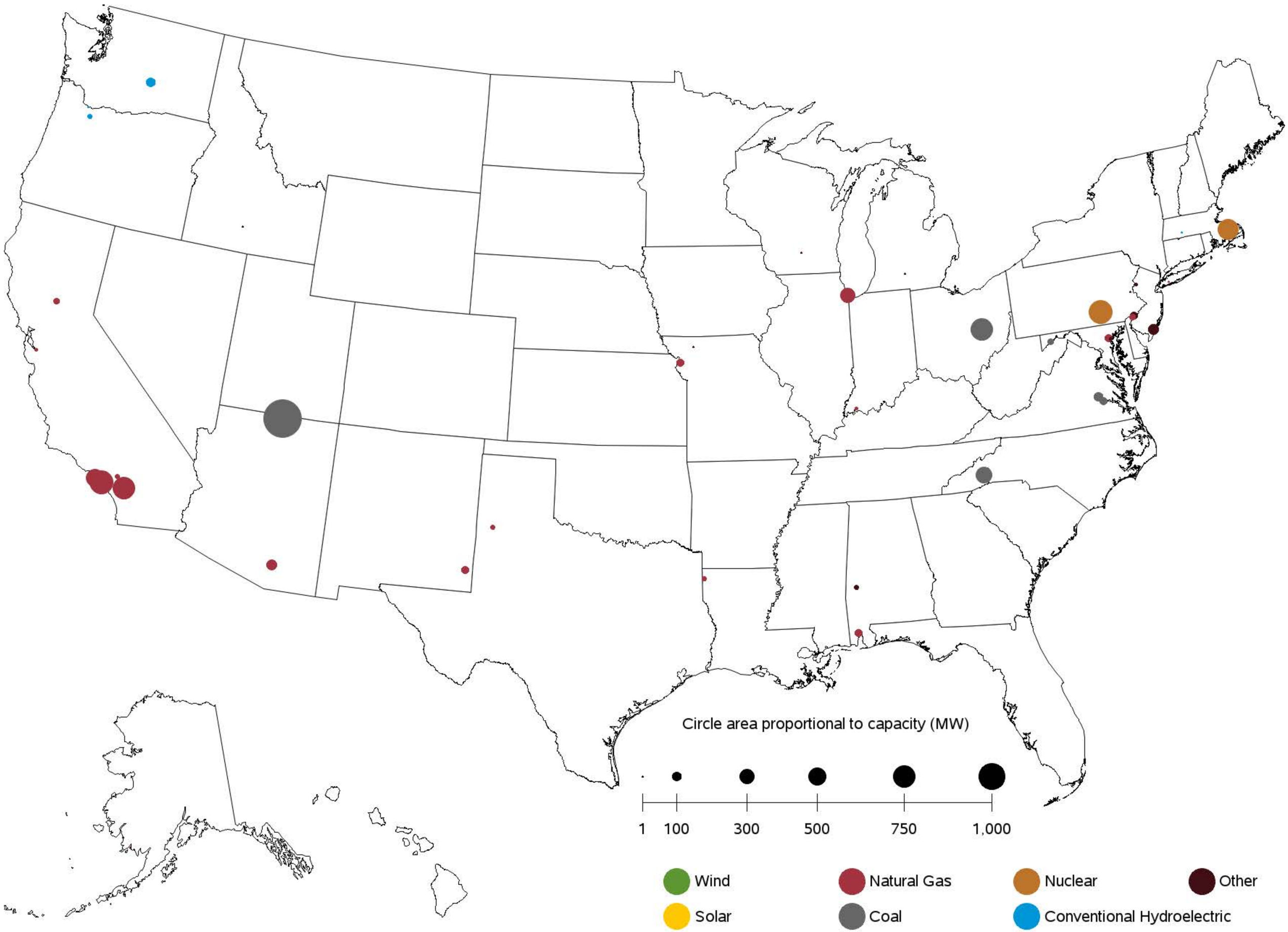
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from April 2019 to March 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 April 2019 to March 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

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 - March 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
Year to Date					
2017	1,394	1,923	504	0	3,821
2018	1,232	1,849	415	0	3,497
2019	1,262	1,709	480	0	3,451
Rolling 12 Months Ending in March					
2018	4,884	6,746	1,657	0	13,287
2019	6,133	8,060	2,193	0	16,386

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

Table 8.2 Puerto Rico- Revenue from Sales of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - March 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
Year to Date					
2017	317	437	95	0	849
2018	272	479	86	0	836
2019	263	399	96	0	759
Rolling 12 Months Ending in March					
2018	1,078	1,592	335	0	3,004
2019	1,257	1,813	416	0	3,485

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

Table 8.3 Puerto Rico- Number of Ultimate Customers Served by Sector: Total by End-Use Sector, 2009 - March 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
Rolling 12 Months Ending in March					
2018	1,338,251	126,885	615	0	1,465,751
2019	1,343,565	126,222	605	0	1,470,391

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

Table 8.4 Puerto Rico- Average Price of Electricity to Ultimate Customers: Total by End-Use Sector, 2009 - March 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
Year to Date					
2017	22.72	22.70	18.91	--	22.21
2018	22.05	25.89	20.71	--	23.92
2019	20.86	23.33	20.09	--	21.98
Rolling 12 Months Ending in March					
2018	22.07	23.59	20.19	--	22.61
2019	20.49	22.49	18.95	--	21.27

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

Table 8.5. Net Summer Capacity (MW) of Existing Utility Scale Units by Technology for Puerto Rico, 2007-March 2019

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,346	0	2,978	0	0	4,876
2008	454	98	1,346	0	3,408	0	0	5,306
2009	454	98	1,346	0	3,472	0	0	5,370
2010	454	98	1,346	0	3,472	0	0	5,370
2011	454	98	1,346	0	3,472	5	0	5,376
2012	454	98	1,346	0	3,472	23	98	5,492
2013	454	98	1,346	0	3,472	26	98	5,495
2014	454	98	1,346	0	3,472	38	99	5,507
2015	454	98	1,346	9	3,476	70	99	5,552
2016	454	98	1,346	33	3,476	145	99	5,651
2017	454	98	1,346	33	3,476	145	99	5,651
2018	454	98	1,346	33	3,476	145	99	5,651
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

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, March 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**4**	**21**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	34	0	1	0	0	33
Maine	22	29	0	17	0	0	12
Massachusetts	0	47	0	4	0	0	21
New Hampshire	0	22	0	0	0	0	20
Rhode Island	0	55	0	11	0	0	0
Vermont	0	222	0	0	0	0	18
Middle Atlantic	**3**	**21**	**46**	**1**	**21**	**0**	**3**
New Jersey	0	48	0	2	0	0	0
New York	0	28	0	3	0	0	2
Pennsylvania	3	26	70	1	31	0	12
East North Central	**1**	**8**	**11**	**1**	**7**	**0**	**18**
Illinois	0	24	0	8	0	0	45
Indiana	0	2	0	2	13	0	37
Michigan	4	13	0	2	0	0	35
Ohio	1	16	24	1	20	0	39
Wisconsin	0	79	0	2	0	0	27
West North Central	**1**	**17**	**0**	**3**	**0**	**0**	**12**
Iowa	1	35	0	4	0	0	48
Kansas	0	11	0	15	0	0	0
Minnesota	6	155	0	5	0	0	40
Missouri	0	8	0	7	0	0	18
Nebraska	6	127	0	33	0	0	37
North Dakota	0	11	0	39	0	0	28
South Dakota	0	196	0	40	0	0	19
South Atlantic	**1**	**4**	**9**	**1**	**0**	**0**	**8**
Delaware	0	133	0	2	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	5	0	1	0	0	44
Georgia	0	16	59	2	0	0	13
Maryland	0	10	0	1	0	0	2
North Carolina	0	7	0	2	0	0	12
South Carolina	0	11	0	1	0	0	17
Virginia	10	14	0	1	0	0	19
West Virginia	2	0	0	9	0	0	16
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**5**
Alabama	0	38	0	2	0	0	6
Kentucky	0	2	0	2	0	0	11
Mississippi	0	5	0	1	0	0	0
Tennessee	0	0	0	2	0	0	8
West South Central	**0**	**7**	**0**	**1**	**3**	**0**	**9**
Arkansas	0	4	0	3	0	0	12
Louisiana	0	286	0	2	7	0	22
Oklahoma	0	3	0	2	0	0	14
Texas	0	6	0	1	2	0	19
Mountain	**2**	**11**	**0**	**2**	**0**	**0**	**7**
Arizona	0	16	0	4	0	0	7
Colorado	0	129	0	3	0	0	29
Idaho	145	0	0	19	0	0	14
Montana	5	40	0	20	0	0	14
Nevada	0	0	0	1	0	0	3
New Mexico	0	35	0	5	0	0	90
Utah	0	1	0	3	0	0	41
Wyoming	5	1	0	7	0	0	42
Pacific Contiguous	**0**	**38**	**0**	**1**	**2**	**0**	**2**
California	0	48	0	2	2	0	4
Oregon	0	15	0	3	0	0	5
Washington	0	72	0	6	0	0	2
Pacific Noncontiguous	**19**	**1**	**0**	**17**	**0**	**0**	**33**
Alaska	48	9	0	17	0	0	34
Hawaii	0	1	0	0	0	0	67
U.S. Total	**0**	**2**	**5**	**0**	**4**	**0**	**2**

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

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**1**
Connecticut	0	0	0	23	9	0	0	1
Maine	0	0	0	90	6	0	0	6
Massachusetts	0	0	0	7	5	0	2	3
New Hampshire	0	0	0	0	14	0	0	2
Rhode Island	0	0	0	36	14	0	0	10
Vermont	0	0	0	20	13	0	0	12
Middle Atlantic	**0**	**0**	**0**	**6**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	12	5	0	2	1
Pennsylvania	0	0	0	25	6	0	0	1
East North Central	**0**	**0**	**0**	**9**	**3**	**0**	**4**	**0**
Illinois	0	0	0	23	3	0	0	1
Indiana	0	0	0	13	5	0	0	1
Michigan	0	0	0	19	5	0	13	2
Ohio	0	0	0	22	4	0	0	1
Wisconsin	0	0	0	45	8	0	47	1
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**7**	**1**
Iowa	0	0	0	68	3	0	0	2
Kansas	0	0	0	107	2	0	0	1
Minnesota	0	0	0	7	5	0	6	2
Missouri	0	0	0	25	6	0	0	1
Nebraska	0	0	0	46	5	0	0	4
North Dakota	0	0	0	0	4	0	45	2
South Dakota	0	0	0	178	10	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	33	31	0	0	2
District of Columbia	0	0	0	88	15	0	0	8
Florida	0	0	0	1	2	0	1	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	9	10	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	9	4	0	0	1
Virginia	0	0	0	8	5	0	0	1
West Virginia	0	0	0	0	11	0	0	2
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**78**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	35	15	0	0	1
Mississippi	0	0	0	3	4	0	0	1
Tennessee	0	0	0	13	7	0	78	1
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**3**	**0**
Arkansas	0	0	0	6	4	0	0	1
Louisiana	0	0	0	168	5	0	2	1
Oklahoma	0	0	0	37	1	0	0	1
Texas	0	0	0	3	1	0	5	1
Mountain	**0**	**3**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	3	3	0	0	1
Colorado	0	0	0	7	2	0	0	1
Idaho	0	14	0	11	8	0	0	9
Montana	0	0	0	52	11	0	0	5
Nevada	0	3	0	3	2	0	0	1
New Mexico	0	0	0	7	2	0	0	2
Utah	0	6	0	6	4	0	10	1
Wyoming	0	0	0	0	8	0	0	5
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**2**	**1**
California	0	1	0	2	1	0	2	1
Oregon	0	9	0	10	7	0	0	3
Washington	0	0	0	48	6	0	0	1
Pacific Noncontiguous	**0**	**8**	**0**	**12**	**7**	**0**	**0**	**6**
Alaska	0	0	0	0	37	0	0	13
Hawaii	0	8	0	12	6	0	0	1
U.S. Total	**0**	**2**	**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.1.B. Relative Standard Error (Percent) for Net Generation by Fuel Type:

