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with Data for September 2018

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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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Net Generation and Consumption of Fuels for September															
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	96,743	98,203	-1.5%	73,136	71,859	22,986	25,701	29	27	592	615	0	0
Petroleum Liquids	Utility Scale Facilities	1,040	925	12.4%	763	661	230	223	8	6	38	34	0	0
Petroleum Coke	Utility Scale Facilities	835	712	17.3%	639	523	125	136	1	1	70	52	0	0
Natural Gas	Utility Scale Facilities	142,745	118,112	20.9%	68,921	56,393	65,199	53,827	747	701	7,878	7,191	0	0
Other Gas	Utility Scale Facilities	1,001	1,060	-5.6%	3	0	315	346	0	0	682	715	0	0
Nuclear	Utility Scale Facilities	64,725	68,098	-5.0%	34,377	35,496	30,348	32,602	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	18,663	19,067	-2.1%	16,649	17,749	1,897	1,228	14	14	103	75	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	30,790	29,258	5.2%	3,563	3,250	24,649	23,455	265	268	2,313	2,285	0	0
... Wind	Utility Scale Facilities	17,991	17,855	0.8%	2,604	2,583	15,369	15,257	11	11	NM	4	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	6,471	5,115	26.5%	509	304	5,887	4,755	66	52	10	4	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	3,305	3,294	0.3%	265	166	801	922	8	2	2,231	2,204	0	0
... Other Biomass	Utility Scale Facilities	1,635	1,696	-3.6%	97	112	1,293	1,310	179	202	65	72	0	0
... Geothermal	Utility Scale Facilities	1,388	1,297	7.0%	88	85	1,300	1,212	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-603	-606	-0.5%	-500	-522	-103	-84	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	801	1,033	-22.5%	50	49	312	508	80	90	359	386	0	0
All Energy Sources	Utility Scale Facilities	356,738	335,861	6.2%	197,602	185,458	145,957	137,942	1,144	1,107	12,035	11,354	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	2,681	2,225	20.5%	0	0	0	0	891	709	246	223	1,545	1,293
Estimated Total Solar Photovoltaic	All Facilities	8,723	6,991	24.8%	504	298	5,461	4,412	957	761	255	227	1,545	1,293
Estimated Total Solar	All Facilities	9,153	7,340	24.7%	509	304	5,887	4,755	957	761	255	227	1,545	1,293
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	53,945	54,713	-1.4%	40,309	39,390	13,416	15,098	8	8	212	218	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,775	1,623	9.4%	1,346	1,199	373	372	20	14	37	38	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	316	276	14.4%	259	209	39	50	0	0	18	16	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,064,303	877,808	21.2%	536,010	433,254	477,474	397,947	4,666	4,400	46,154	42,206	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	1,079	1,103	-2.2%	193	207	79	86	42	38	765	773	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	170	134	26.8%	6	3	12	18	17	11	135	102	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	72	76	-4.5%	1	1	7	9	1	2	63	64	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	133,764	131,476	1.7%	3,498	2,980	27,336	25,078	40,848	42,918	62,083	60,501	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	55,025	55,817	-1.4%	40,502	39,596	13,496	15,184	51	45	977	991	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	1,945	1,756	10.7%	1,352	1,202	384	390	36	24	173	140	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	389	352	10.4%	260	211	47	60	1	2	81	80	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,198,067	1,009,284	18.7%	539,507	436,234	504,810	423,025	45,514	47,317	108,236	102,707	0	0
Fuel Stocks (end-of-month)														
Coal (1000 tons)	Utility Scale Facilities	101,363	140,865	-28.0%	84,887	113,247	15,829	26,324	64	138	582	1,157	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	26,059	32,390	-19.5%	16,736	20,516	7,666	9,830	348	442	1,309	1,602	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	975	967	0.8%	W	W	W	W	W	W	W	W	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for September									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	September 2018	September 2017	Percentage Change	September 2018	September 2017	Percentage Change	September 2018	September 2017	Percentage Change
Residential	128,458	118,779	8.1%	16,709	15,772	5.9%	13.01	13.28	-2.0%
Commercial	121,600	118,831	2.3%	12,985	13,106	-0.9%	10.68	11.03	-3.2%
Industrial	81,216	83,540	-2.8%	5,756	5,992	-3.9%	7.09	7.17	-1.1%
Transportation	648	618	4.9%	67	62	7.9%	10.28	9.99	2.9%
All Sectors	331,923	321,768	3.2%	35,516	34,931	1.7%	10.70	10.86	-1.5%

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 2018 and 2017

Net Generation and Consumption of Fuels for January through September															
		Total (All Sectors)			Electric Power Sector				Commercial		Industrial		Residential	
					Electric Utilities		Independent Power Producers							
Fuel	Facility Type	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
Net Generation (Thousand Megawatthours)														
Coal	Utility Scale Facilities	869,110	918,528	-5.4%	654,110	685,288	208,967	227,228	246	241	5,787	5,771	0	0
Petroleum Liquids	Utility Scale Facilities	12,819	8,573	49.5%	7,760	6,260	4,535	1,923	117	67	408	323	0	0
Petroleum Coke	Utility Scale Facilities	6,847	6,911	-0.9%	5,361	5,167	902	1,138	4	6	580	600	0	0
Natural Gas	Utility Scale Facilities	1,132,165	983,306	15.1%	557,152	475,224	498,767	433,428	6,348	6,096	69,897	68,558	0	0
Other Gas	Utility Scale Facilities	9,339	9,372	-0.4%	152	100	2,948	2,964	0	0	6,239	6,308	0	0
Nuclear	Utility Scale Facilities	612,076	598,637	2.2%	321,621	316,034	290,455	282,603	0	0	0	0	0	0
Hydroelectric Conventional	Utility Scale Facilities	227,023	239,108	-5.1%	207,842	219,469	17,962	18,396	193	165	1,026	1,079	0	0
Renewable Sources Excluding Hydroelectric	Utility Scale Facilities	320,798	280,742	14.3%	36,289	32,090	260,166	224,846