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**4**	**21**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	34	0	1	0	0	33
Maine	22	29	0	17	0	0	12
Massachusetts	0	47	0	4	0	0	21
New Hampshire	0	22	0	0	0	0	20
Rhode Island	0	55	0	11	0	0	0
Vermont	0	222	0	0	0	0	18
Middle Atlantic	**3**	**21**	**46**	**1**	**21**	**0**	**3**
New Jersey	0	48	0	2	0	0	0
New York	0	28	0	3	0	0	2
Pennsylvania	3	26	70	1	31	0	12
East North Central	**1**	**8**	**11**	**1**	**7**	**0**	**18**
Illinois	0	24	0	8	0	0	45
Indiana	0	2	0	2	13	0	37
Michigan	4	13	0	2	0	0	35
Ohio	1	16	24	1	20	0	39
Wisconsin	0	79	0	2	0	0	27
West North Central	**1**	**17**	**0**	**3**	**0**	**0**	**12**
Iowa	1	35	0	4	0	0	48
Kansas	0	11	0	15	0	0	0
Minnesota	6	155	0	5	0	0	40
Missouri	0	8	0	7	0	0	18
Nebraska	6	127	0	33	0	0	37
North Dakota	0	11	0	39	0	0	28
South Dakota	0	196	0	40	0	0	19
South Atlantic	**1**	**4**	**9**	**1**	**0**	**0**	**8**
Delaware	0	133	0	2	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	5	0	1	0	0	44
Georgia	0	16	59	2	0	0	13
Maryland	0	10	0	1	0	0	2
North Carolina	0	7	0	2	0	0	12
South Carolina	0	11	0	1	0	0	17
Virginia	10	14	0	1	0	0	19
West Virginia	2	0	0	9	0	0	16
East South Central	**0**	**2**	**0**	**1**	**0**	**0**	**5**
Alabama	0	38	0	2	0	0	6
Kentucky	0	2	0	2	0	0	11
Mississippi	0	5	0	1	0	0	0
Tennessee	0	0	0	2	0	0	8
West South Central	**0**	**7**	**0**	**1**	**3**	**0**	**9**
Arkansas	0	4	0	3	0	0	12
Louisiana	0	286	0	2	7	0	22
Oklahoma	0	3	0	2	0	0	14
Texas	0	6	0	1	2	0	19
Mountain	**2**	**11**	**0**	**2**	**0**	**0**	**7**
Arizona	0	16	0	4	0	0	7
Colorado	0	129	0	3	0	0	29
Idaho	145	0	0	19	0	0	14
Montana	5	40	0	20	0	0	14
Nevada	0	0	0	1	0	0	3
New Mexico	0	35	0	5	0	0	90
Utah	0	1	0	3	0	0	41
Wyoming	5	1	0	7	0	0	42
Pacific Contiguous	**0**	**38**	**0**	**1**	**2**	**0**	**2**
California	0	48	0	2	2	0	4
Oregon	0	15	0	3	0	0	5
Washington	0	72	0	6	0	0	2
Pacific Noncontiguous	**19**	**1**	**0**	**17**	**0**	**0**	**33**
Alaska	48	9	0	17	0	0	34
Hawaii	0	1	0	0	0	0	67
U.S. Total	**0**	**2**	**5**	**0**	**4**	**0**	**2**

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

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

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

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**7**	**4**	**0**	**1**	**1**
Connecticut	0	0	0	23	9	0	0	1
Maine	0	0	0	90	6	0	0	6
Massachusetts	0	0	0	7	5	0	2	3
New Hampshire	0	0	0	0	14	0	0	2
Rhode Island	0	0	0	36	14	0	0	10
Vermont	0	0	0	20	13	0	0	12
Middle Atlantic	**0**	**0**	**0**	**6**	**4**	**0**	**1**	**1**
New Jersey	0	0	0	7	5	0	0	1
New York	0	0	0	12	5	0	2	1
Pennsylvania	0	0	0	25	6	0	0	1
East North Central	**0**	**0**	**0**	**9**	**3**	**0**	**4**	**0**
Illinois	0	0	0	23	3	0	0	1
Indiana	0	0	0	13	5	0	0	1
Michigan	0	0	0	19	5	0	13	2
Ohio	0	0	0	22	4	0	0	1
Wisconsin	0	0	0	45	8	0	47	1
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**7**	**1**
Iowa	0	0	0	68	3	0	0	2
Kansas	0	0	0	107	2	0	0	1
Minnesota	0	0	0	7	5	0	6	2
Missouri	0	0	0	25	6	0	0	1
Nebraska	0	0	0	46	5	0	0	4
North Dakota	0	0	0	0	4	0	45	2
South Dakota	0	0	0	178	10	0	0	8
South Atlantic	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Delaware	0	0	0	33	31	0	0	2
District of Columbia	0	0	0	88	15	0	0	8
Florida	0	0	0	1	2	0	1	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	9	10	0	0	1
North Carolina	0	0	0	3	2	0	0	1
South Carolina	0	0	0	9	4	0	0	1
Virginia	0	0	0	8	5	0	0	1
West Virginia	0	0	0	0	11	0	0	2
East South Central	**0**	**0**	**0**	**6**	**3**	**0**	**78**	**1**
Alabama	0	0	0	10	4	0	0	1
Kentucky	0	0	0	35	15	0	0	1
Mississippi	0	0	0	3	4	0	0	1
Tennessee	0	0	0	13	7	0	78	1
West South Central	**0**	**0**	**0**	**3**	**1**	**0**	**3**	**0**
Arkansas	0	0	0	6	4	0	0	1
Louisiana	0	0	0	168	5	0	2	1
Oklahoma	0	0	0	37	1	0	0	1
Texas	0	0	0	3	1	0	5	1
Mountain	**0**	**3**	**0**	**2**	**2**	**0**	**3**	**1**
Arizona	0	0	0	3	3	0	0	1
Colorado	0	0	0	7	2	0	0	1
Idaho	0	14	0	11	8	0	0	9
Montana	0	0	0	52	11	0	0	5
Nevada	0	3	0	3	2	0	0	1
New Mexico	0	0	0	7	2	0	0	2
Utah	0	6	0	6	4	0	10	1
Wyoming	0	0	0	0	8	0	0	5
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**2**	**1**
California	0	1	0	2	1	0	2	1
Oregon	0	9	0	10	7	0	0	3
Washington	0	0	0	48	6	0	0	1
Pacific Noncontiguous	**0**	**8**	**0**	**12**	**7**	**0**	**0**	**6**
Alaska	0	0	0	0	37	0	0	13
Hawaii	0	8	0	12	6	0	0	1
U.S. Total	**0**	**2**	**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.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, March 2019

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**2**	**1**	**.**	**1**
Connecticut	0	1	0	.	0
Maine	2	2	0	.	1
Massachusetts	1	2	2	.	1
New Hampshire	1	0	0	.	1
Rhode Island	0	0	0	.	0
Vermont	3	9	55	.	4
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	2	.	0
New York	0	0	1	.	0
Pennsylvania	1	2	0	.	1
East North Central	**2**	**3**	**2**	**.**	**2**
Illinois	5	9	0	.	5
Indiana	7	2	0	.	2
Michigan	4	17	15	.	6
Ohio	5	4	3	.	3
Wisconsin	9	9	2	.	5
West North Central	**2**	**2**	**5**	**.**	**1**
Iowa	6	3	32	.	3
Kansas	11	6	0	.	7
Minnesota	5	6	4	.	4
Missouri	2	1	0	.	1
Nebraska	14	43	31	.	13
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	5	3	12	.	3
District of Columbia	0	0	0	.	0
Florida	4	6	2	.	3
Georgia	121	71	0	.	70
Maryland	1	2	2	.	1
North Carolina	7	1	0	.	5
South Carolina	4	4	0	.	3
Virginia	9	6	5	.	6
West Virginia	0	0	0	.	0
East South Central	**3**	**3**	**0**	**.**	**2**
Alabama	0	0	0	.	0
Kentucky	4	3	0	.	3
Mississippi	4	8	0	.	4
Tennessee	0	0	0	.	0
West South Central	**2**	**3**	**0**	**.**	**2**
Arkansas	15	11	0	.	9
Louisiana	2	5	0	.	2
Oklahoma	13	8	0	.	9
Texas	4	4	0	.	3
Mountain	**0**	**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	.	1
Wyoming	23	37	0	.	18
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	2	7	7	.	3
Washington	2	22	36	.	4
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, March 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**51**	**0**	**77**	**0**	**0**	**20**
Connecticut	0	86	0	0	0	0	34
Maine	0	0	0	0	0	0	0
Massachusetts	0	79	0	139	0	0	41
New Hampshire	0	50	0	0	0	0	36
Rhode Island	0	0	0	0	0	0	0
Vermont	0	222	0	0	0	0	30
Middle Atlantic	**0**	**53**	**0**	**7**	**0**	**0**	**1**
New Jersey	0	0	0	97	0	0	0
New York	0	53	0	7	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**2**	**0**	**0**	**19**
Illinois	0	100	0	0	0	0	81
Indiana	0	2	0	4	0	0	37
Michigan	4	14	0	5	0	0	37
Ohio	6	79	0	2	0	0	39
Wisconsin	0	92	0	2	0	0	30
West North Central	**1**	**17**	**0**	**4**	**0**	**0**	**12**
Iowa	1	35	0	4	0	0	48
Kansas	0	11	0	16	0	0	0
Minnesota	7	189	0	5	0	0	51
Missouri	0	8	0	12	0	0	18
Nebraska	6	127	0	33	0	0	37
North Dakota	0	11	0	39	0	0	28
South Dakota	0	196	0	40	0	0	19
South Atlantic	**0**	**4**	**0**	**1**	**0**	**0**	**10**
Delaware	0	0	0	0	0	0	0
Florida	0	4	0	1	0	0	44
Georgia	0	11	0	2	0	0	13
Maryland	0	34	0	0	0	0	0
North Carolina	0	5	0	1	0	0	12
South Carolina	0	12	0	0	0	0	17
Virginia	12	29	0	2	0	0	19
West Virginia	0	0	0	0	0	0	24
East South Central	**0**	**1**	**0**	**1**	**0**	**0**	**5**
Alabama	0	11	0	5	0	0	6
Kentucky	0	2	0	3	0	0	11
Mississippi	0	6	0	2	0	0	0
Tennessee	0	0	0	2	0	0	8
West South Central	**0**	**12**	**0**	**2**	**0**	**0**	**10**
Arkansas	0	8	0	4	0	0	12
Louisiana	0	286	0	3	0	0	0
Oklahoma	0	3	0	4	0	0	14
Texas	0	9	0	4	0	0	20
Mountain	**2**	**11**	**0**	**2**	**0**	**0**	**7**
Arizona	0	16	0	5	0	0	7
Colorado	0	129	0	3	0	0	31
Idaho	0	0	0	30	0	0	15
Montana	0	47	0	35	0	0	14
Nevada	0	0	0	1	0	0	0
New Mexico	0	35	0	8	0	0	90
Utah	0	1	0	3	0	0	41
Wyoming	5	1	0	12	0	0	42
Pacific Contiguous	**0**	**60**	**0**	**3**	**0**	**0**	**2**
California	0	61	0	3	0	0	4
Oregon	0	0	0	6	0	0	5
Washington	0	1,489	0	9	0	0	2
Pacific Noncontiguous	**67**	**2**	**0**	**17**	**0**	**0**	**36**
Alaska	67	9	0	17	0	0	36
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**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, March 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**	**23**	**13**	**0**	**0**	**11**
Connecticut	0	0	0	0	0	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	30	33	0	0	29
New Hampshire	0	0	0	0	0	0	0	15
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	37	20	0	0	19
Middle Atlantic	**0**	**0**	**0**	**25**	**25**	**0**	**0**	**2**
New Jersey	0	0	0	25	25	0	0	32
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**	**15**	**8**	**0**	**42**	**1**
Illinois	0	0	0	59	42	0	0	1
Indiana	0	0	0	22	20	0	0	1
Michigan	0	0	0	21	11	0	0	2
Ohio	0	0	0	73	74	0	0	3
Wisconsin	0	0	0	0	15	0	44	2
West North Central	**0**	**0**	**0**	**51**	**3**	**0**	**13**	**1**
Iowa	0	0	0	81	3	0	0	2
Kansas	0	0	0	213	5	0	0	1
Minnesota	0	0	0	126	9	0	0	3
Missouri	0	0	0	0	60	0	0	1
Nebraska	0	0	0	140	32	0	0	5
North Dakota	0	0	0	0	7	0	45	2
South Dakota	0	0	0	0	17	0	0	9
South Atlantic	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**
Delaware	0	0	0	92	92	0	0	76
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	9	9	0	0	1
Maryland	0	0	0	79	79	0	0	0
North Carolina	0	0	0	11	11	0	0	1
South Carolina	0	0	0	168	11	0	0	1
Virginia	0	0	0	19	14	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**29**	**29**	**0**	**0**	**1**
Alabama	0	0	0	50	50	0	0	1
Kentucky	0	0	0	35	34	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	168	168	0	0	1
West South Central	**0**	**0**	**0**	**35**	**6**	**0**	**0**	**1**
Arkansas	0	0	0	183	183	0	0	1
Louisiana	0	0	0	168	168	0	0	2
Oklahoma	0	0	0	37	6	0	0	2
Texas	0	0	0	123	24	0	0	2
Mountain	**0**	**9**	**0**	**8**	**5**	**0**	**27**	**1**
Arizona	0	0	0	9	9	0	0	1
Colorado	0	0	0	127	2	0	0	1
Idaho	0	0	0	0	39	0	0	14
Montana	0	0	0	0	35	0	0	13
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	16	16	0	0	3
Utah	0	9	0	0	9	0	44	2
Wyoming	0	0	0	0	13	0	0	5
Pacific Contiguous	**0**	**0**	**0**	**11**	**5**	**0**	**0**	**1**
California	0	0	0	11	4	0	0	2
Oregon	0	0	0	96	14	0	0	4
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**22**	**0**	**0**	**8**
Alaska	0	0	0	0	61	0	0	14
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**2**	**0**	**2**	**2**	**0**	**7**	**0**

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**51**	**0**	**77**	**0**	**0**	**20**
Connecticut	0	86	0	0	0	0	34
Maine	0	0	0	0	0	0	0
Massachusetts	0	79	0	139	0	0	41
New Hampshire	0	50	0	0	0	0	36
Rhode Island	0	0	0	0	0	0	0
Vermont	0	222	0	0	0	0	30
Middle Atlantic	**0**	**53**	**0**	**7**	**0**	**0**	**1**
New Jersey	0	0	0	97	0	0	0
New York	0	53	0	7	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**10**	**0**	**2**	**0**	**0**	**19**
Illinois	0	100	0	0	0	0	81
Indiana	0	2	0	4	0	0	37
Michigan	4	14	0	5	0	0	37
Ohio	6	79	0	2	0	0	39
Wisconsin	0	92	0	2	0	0	30
West North Central	**1**	**17**	**0**	**4**	**0**	**0**	**12**
Iowa	1	35	0	4	0	0	48
Kansas	0	11	0	16	0	0	0
Minnesota	7	189	0	5	0	0	51
Missouri	0	8	0	12	0	0	18
Nebraska	6	127	0	33	0	0	37
North Dakota	0	11	0	39	0	0	28
South Dakota	0	196	0	40	0	0	19
South Atlantic	**0**	**4**	**0**	**1**	**0**	**0**	**10**
Delaware	0	0	0	0	0	0	0
Florida	0	4	0	1	0	0	44
Georgia	0	11	0	2	0	0	13
Maryland	0	34	0	0	0	0	0
North Carolina	0	5	0	1	0	0	12
South Carolina	0	12	0	0	0	0	17
Virginia	12	29	0	2	0	0	19
West Virginia	0	0	0	0	0	0	24
East South Central	**0**	**1**	**0**	**1**	**0**	**0**	**5**
Alabama	0	11	0	5	0	0	6
Kentucky	0	2	0	3	0	0	11
Mississippi	0	6	0	2	0	0	0
Tennessee	0	0	0	2	0	0	8
West South Central	**0**	**12**	**0**	**2**	**0**	**0**	**10**
Arkansas	0	8	0	4	0	0	12
Louisiana	0	286	0	3	0	0	0
Oklahoma	0	3	0	4	0	0	14
Texas	0	9	0	4	0	0	20
Mountain	**2**	**11**	**0**	**2**	**0**	**0**	**7**
Arizona	0	16	0	5	0	0	7
Colorado	0	129	0	3	0	0	31
Idaho	0	0	0	30	0	0	15
Montana	0	47	0	35	0	0	14
Nevada	0	0	0	1	0	0	0
New Mexico	0	35	0	8	0	0	90
Utah	0	1	0	3	0	0	41
Wyoming	5	1	0	12	0	0	42
Pacific Contiguous	**0**	**60**	**0**	**3**	**0**	**0**	**2**
California	0	61	0	3	0	0	4
Oregon	0	0	0	6	0	0	5
Washington	0	1,489	0	9	0	0	2
Pacific Noncontiguous	**67**	**2**	**0**	**17**	**0**	**0**	**36**
Alaska	67	9	0	17	0	0	36
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**2**	**0**	**1**	**0**	**0**	**2**

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

Electric Utilities by Census Division and State, Year-to-Date through March 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**	**23**	**13**	**0**	**0**	**11**
Connecticut	0	0	0	0	0	0	0	18
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	30	33	0	0	29
New Hampshire	0	0	0	0	0	0	0	15
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	37	20	0	0	19
Middle Atlantic	**0**	**0**	**0**	**25**	**25**	**0**	**0**	**2**
New Jersey	0	0	0	25	25	0	0	32
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**	**15**	**8**	**0**	**42**	**1**
Illinois	0	0	0	59	42	0	0	1
Indiana	0	0	0	22	20	0	0	1
Michigan	0	0	0	21	11	0	0	2
Ohio	0	0	0	73	74	0	0	3
Wisconsin	0	0	0	0	15	0	44	2
West North Central	**0**	**0**	**0**	**51**	**3**	**0**	**13**	**1**
Iowa	0	0	0	81	3	0	0	2
Kansas	0	0	0	213	5	0	0	1
Minnesota	0	0	0	126	9	0	0	3
Missouri	0	0	0	0	60	0	0	1
Nebraska	0	0	0	140	32	0	0	5
North Dakota	0	0	0	0	7	0	45	2
South Dakota	0	0	0	0	17	0	0	9
South Atlantic	**0**	**0**	**0**	**2**	**3**	**0**	**0**	**0**
Delaware	0	0	0	92	92	0	0	76
Florida	0	0	0	1	1	0	0	1
Georgia	0	0	0	9	9	0	0	1
Maryland	0	0	0	79	79	0	0	0
North Carolina	0	0	0	11	11	0	0	1
South Carolina	0	0	0	168	11	0	0	1
Virginia	0	0	0	19	14	0	0	1
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**29**	**29**	**0**	**0**	**1**
Alabama	0	0	0	50	50	0	0	1
Kentucky	0	0	0	35	34	0	0	1
Mississippi	0	0	0	0	0	0	0	1
Tennessee	0	0	0	168	168	0	0	1
West South Central	**0**	**0**	**0**	**35**	**6**	**0**	**0**	**1**
Arkansas	0	0	0	183	183	0	0	1
Louisiana	0	0	0	168	168	0	0	2
Oklahoma	0	0	0	37	6	0	0	2
Texas	0	0	0	123	24	0	0	2
Mountain	**0**	**9**	**0**	**8**	**5**	**0**	**27**	**1**
Arizona	0	0	0	9	9	0	0	1
Colorado	0	0	0	127	2	0	0	1
Idaho	0	0	0	0	39	0	0	14
Montana	0	0	0	0	35	0	0	13
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	16	16	0	0	3
Utah	0	9	0	0	9	0	44	2
Wyoming	0	0	0	0	13	0	0	5
Pacific Contiguous	**0**	**0**	**0**	**11**	**5**	**0**	**0**	**1**
California	0	0	0	11	4	0	0	2
Oregon	0	0	0	96	14	0	0	4
Washington	0	0	0	0	9	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**22**	**0**	**0**	**8**
Alaska	0	0	0	0	61	0	0	14
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**2**	**0**	**2**	**2**	**0**	**7**	**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, March 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**30**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	41	0	1	0	0	37
Maine	0	19	0	17	0	0	12
Massachusetts	0	85	0	4	0	0	24
New Hampshire	0	722	0	0	0	0	22
Rhode Island	0	73	0	12	0	0	0
Vermont	0	0	0	0	0	0	23
Middle Atlantic	**3**	**24**	**0**	**1**	**0**	**0**	**10**
New Jersey	0	48	0	2	0	0	0
New York	0	43	0	3	0	0	10
Pennsylvania	3	28	0	1	0	0	13
East North Central	**0**	**13**	**24**	**1**	**8**	**0**	**48**
Illinois	0	23	0	8	0	0	56
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	117
Ohio	0	16	24	1	27	0	73
Wisconsin	0	0	0	0	0	0	122
West North Central	**0**	**209**	**0**	**8**	**0**	**0**	**81**
Iowa	0	202	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	265	0	31	0	0	94
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**4**	**11**	**0**	**2**	**0**	**0**	**5**
Delaware	0	133	0	2	0	0	0
Florida	0	367	0	8	0	0	0
Georgia	0	53	0	5	0	0	132
Maryland	0	10	0	2	0	0	2
North Carolina	0	150	0	6	0	0	55
South Carolina	0	0	0	21	0	0	69
Virginia	0	9	0	2	0	0	57
West Virginia	7	0	0	40	0	0	33
East South Central	**0**	**39**	**0**	**0**	**0**	**0**	**203**
Alabama	0	92	0	0	0	0	0
Kentucky	0	0	0	0	0	0	203
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**4**	**0**	**1**	**0**	**0**	**21**
Arkansas	0	0	0	0	0	0	98
Louisiana	0	0	0	3	0	0	22
Oklahoma	0	0	0	0	0	0	0
Texas	0	10	0	1	0	0	0
Mountain	**5**	**39**	**0**	**3**	**0**	**0**	**37**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	9	0	0	89
Idaho	0	0	0	24	0	0	46
Montana	5	73	0	7	0	0	116
Nevada	0	0	0	0	0	0	150
New Mexico	0	0	0	5	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**12**	**0**	**2**	**0**	**0**	**23**
California	0	0	0	3	0	0	26
Oregon	0	0	0	1	0	0	81
Washington	0	16	0	6	0	0	70
Pacific Noncontiguous	**6**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	58	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**16**	**0**	**4**	**0**	**7**

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

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

Independent Power Producers by Census Division and State, March 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**	**1**
Connecticut	0	0	0	23	9	0	0	1
Maine	0	0	0	90	8	0	0	6
Massachusetts	0	0	0	8	6	0	2	3
New Hampshire	0	0	0	0	16	0	0	2
Rhode Island	0	0	0	36	14	0	0	11
Vermont	0	0	0	23	18	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	12	5	0	0	1
Pennsylvania	0	0	0	28	7	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**25**	**0**
Illinois	0	0	0	22	3	0	0	1
Indiana	0	0	0	16	5	0	0	1
Michigan	0	0	0	36	7	0	35	1
Ohio	0	0	0	24	4	0	0	0
Wisconsin	0	0	0	46	10	0	0	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**2**
Iowa	0	0	0	127	5	0	0	3
Kansas	0	0	0	123	2	0	0	2
Minnesota	0	0	0	7	5	0	0	5
Missouri	0	0	0	26	6	0	0	3
Nebraska	0	0	0	48	5	0	0	5
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	178	12	0	0	12
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**1**
Delaware	0	0	0	35	37	0	0	2
District of Columbia	0	0	0	88	88	0	0	88
Florida	0	0	0	7	4	0	1	4
Georgia	0	0	0	5	5	0	0	4
Maryland	0	0	0	9	11	0	0	1
North Carolina	0	0	0	3	2	0	0	3
South Carolina	0	0	0	9	10	0	0	10
Virginia	0	0	0	9	8	0	0	2
West Virginia	0	0	0	0	11	0	0	6
East South Central	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**0**
Alabama	0	0	0	10	11	0	0	0
Kentucky	0	0	0	203	69	0	0	6
Mississippi	0	0	0	3	6	0	0	0
Tennessee	0	0	0	13	16	0	0	16
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Arkansas	0	0	0	5	13	0	0	1
Louisiana	0	0	0	0	53	0	0	3
Oklahoma	0	0	0	0	1	0	0	1
Texas	0	0	0	3	1	0	0	1
Mountain	**0**	**3**	**0**	**2**	**2**	**0**	**0**	**2**
Arizona	0	0	0	3	3	0	0	1
Colorado	0	0	0	7	2	0	0	3
Idaho	0	14	0	11	9	0	0	11
Montana	0	0	0	52	11	0	0	4
Nevada	0	4	0	3	2	0	0	2
New Mexico	0	0	0	8	2	0	0	2
Utah	0	9	0	6	5	0	0	4
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	1	0	2	1	0	0	2
Oregon	0	9	0	10	8	0	0	3
Washington	0	0	0	49	11	0	0	3
Pacific Noncontiguous	**0**	**8**	**0**	**15**	**9**	**0**	**0**	**3**
Alaska	0	0	0	0	80	0	0	48
Hawaii	0	8	0	15	9	0	0	3
U.S. Total	**0**	**2**	**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 March 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**30**	**0**	**2**	**0**	**0**	**10**
Connecticut	0	41	0	1	0	0	37
Maine	0	19	0	17	0	0	12
Massachusetts	0	85	0	4	0	0	24
New Hampshire	0	722	0	0	0	0	22
Rhode Island	0	73	0	12	0	0	0
Vermont	0	0	0	0	0	0	23
Middle Atlantic	**3**	**24**	**0**	**1**	**0**	**0**	**10**
New Jersey	0	48	0	2	0	0	0
New York	0	43	0	3	0	0	10
Pennsylvania	3	28	0	1	0	0	13
East North Central	**0**	**13**	**24**	**1**	**8**	**0**	**48**
Illinois	0	23	0	8	0	0	56
Indiana	0	0	0	1	0	0	0
Michigan	0	0	0	1	0	0	117
Ohio	0	16	24	1	27	0	73
Wisconsin	0	0	0	0	0	0	122
West North Central	**0**	**209**	**0**	**8**	**0**	**0**	**81**
Iowa	0	202	0	0	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	265	0	31	0	0	94
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**4**	**11**	**0**	**2**	**0**	**0**	**5**
Delaware	0	133	0	2	0	0	0
Florida	0	367	0	8	0	0	0
Georgia	0	53	0	5	0	0	132
Maryland	0	10	0	2	0	0	2
North Carolina	0	150	0	6	0	0	55
South Carolina	0	0	0	21	0	0	69
Virginia	0	9	0	2	0	0	57
West Virginia	7	0	0	40	0	0	33
East South Central	**0**	**39**	**0**	**0**	**0**	**0**	**203**
Alabama	0	92	0	0	0	0	0
Kentucky	0	0	0	0	0	0	203
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**4**	**0**	**1**	**0**	**0**	**21**
Arkansas	0	0	0	0	0	0	98
Louisiana	0	0	0	3	0	0	22
Oklahoma	0	0	0	0	0	0	0
Texas	0	10	0	1	0	0	0
Mountain	**5**	**39**	**0**	**3**	**0**	**0**	**37**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	9	0	0	89
Idaho	0	0	0	24	0	0	46
Montana	5	73	0	7	0	0	116
Nevada	0	0	0	0	0	0	150
New Mexico	0	0	0	5	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**12**	**0**	**2**	**0**	**0**	**23**
California	0	0	0	3	0	0	26
Oregon	0	0	0	1	0	0	81
Washington	0	16	0	6	0	0	70
Pacific Noncontiguous	**6**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	58	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**16**	**0**	**4**	**0**	**7**

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

Independent Power Producers by Census Division and State, Year-to-Date through March 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**	**1**
Connecticut	0	0	0	23	9	0	0	1
Maine	0	0	0	90	8	0	0	6
Massachusetts	0	0	0	8	6	0	2	3
New Hampshire	0	0	0	0	16	0	0	2
Rhode Island	0	0	0	36	14	0	0	11
Vermont	0	0	0	23	18	0	0	16
Middle Atlantic	**0**	**0**	**0**	**7**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	8	6	0	0	1
New York	0	0	0	12	5	0	0	1
Pennsylvania	0	0	0	28	7	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**25**	**0**
Illinois	0	0	0	22	3	0	0	1
Indiana	0	0	0	16	5	0	0	1
Michigan	0	0	0	36	7	0	35	1
Ohio	0	0	0	24	4	0	0	0
Wisconsin	0	0	0	46	10	0	0	2
West North Central	**0**	**0**	**0**	**7**	**2**	**0**	**0**	**2**
Iowa	0	0	0	127	5	0	0	3
Kansas	0	0	0	123	2	0	0	2
Minnesota	0	0	0	7	5	0	0	5
Missouri	0	0	0	26	6	0	0	3
Nebraska	0	0	0	48	5	0	0	5
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	178	12	0	0	12
South Atlantic	**0**	**0**	**0**	**2**	**2**	**0**	**1**	**1**
Delaware	0	0	0	35	37	0	0	2
District of Columbia	0	0	0	88	88	0	0	88
Florida	0	0	0	7	4	0	1	4
Georgia	0	0	0	5	5	0	0	4
Maryland	0	0	0	9	11	0	0	1
North Carolina	0	0	0	3	2	0	0	3
South Carolina	0	0	0	9	10	0	0	10
Virginia	0	0	0	9	8	0	0	2
West Virginia	0	0	0	0	11	0	0	6
East South Central	**0**	**0**	**0**	**6**	**7**	**0**	**0**	**0**
Alabama	0	0	0	10	11	0	0	0
Kentucky	0	0	0	203	69	0	0	6
Mississippi	0	0	0	3	6	0	0	0
Tennessee	0	0	0	13	16	0	0	16
West South Central	**0**	**0**	**0**	**2**	**1**	**0**	**0**	**0**
Arkansas	0	0	0	5	13	0	0	1
Louisiana	0	0	0	0	53	0	0	3
Oklahoma	0	0	0	0	1	0	0	1
Texas	0	0	0	3	1	0	0	1
Mountain	**0**	**3**	**0**	**2**	**2**	**0**	**0**	**2**
Arizona	0	0	0	3	3	0	0	1
Colorado	0	0	0	7	2	0	0	3
Idaho	0	14	0	11	9	0	0	11
Montana	0	0	0	52	11	0	0	4
Nevada	0	4	0	3	2	0	0	2
New Mexico	0	0	0	8	2	0	0	2
Utah	0	9	0	6	5	0	0	4
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	1	0	2	1	0	0	2
Oregon	0	9	0	10	8	0	0	3
Washington	0	0	0	49	11	0	0	3
Pacific Noncontiguous	**0**	**8**	**0**	**15**	**9**	**0**	**0**	**3**
Alaska	0	0	0	0	80	0	0	48
Hawaii	0	8	0	15	9	0	0	3
U.S. Total	**0**	**2**	**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, March 2019

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**26**	**0**	**22**	**0**	**0**	**0**
Connecticut	0	1,528	0	29	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	65	0	36	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**0**	**75**	**0**	**21**	**0**	**0**	**0**
New Jersey	0	0	0	39	0	0	0
New York	0	99	0	27	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**51**	**2**	**0**	**10**	**0**	**0**	**0**
Illinois	103	450	0	34	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	6	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	12	0	0	0
West North Central	**0**	**31**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	30	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	8,246	0	0	0	0	0
South Atlantic	**0**	**12**	**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	33	0	0	0	0	0
Maryland	0	395	0	5	0	0	0
North Carolina	0	886	0	67	0	0	0
South Carolina	0	507	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**38**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	38	0	0	0
West South Central	**0**	**0**	**0**	**18**	**0**	**0**	**447**
Arkansas	0	0	0	131	0	0	0
Louisiana	0	0	0	32	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	21	0	0	447
Mountain	**0**	**190**	**0**	**11**	**0**	**0**	**0**
Arizona	0	754	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	47	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**87**	**0**	**3**	**0**	**0**	**118**
California	0	62	0	3	0	0	118
Oregon	0	1,127	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**60**	**2**	**0**	**0**	**0**	**0**	**103**
Alaska	60	3	0	0	0	0	103
Hawaii	0	0	0	0	0	0	0
U.S. Total	**19**	**13**	**0**	**5**	**0**	**0**	**69**

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, March 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**	**100**	**9**	**0**	**0**	**16**
Connecticut	0	0	0	215	215	0	0	29
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	112	28	0	0	30
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**18**	**5**	**0**	**4**	**10**
New Jersey	0	0	0	19	10	0	0	10
New York	0	0	0	92	8	0	9	17
Pennsylvania	0	0	0	74	6	0	0	2
East North Central	**0**	**0**	**0**	**90**	**17**	**0**	**0**	**8**
Illinois	0	0	0	151	148	0	0	31
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	4
Ohio	0	0	0	131	28	0	0	2
Wisconsin	0	0	0	194	45	0	0	22
West North Central	**0**	**0**	**0**	**0**	**13**	**0**	**106**	**5**
Iowa	0	0	0	0	13	0	0	3
Kansas	0	0	0	0	90	0	0	90
Minnesota	0	0	0	0	24	0	106	13
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	8,246
South Atlantic	**0**	**0**	**0**	**21**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	94	26	0	0	18
Georgia	0	0	0	127	127	0	0	92
Maryland	0	0	0	76	29	0	0	5
North Carolina	0	0	0	23	22	0	0	21
South Carolina	0	0	0	0	0	0	0	3
Virginia	0	0	0	187	4	0	0	2
East South Central	**0**	**0**	**0**	**104**	**104**	**0**	**0**	**37**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	104	104	0	0	37
West South Central	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	111
Louisiana	0	0	0	0	0	0	0	32
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	20	0	0	19
Mountain	**0**	**0**	**0**	**26**	**4**	**0**	**0**	**5**
Arizona	0	0	0	101	101	0	0	5
Colorado	0	0	0	60	62	0	0	50
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	31	3	0	0	3
New Mexico	0	0	0	0	201	0	0	46
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**20**	**5**	**0**	**0**	**3**
California	0	0	0	20	5	0	0	3
Oregon	0	0	0	0	25	0	0	11
Washington	0	0	0	0	49	0	0	17
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**
Alaska	0	0	0	0	0	0	0	55
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**0**	**2**	**3**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**26**	**0**	**22**	**0**	**0**	**0**
Connecticut	0	1,528	0	29	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	65	0	36	0	0	0
New Hampshire	0	1	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0
Middle Atlantic	**0**	**75**	**0**	**21**	**0**	**0**	**0**
New Jersey	0	0	0	39	0	0	0
New York	0	99	0	27	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**51**	**2**	**0**	**10**	**0**	**0**	**0**
Illinois	103	450	0	34	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	6	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	12	0	0	0
West North Central	**0**	**31**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	30	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	8,246	0	0	0	0	0
South Atlantic	**0**	**12**	**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	33	0	0	0	0	0
Maryland	0	395	0	5	0	0	0
North Carolina	0	886	0	67	0	0	0
South Carolina	0	507	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**38**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	38	0	0	0
West South Central	**0**	**0**	**0**	**18**	**0**	**0**	**447**
Arkansas	0	0	0	131	0	0	0
Louisiana	0	0	0	32	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	21	0	0	447
Mountain	**0**	**190**	**0**	**11**	**0**	**0**	**0**
Arizona	0	754	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	47	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**87**	**0**	**3**	**0**	**0**	**118**
California	0	62	0	3	0	0	118
Oregon	0	1,127	0	0	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**60**	**2**	**0**	**0**	**0**	**0**	**103**
Alaska	60	3	0	0	0	0	103
Hawaii	0	0	0	0	0	0	0
U.S. Total	**19**	**13**	**0**	**5**	**0**	**0**	**69**

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 March 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**	**100**	**9**	**0**	**0**	**16**
Connecticut	0	0	0	215	215	0	0	29
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	112	28	0	0	30
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	0	0	0	0	0
Middle Atlantic	**0**	**0**	**0**	**18**	**5**	**0**	**4**	**10**
New Jersey	0	0	0	19	10	0	0	10
New York	0	0	0	92	8	0	9	17
Pennsylvania	0	0	0	74	6	0	0	2
East North Central	**0**	**0**	**0**	**90**	**17**	**0**	**0**	**8**
Illinois	0	0	0	151	148	0	0	31
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	4
Ohio	0	0	0	131	28	0	0	2
Wisconsin	0	0	0	194	45	0	0	22
West North Central	**0**	**0**	**0**	**0**	**13**	**0**	**106**	**5**
Iowa	0	0	0	0	13	0	0	3
Kansas	0	0	0	0	90	0	0	90
Minnesota	0	0	0	0	24	0	106	13
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	8,246
South Atlantic	**0**	**0**	**0**	**21**	**7**	**0**	**0**	**4**
Delaware	0	0	0	0	0	0	0	0
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	94	26	0	0	18
Georgia	0	0	0	127	127	0	0	92
Maryland	0	0	0	76	29	0	0	5
North Carolina	0	0	0	23	22	0	0	21
South Carolina	0	0	0	0	0	0	0	3
Virginia	0	0	0	187	4	0	0	2
East South Central	**0**	**0**	**0**	**104**	**104**	**0**	**0**	**37**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	104	104	0	0	37
West South Central	**0**	**0**	**0**	**0**	**19**	**0**	**0**	**17**
Arkansas	0	0	0	0	0	0	0	111
Louisiana	0	0	0	0	0	0	0	32
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	20	0	0	19
Mountain	**0**	**0**	**0**	**26**	**4**	**0**	**0**	**5**
Arizona	0	0	0	101	101	0	0	5
Colorado	0	0	0	60	62	0	0	50
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	31	3	0	0	3
New Mexico	0	0	0	0	201	0	0	46
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**20**	**5**	**0**	**0**	**3**
California	0	0	0	20	5	0	0	3
Oregon	0	0	0	0	25	0	0	11
Washington	0	0	0	0	49	0	0	17
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**21**
Alaska	0	0	0	0	0	0	0	55
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**10**	**3**	**0**	**2**	**3**

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**104**	**34**	**0**	**18**	**0**	**0**	**63**
Connecticut	0	0	0	21	0	0	0
Maine	104	87	0	52	0	0	63
Massachusetts	0	0	0	11	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	61	0	0	0
Middle Atlantic	**38**	**7**	**46**	**11**	**21**	**0**	**30**
New Jersey	0	0	0	11	0	0	0
New York	0	1	0	9	0	0	30
Pennsylvania	38	33	70	19	31	0	0
East North Central	**8**	**30**	**0**	**7**	**10**	**0**	**62**
Illinois	8	0	0	34	0	0	0
Indiana	0	2	0	10	13	0	0
Michigan	63	244	0	12	0	0	297
Ohio	0	0	0	23	0	0	0
Wisconsin	21	288	0	14	0	0	63
West North Central	**6**	**0**	**0**	**5**	**0**	**0**	**0**
Iowa	3	0	0	7	0	0	0
Kansas	0	0	0	21	0	0	0
Minnesota	20	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	63	0	0	0	0	0	0
North Dakota	77	0	0	0	0	0	0
South Atlantic	**15**	**25**	**59**	**5**	**0**	**0**	**28**
Delaware	0	0	0	0	0	0	0
Florida	41	56	0	14	0	0	0
Georgia	67	38	59	25	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	95	0	26	0	0	395
South Carolina	0	0	0	12	0	0	0
Virginia	0	126	0	8	0	0	0
West Virginia	0	0	0	0	0	0	28
East South Central	**0**	**58**	**0**	**9**	**0**	**0**	**0**
Alabama	0	81	0	17	0	0	0
Kentucky	0	0	0	17	0	0	0
Mississippi	0	0	0	24	0	0	0
Tennessee	0	0	0	6	0	0	0
West South Central	**0**	**3**	**0**	**2**	**5**	**0**	**0**
Arkansas	0	0	0	19	0	0	0
Louisiana	0	0	0	2	7	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	6	0	2	7	0	0
Mountain	**27**	**0**	**0**	**4**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	145	0	0	27	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	28	0	0	8	0	0	0
Pacific Contiguous	**0**	**65**	**0**	**2**	**2**	**0**	**0**
California	0	0	0	2	2	0	0
Oregon	0	0	0	32	0	0	0
Washington	0	98	0	26	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**107**
Alaska	0	10	0	0	0	0	0
Hawaii	0	0	0	0	0	0	107
U.S. Total	**4**	**7**	**22**	**1**	**5**	**0**	**20**

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, March 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**	**39**	**7**	**0**	**0**	**9**
Connecticut	0	0	0	601	601	0	0	20
Maine	0	0	0	0	7	0	0	12
Massachusetts	0	0	0	0	0	0	0	11
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	61
Middle Atlantic	**0**	**0**	**0**	**57**	**7**	**0**	**0**	**8**
New Jersey	0	0	0	84	84	0	0	6
New York	0	0	0	0	14	0	0	7
Pennsylvania	0	0	0	77	7	0	0	12
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	19	0	0	8
Michigan	0	0	0	0	8	0	0	7
Ohio	0	0	0	0	19	0	0	10
Wisconsin	0	0	0	0	9	0	105	9
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	20
Minnesota	0	0	0	0	0	0	0	6
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	63
North Dakota	0	0	0	0	82	0	0	45
South Atlantic	**0**	**0**	**0**	**108**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	46	0	0	0
Florida	0	0	0	154	5	0	0	5
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	151	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	12
East South Central	**0**	**0**	**0**	**123**	**3**	**0**	**78**	**3**
Alabama	0	0	0	0	4	0	0	6
Kentucky	0	0	0	0	16	0	0	12
Mississippi	0	0	0	0	5	0	0	8
Tennessee	0	0	0	123	6	0	78	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**3**	**1**
Arkansas	0	0	0	0	5	0	0	5
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	10	0	7	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	0	9
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	8
Pacific Contiguous	**0**	**0**	**0**	**38**	**6**	**0**	**3**	**1**
California	0	0	0	38	10	0	3	1
Oregon	0	0	0	0	11	0	0	11
Washington	0	0	0	0	8	0	0	7
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**137**	**0**	**0**	**12**
Alaska	0	0	0	0	137	0	0	4
Hawaii	0	0	0	0	0	0	0	18
U.S. Total	**0**	**0**	**0**	**28**	**2**	**0**	**1**	**1**

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

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

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

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**104**	**34**	**0**	**18**	**0**	**0**	**63**
Connecticut	0	0	0	21	0	0	0
Maine	104	87	0	52	0	0	63
Massachusetts	0	0	0	11	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	61	0	0	0
Middle Atlantic	**38**	**7**	**46**	**11**	**21**	**0**	**30**
New Jersey	0	0	0	11	0	0	0
New York	0	1	0	9	0	0	30
Pennsylvania	38	33	70	19	31	0	0
East North Central	**8**	**30**	**0**	**7**	**10**	**0**	**62**
Illinois	8	0	0	34	0	0	0
Indiana	0	2	0	10	13	0	0
Michigan	63	244	0	12	0	0	297
Ohio	0	0	0	23	0	0	0
Wisconsin	21	288	0	14	0	0	63
West North Central	**6**	**0**	**0**	**5**	**0**	**0**	**0**
Iowa	3	0	0	7	0	0	0
Kansas	0	0	0	21	0	0	0
Minnesota	20	0	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	63	0	0	0	0	0	0
North Dakota	77	0	0	0	0	0	0
South Atlantic	**15**	**25**	**59**	**5**	**0**	**0**	**28**
Delaware	0	0	0	0	0	0	0
Florida	41	56	0	14	0	0	0
Georgia	67	38	59	25	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	0	95	0	26	0	0	395
South Carolina	0	0	0	12	0	0	0
Virginia	0	126	0	8	0	0	0
West Virginia	0	0	0	0	0	0	28
East South Central	**0**	**58**	**0**	**9**	**0**	**0**	**0**
Alabama	0	81	0	17	0	0	0
Kentucky	0	0	0	17	0	0	0
Mississippi	0	0	0	24	0	0	0
Tennessee	0	0	0	6	0	0	0
West South Central	**0**	**3**	**0**	**2**	**5**	**0**	**0**
Arkansas	0	0	0	19	0	0	0
Louisiana	0	0	0	2	7	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	6	0	2	7	0	0
Mountain	**27**	**0**	**0**	**4**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	145	0	0	27	0	0	0
Montana	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	28	0	0	8	0	0	0
Pacific Contiguous	**0**	**65**	**0**	**2**	**2**	**0**	**0**
California	0	0	0	2	2	0	0
Oregon	0	0	0	32	0	0	0
Washington	0	98	0	26	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**107**
Alaska	0	10	0	0	0	0	0
Hawaii	0	0	0	0	0	0	107
U.S. Total	**4**	**7**	**22**	**1**	**5**	**0**	**20**

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 March 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**	**39**	**7**	**0**	**0**	**9**
Connecticut	0	0	0	601	601	0	0	20
Maine	0	0	0	0	7	0	0	12
Massachusetts	0	0	0	0	0	0	0	11
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	61
Middle Atlantic	**0**	**0**	**0**	**57**	**7**	**0**	**0**	**8**
New Jersey	0	0	0	84	84	0	0	6
New York	0	0	0	0	14	0	0	7
Pennsylvania	0	0	0	77	7	0	0	12
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	7
Indiana	0	0	0	0	19	0	0	8
Michigan	0	0	0	0	8	0	0	7
Ohio	0	0	0	0	19	0	0	10
Wisconsin	0	0	0	0	9	0	105	9
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	20
Minnesota	0	0	0	0	0	0	0	6
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	63
North Dakota	0	0	0	0	82	0	0	45
South Atlantic	**0**	**0**	**0**	**108**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	46	0	0	0
Florida	0	0	0	154	5	0	0	5
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	5	0	0	5
South Carolina	0	0	0	151	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	12
East South Central	**0**	**0**	**0**	**123**	**3**	**0**	**78**	**3**
Alabama	0	0	0	0	4	0	0	6
Kentucky	0	0	0	0	16	0	0	12
Mississippi	0	0	0	0	5	0	0	8
Tennessee	0	0	0	123	6	0	78	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**3**	**1**
Arkansas	0	0	0	0	5	0	0	5
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	10	0	7	2
Mountain	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**4**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	1	0	0	9
Montana	0	0	0	0	0	0	0	0
Nevada	0	0	0	0	0	0	0	0
New Mexico	0	0	0	0	0	0	0	0
Utah	0	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0	8
Pacific Contiguous	**0**	**0**	**0**	**38**	**6**	**0**	**3**	**1**
California	0	0	0	38	10	0	3	1
Oregon	0	0	0	0	11	0	0	11
Washington	0	0	0	0	8	0	0	7
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**137**	**0**	**0**	**12**
Alaska	0	0	0	0	137	0	0	4
Hawaii	0	0	0	0	0	0	0	18
U.S. Total	**0**	**0**	**0**	**28**	**2**	**0**	**1**	**1**

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

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

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

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

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**3**	**1**	**1**
Connecticut	0	1	3	2	1
Maine	1	1	2	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	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	0	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	0
Indiana	1	3	2	0	1
Michigan	1	2	3	0	1
Ohio	1	1	1	0	0
Wisconsin	1	3	5	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	6	5	0	3
Kansas	2	1	6	0	2
Minnesota	1	4	6	0	2
Missouri	1	2	6	0	1
Nebraska	2	7	9	0	3
North Dakota	1	3	8	0	3
South Dakota	2	8	12	0	4
South Atlantic	**1**	**0**	**1**	**0**	**0**
Delaware	1	2	6	0	1
District of Columbia	0	0	0	0	0
Florida	1	0	5	0	1
Georgia	2	1	3	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**	**1**	**2**	**0**	**1**
Alabama	2	1	2	0	1
Kentucky	2	3	3	0	1
Mississippi	2	2	4	0	2
Tennessee	1	3	4	0	1
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	1	4	0	1
Louisiana	2	1	1	0	1
Oklahoma	2	1	4	0	1
Texas	1	1	2	0	1
Mountain	**0**	**1**	**2**	**0**	**1**
Arizona	1	2	3	0	1
Colorado	1	4	5	0	2
Idaho	1	4	5	0	2
Montana	2	6	5	0	3
Nevada	1	2	1	0	1
New Mexico	2	6	6	0	3
Utah	2	4	2	0	2
Wyoming	2	7	3	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	2	0	1
Oregon	1	4	8	0	2
Washington	1	4	6	0	2
Pacific Noncontiguous	**1**	**4**	**4**	**0**	**2**
Alaska	2	9	15	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, March 2019

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

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**1**	**1**	**2**	**1**	**1**
Connecticut	5	1	1	3	2
Maine	1	1	2	0	1
Massachusetts	1	1	3	0	1
New Hampshire	1	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	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	2	3	2	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**	**4**	**0**	**1**
Iowa	2	5	7	0	3
Kansas	2	2	5	0	2
Minnesota	2	3	7	0	2
Missouri	2	3	6	0	2
Nebraska	2	6	11	0	4
North Dakota	2	3	7	0	3
South Dakota	3	6	13	0	3
South Atlantic	**1**	**0**	**1**	**0**	**0**
Delaware	2	3	8	0	2
District of Columbia	0	0	0	0	0
Florida	1	1	5	0	1
Georgia	2	1	4	0	1
Maryland	0	1	2	0	0
North Carolina	1	1	3	0	1
South Carolina	2	2	3	0	1
Virginia	1	1	3	0	1
West Virginia	1	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	2	2	0	1
Kentucky	2	4	3	0	2
Mississippi	3	3	5	0	2
Tennessee	2	3	4	0	2
West South Central	**1**	**1**	**1**	**0**	**1**
Arkansas	2	2	4	0	2
Louisiana	2	2	1	0	1
Oklahoma	2	2	4	0	2
Texas	1	1	2	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	2	4	0	1
Colorado	3	4	6	0	2
Idaho	1	3	6	0	2
Montana	2	5	8	0	3
Nevada	1	2	1	0	1
New Mexico	4	7	10	0	4
Utah	3	5	3	0	2
Wyoming	3	6	5	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	1
Pacific Noncontiguous	**1**	**2**	**3**	**0**	**1**
Alaska	2	6	15	0	4
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

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

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

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2018	3	03/02/2018 11:34 AM	. .	. Hours, . Minutes	New York State Electric & Gas	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	50000
2018	3	03/02/2018 11:58 AM	. .	. Hours, . Minutes	PPL Electric Utilities Corp	RF	Pennsylvania: Berks County, Bucks County, Carbon County, Chester County, Clinton County, Columbia County, Cumberland County, Dauphin County, Juniata County, Lackawanna County, Lancaster County, Lebanon County, Lehigh County, Luzerne County, Lycoming County, Monroe County, Montgomery County, Montour County, Northampton County, Northumberland County, Pike County, Schuylkill County, Snyder County;	Electrical System Separation (Islanding) where part or parts of a power grid remain(s) operational in an otherwise blacked out area or within the partial failure of an integrated electrical system-Severe Weather	Unknown	126000
2018	3	03/02/2018 12:00 PM	. .	. Hours, . Minutes	Baltimore Gas and Electric	RF	Maryland:	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Severe Weather	670	474019
2018	3	03/02/2018 12:00 PM	03/05/2018 12:00 AM	60 Hours, 0 Minutes	Exelon Corporation/PECO	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	630000
2018	3	03/02/2018 1:51 PM	03/04/2018 12:11 PM	46 Hours, 20 Minutes	Metropolitan Edison Co	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	233136
2018	3	03/02/2018 1:51 PM	03/05/2018 1:18 PM	71 Hours, 27 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	325000
2018	3	03/02/2018 3:10 PM	03/06/2018 4:57 AM	85 Hours, 47 Minutes	Jersey Central Power & Lt Co	RF	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	249322
2018	3	03/02/2018 3:46 PM	03/04/2018 7:46 PM	52 Hours, 0 Minutes	Consolidated Edison Co-NY Inc	NPCC	New York: New York County, Westchester County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	72353
2018	3	03/02/2018 5:00 PM	03/06/2018 11:00 AM	90 Hours, 0 Minutes	Delmarva Power & Light Company	RF	Delaware: Maryland:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	60000
2018	3	03/07/2018 12:00 PM	03/07/2018 5:00 PM	5 Hours, 0 Minutes	Exelon Corporation/PECO	RF	Pennsylvania:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	120000
2018	3	03/07/2018 4:10 PM	03/10/2018 11:32 AM	67 Hours, 22 Minutes	Jersey Central Power & Lt Co	RF	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	216800
2018	3	03/07/2018 5:15 PM	. .	. Hours, . Minutes	Public Service Electric & Gas	RF	New Jersey:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	50	58000
2018	3	03/07/2018 7:37 PM	03/10/2018 4:35 PM	68 Hours, 58 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Maine: New Hampshire: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	102000
2018	3	03/13/2018 8:50 AM	03/14/2018 11:22 PM	38 Hours, 32 Minutes	ISO New England	NPCC	Massachusetts: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	123629
2018	3	03/19/2018 11:29 PM	03/20/2018 3:37 AM	4 Hours, 8 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	261	78220
2018	3	03/20/2018 7:00 PM	03/25/2018 6:30 AM	107 Hours, 30 Minutes	Atlantic City Electric Co	RF	New Jersey: Atlantic County, Camden County, Cape May County, Gloucester County, Salem County, Cumberland County, Burlington County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	80	124000
2018	3	03/24/2018 10:30 PM	03/26/2018 8:00 PM	45 Hours, 30 Minutes	American Electric Power - (RFC Reliability Region) (8400 Smiths Mill Road, New Albany Ohio 43054)	RF	Virginia: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	81227
2018	4	04/04/2018 4:42 PM	04/07/2018 6:22 AM	61 Hours, 40 Minutes	Niagara Mohawk Power Corporation (dba National Grid)	NPCC	New York:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	72896
2018	4	04/05/2018 12:50 AM	04/05/2018 4:00 PM	15 Hours, 10 Minutes	ISO New England	NPCC	Connecticut: Maine: Massachusetts: New Hampshire: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	65932
2018	4	04/09/2018 11:16 AM	. .	. Hours, . Minutes	Peak Reliability	WECC	Utah:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	300	250000
2018	4	04/09/2018 12:16 PM	04/09/2018 1:52 PM	1 Hours, 36 Minutes	Pacificorp	WECC	Utah: Salt Lake County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	806	57000
2018	4	04/14/2018 9:30 AM	04/14/2018 10:00 AM	0 Hours, 30 Minutes	Entergy Corp	SERC	Louisiana: Arkansas: Mississippi: Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	56350
2018	4	04/15/2018 7:30 AM	04/18/2018 7:30 AM	72 Hours, 0 Minutes	DTE Energy	RF	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	389591
2018	4	04/15/2018 5:14 PM	04/15/2018 11:25 PM	6 Hours, 11 Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	78100
2018	5	05/04/2018 12:00 PM	05/06/2018 1:00 PM	49 Hours, 0 Minutes	DTE Energy	RF	Michigan:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	300000
2018	5	05/04/2018 2:00 PM	05/05/2018 9:30 AM	19 Hours, 30 Minutes	Consumers Energy Co	RF	Michigan: Calhoun County, Genesee County, Ingham County, Kent County, Macomb County, Midland County, Saginaw County, Gratiot County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	90000

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

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

Table B.2 Major Disturbances and Unusual Occurrences, 2018

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2018	9	09/15/2018 3:00 PM	09/15/2018 6:00 PM	3 Hours, 0 Minutes	Cooperative Energy	SERC	Mississippi: Forrest County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the Bulk Electric System.-System Operations	1322	420000
2018	9	09/16/2018 8:00 AM	09/18/2018 7:40 PM	59 Hours, 40 Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50000
2018	9	09/22/2018 3:23 PM	09/22/2018 11:00 PM	7 Hours, 37 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Natural Disaster	3507	2500
2018	9	09/26/2018 1:54 PM	09/26/2018 5:58 PM	4 Hours, 4 Minutes	CenterPoint Energy	TRE	Texas: Harris County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2018	10	10/10/2018 11:59 AM	. .	. Hours, . Minutes	Southern Company	FRCC	Florida: Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	152	45604
2018	10	10/10/2018 2:00 PM	10/11/2018 6:00 AM	16 Hours, 0 Minutes	Seminole Electric Cooperative Inc.	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	135	60717
2018	10	10/10/2018 4:00 PM	10/19/2018 6:00 AM	206 Hours, 0 Minutes	City of Tallahassee	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	330	55000
2018	10	10/11/2018 7:21 AM	10/11/2018 3:00 PM	7 Hours, 39 Minutes	South Carolina Electric and Gas	SERC	South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	71654
2018	10	10/11/2018 1:15 PM	. .	. Hours, . Minutes	Duke Energy Carolinas	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	240807
2018	10	10/11/2018 4:42 PM	10/12/2018 9:00 PM	28 Hours, 18 Minutes	Duke Energy Progress	SERC	North Carolina: South Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	170222
2018	10	10/11/2018 6:55 PM	10/12/2018 12:00 PM	17 Hours, 5 Minutes	North Carolina EI Member Corp	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	117000
2018	10	10/12/2018 3:36 AM	10/12/2018 1:56 PM	10 Hours, 20 Minutes	PJM Interconnection	RF	Maryland: Garrett County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	0	0
2018	10	10/14/2018 10:11 PM	. .	. Hours, . Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Natural Disaster	Unknown	60000
2018	10	10/16/2018 4:15 AM	10/16/2018 5:11 PM	12 Hours, 56 Minutes	ISO New England	NPCC	Connecticut: Rhode Island: Massachusetts: Vermont: New Hampshire: Maine:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	18000
2018	10	10/21/2018 12:16 AM	10/21/2018 4:14 PM	15 Hours, 58 Minutes	American Electric Power	RF	West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	63408
2018	10	10/31/2018 7:30 PM	11/01/2018 6:55 PM	23 Hours, 25 Minutes	CenterPoint Energy	TRE	Texas: Harris County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	402	140932
2018	11	11/03/2018 5:20 PM	11/04/2018 2:30 PM	21 Hours, 10 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Vermont: Maine: Rhode Island:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	62000
2018	11	11/06/2018 9:49 AM	11/09/2018 2:05 PM	76 Hours, 16 Minutes	Tennessee Valley Authority	SERC	Tennessee:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	61000
2018	11	11/08/2018 7:16 AM	11/28/2018 4:32 PM	489 Hours, 16 Minutes	Pacific Gas & Electric Co	WECC	California: Butte County;	Electrical System Separation (Islanding) where part or parts of power grid remain(s) operational in an otherwise blocked out area or within the partial failure of an integrated electrical system-Natural Disaster/Transmission Interruption	32	11844
2018	11	11/10/2018 5:02 PM	11/14/2018 3:00 PM	93 Hours, 58 Minutes	WPSC	MRO	Wisconsin:	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2018	11	11/15/2018 3:23 AM	11/15/2018 5:35 PM	14 Hours, 12 Minutes	LG&E KU	SERC	Kentucky:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	150000
2018	11	11/15/2018 5:28 AM	11/15/2018 8:35 AM	3 Hours, 7 Minutes	Duke Energy Midwest	RF	Indiana:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	55000
2018	11	11/15/2018 5:38 AM	11/16/2018 6:00 AM	24 Hours, 22 Minutes	Duke Energy Midwest	SERC	Kentucky: Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	104000
2018	11	11/15/2018 10:50 AM	11/17/2018 1:12 PM	50 Hours, 22 Minutes	American Electric Power - (RFC Reliability Region)	RF	Virginia: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	50600

Table B.2 Major Disturbances and Unusual Occurrences, 2018

Year	Month	Event Date and Time	Restoration Date and Time	Duration	Utility/Power Pool	NERC Region	Area Affected	Type of Disturbance	Loss (megawatts)	Number of Customers Affected
2018	11	11/25/2018 10:30 PM	11/28/2018 8:17 PM	69 Hours, 47 Minutes	ComEd	SERC	Illinois: Will County, DuPage County, Kane County, McHenry County, Winnebago County, Ogle County, DeKalb County, Lee County, Grundy County, Lake County, Cook County, Livingston County, Stephenson County, LaSalle County, Kankakee County, Kendall County, Boone County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	313448
2018	11	11/27/2018 8:00 AM	11/28/2018 4:50 PM	32 Hours, 50 Minutes	ISO New England	NPCC	Maine: New Hampshire: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	32000
2018	12	12/03/2018 3:15 AM	12/03/2018 3:44 AM	0 Hours, 29 Minutes	ERCOT	TRE	Texas:	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	16	Unknown
2018	12	12/09/2018 12:23 AM	12/09/2018 11:54 AM	11 Hours, 31 Minutes	Southern Company	SERC	Alabama: Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	137	41126
2018	12	12/09/2018 3:35 AM	12/10/2018 11:45 PM	44 Hours, 10 Minutes	Duke Energy Carolinas	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather/Transmission Interruption	Unknown	50000
2018	12	12/09/2018 8:41 AM	12/09/2018 6:00 PM	9 Hours, 19 Minutes	Duke Energy Progress	SERC	North Carolina:	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	70000
2018	12	12/14/2018 4:00 PM	12/17/2018 2:00 AM	58 Hours, 0 Minutes	Puget Sound Energy	WECC	Washington: King County, Kitsap County, Island County, Pierce County, Thurston County, Whatcom County, Skagit County, Kittitas County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	150000
2018	12	12/14/2018 6:00 PM	. .	. Hours, . Minutes	Snohomish County PUD No. 1	WECC	Washington: Snohomish County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	200	60000
2018	12	12/20/2018 9:30 AM	12/20/2018 5:00 PM	7 Hours, 30 Minutes	Puget Sound Energy	WECC	Washington: Skagit County, Snohomish County, King County, Kitsap County, Island County;	Loss of electric service to more than 50,000 customers for 1 hour or more.-Severe Weather	Unknown	165000
2018	12	12/27/2018 9:12 PM	12/27/2018 9:16 PM	0 Hours, 4 Minutes	Consolidated Edison Co-NY Inc.	NPCC	New York: New York County;	Unexpected Transmission loss within its area, contrary to design, of three or more Bulk Electric System Facilities caused by a common disturbance (excluding successful automatic reclosing).-Transmission Interruption	Unknown	Unknown

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

Appendix C

Technical notes

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

Data quality

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

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

Reliability of data

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

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

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

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

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

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

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

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

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

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

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

Data revision procedure

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

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

Data sources for Electric Power Monthly

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

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

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

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

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

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

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

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

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

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

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

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

P Indicates a preliminary value.

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

Form EIA-826

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860

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

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

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

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

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

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

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

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

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

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

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

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

Form EIA-860M

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

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

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

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

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

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

Form EIA-861

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

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

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

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

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

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

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

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

Form EIA-923

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

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

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

Instrument and design history:

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

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

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

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

Generation, consumption, and stocks

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Issues within historical data series:

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

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

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

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

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

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

Average Capacity Factors

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

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

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

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

NERC classification

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

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

The new NERC Regional Council names are as follows:

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

Business classification

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

Agriculture, Forestry, and Fishing

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

Mining

211 Oil and gas extraction
2121 Coal mining
2122 Metal mining

2123 Mining and quarrying of nonmetallic minerals except fuels

Construction

23

Manufacturing

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

Transportation and Public Utilities

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

Wholesale Trade

421 to 422

Retail Trade

441 to 454

Finance, Insurance, and Real Estate

521 to 533

Services

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

Public Administration

92

Multiple Survey Programs- Small Scale PV Solar Estimation of Generation

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

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

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

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

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

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

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

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

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

e_i is the error term

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

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

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

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

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

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

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

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

Appendix 1- MSAs

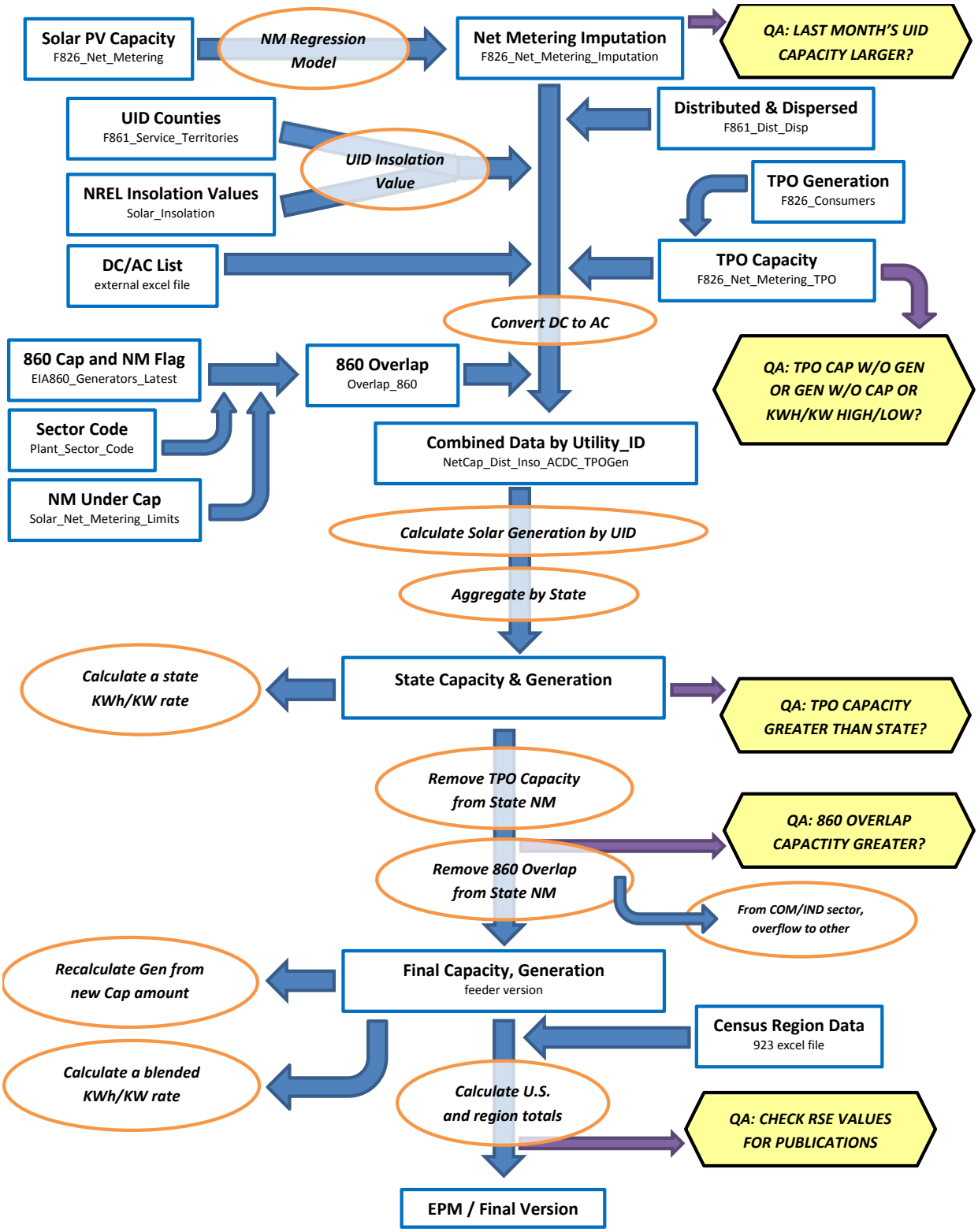
TMY3 (1991-2005) Weather Stations by MSA

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

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

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

Appendix 2 – Flow diagram of data sources and analysis



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

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

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

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

Census Division and State	Coal (Million Btu per Ton)	Petroleum Liquids (Million Btu per Barrel)	Petroleum Coke (Million Btu per Ton)	Natural Gas (Million Btu per Thousand Cubic Feet)
New England	24.60	6.12	--	1.03
Connecticut	--	5.80	--	1.03
Maine	24.60	6.25	--	1.06
Massachusetts	--	5.81	--	1.03
New Hampshire	--	5.80	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.60	6.06	--	1.04
New Jersey	25.97	5.72	--	1.04
New York	--	6.08	--	1.03
Pennsylvania	22.49	5.97	--	1.04
East North Central	21.03	5.80	27.21	1.05
Illinois	17.94	5.79	--	1.00
Indiana	22.30	5.76	--	1.06
Michigan	19.50	5.84	--	1.05
Ohio	24.94	5.80	--	1.06
Wisconsin	18.10	5.86	27.21	1.04
West North Central	16.31	5.79	--	1.06
Iowa	17.86	5.73	--	1.08
Kansas	17.05	--	--	1.01
Minnesota	17.78	5.80	--	1.07
Missouri	17.80	5.80	--	1.03
Nebraska	16.98	--	--	1.04
North Dakota	13.07	5.88	--	1.00
South Dakota	16.56	--	--	--
South Atlantic	23.92	5.85	28.08	1.03
Delaware	26.02	--	--	1.04
District of Columbia	--	--	--	--
Florida	23.75	5.89	28.08	1.02
Georgia	19.98	5.94	--	1.02
Maryland	24.90	5.80	--	1.04
North Carolina	25.15	5.79	--	1.03
South Carolina	24.66	5.79	--	1.02
Virginia	22.39	5.90	--	1.05
West Virginia	25.13	5.85	--	1.08
East South Central	21.11	5.79	--	1.02
Alabama	19.24	5.55	--	1.02
Kentucky	22.78	5.82	--	1.03
Mississippi	12.81	5.80	--	1.03
Tennessee	23.78	5.76	--	1.00
West South Central	15.92	5.84	29.01	1.02
Arkansas	17.44	5.87	--	1.02
Louisiana	16.94	--	29.01	1.03
Oklahoma	17.14	5.80	--	1.03
Texas	15.49	5.83	--	1.02
Mountain	18.70	5.77	--	1.05
Arizona	19.71	5.72	--	1.04
Colorado	18.63	5.88	--	1.12
Idaho	--	--	--	1.00
Montana	16.83	5.92	--	1.04
Nevada	19.50	5.81	--	1.04
New Mexico	18.21	5.66	--	1.02
Utah	21.52	5.88	--	1.04
Wyoming	17.59	5.88	--	1.05
Pacific Contiguous	17.80	5.89	--	1.04
California	22.92	--	--	1.03
Oregon	17.18	--	--	1.05
Washington	16.93	5.89	--	1.09
Pacific Noncontiguous	18.42	6.15	--	1.00
Alaska	14.19	5.60	--	1.00
Hawaii	19.69	6.15	--	--
U.S. Total	19.54	6.05	28.67	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	399,371	-0.23%
Total	**4,087,381**	**4,077,601**	**-0.24%**	**4,079,079**	**4,076,675**	**-0.06%**	**4,014,804**	**4,034,268**	**0.48%**
Consumption of Fossil Fuels for Electricity Generation									
Coal (1,000 tons)	740,855	739,594	-0.17%	678,005	677,371	-0.09%	663,479	663,911	0.07%
Petroleum Liquids (1,000 barrels)	29,545	28,925	-2.10%	21,225	22,405	5.56%	21,935	21,696	-1.09%
Petroleum Coke (1,000 tons)	4,088	4,044	-1.07%	4,275	4,253	-0.52%	3,349	3,490	4.21%
Natural Gas (1,000 Mcf)	10,048,346	10,016,576	-0.32%	10,400,189	10,170,110	-2.21%	9,440,777	9,507,760	0.71%
Fuel Stocks for Electric Power Sector									
Coal (1,000 tons)	197,128	195,548	-0.80%	163,946	162,009	-1.18%	137,155	137,687	0.39%
Petroleum Liquids (1,000 barrels)	32,223	32,884	2.05%	30,880	31,839	3.11%	28,723	29,294	1.99%
Petroleum Coke (1,000 tons)	1,342	1,340	-0.15%	872	845	-3.10%	1,113	864	-22.42%
Retail Sales (Million kWh)									
Residential	1,399,884	1,404,096	0.30%	1,407,394	1,411,058	0.26%	1,378,819	1,378,648	-0.01%
Commercial	1,358,419	1,360,752	0.17%	1,359,617	1,367,191	0.56%	1,349,208	1,352,888	0.27%
Industrial	958,563	986,508	2.92%	936,269	976,715	4.32%	946,443	984,298	4.00%
Transportation	7,659	7,637	-0.29%	7,499	7,497	-0.03%	7,524	7,523	-0.02%
Total	**3,724,525**	**3,758,992**	**0.93%**	**3,710,779**	**3,762,462**	**1.39%**	**3,681,995**	**3,723,356**	**1.12%**
Revenue (Million Dollars)									
Residential	177,367	177,624	0.14%	176,585	177,077	0.28%	177,860	177,661	-0.11%
Commercial	143,893	144,781	0.62%	140,937	142,643	1.21%	144,108	144,242	0.09%
Industrial	66,088	68,166	3.14%	63,201	66,068	4.54%	65,394	67,691	3.51%
Transportation	779	771	-1.12%	711	722	1.53%	727	728	0.15%
Total	**388,127**	**391,341**	**0.83%**	**381,435**	**386,509**	**1.33%**	**388,089**	**390,322**	**0.58%**
Average Retail Price (Cents/kWh)									
Residential	12.67	12.65	-0.16%	12.55	12.55	0.02%	12.90	12.89	-0.10%
Commercial	10.59	10.64	0.44%	10.37	10.43	0.65%	10.68	10.66	-0.18%
Industrial	6.89	6.91	0.22%	6.75	6.76	0.21%	6.91	6.88	-0.47%
Transportation	10.17	10.09	-0.83%	9.48	9.63	1.55%	9.67	9.68	0.17%
Total	**10.42**	**10.41**	**-0.10%**	**10.28**	**10.27**	**-0.06%**	**10.54**	**10.48**	**-0.54%**
Receipt of Fossil Fuels									
Coal (1,000 tons)	769,866	782,929	1.70%	638,564	650,770	1.91%	634,118	642,364	1.30%
Petroleum Liquids (1,000 barrels)	24,512	24,320	-0.78%	16,610	16,807	1.18%	15,619	16,127	3.25%
Petroleum Coke (1,000 tons)	4,779	4,897	2.46%	4,166	4,166	0.01%	3,309	3,309	0.00%
Natural Gas (1,000 Mcf)	9,843,170	9,842,581	-0.01%	10,258,688	10,271,180	0.12%	8,050,520	9,628,733	19.60%
Cost of Fossil Fuels (Dollars per Million Btu)									
Coal (1,000 tons)	2.22	2.22	-0.03%	2.12	2.11	-0.15%	2.08	2.06	-0.87%
Petroleum Liquids (1,000 barrels)	11.48	11.49	0.10%	9.36	9.39	0.28%	11.82	11.86	0.36%
Petroleum Coke (1,000 tons)	1.87	1.84	-1.37%	1.65	1.65	0.15%	2.13	2.13	0.00%
Natural Gas (1,000 Mcf)	3.22	3.23	0.18%	2.88	2.87	-0.06%	3.39	3.37	-0.55%

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

Table C.4. Unit of Measure Equivalents for Electricity

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

Source: U.S. Energy Information Administration

Glossary

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Geothermal: Pertaining to heat within the Earth.

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

Gigawatt (GW): One billion watts.

Gigawatthour (GWh): One billion watthours.

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

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

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

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

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

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

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

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

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

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

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

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

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

Kilowatt (kW): One thousand watts.

Kilowatthour (kWh): One thousand watthours.

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

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

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

Mcf: One thousand cubic feet.

Megawatt (MW): One million watts of electricity.

Megawatthour (MWh): One million watthours.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Petroleum coke: See Coke (petroleum).

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

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

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

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

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

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

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

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

Receipts: Purchases of fuel.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Terrawatt: One trillion watts.

Terrawatthour: One trillion kilowatthours.

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

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

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

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

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

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

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

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

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

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

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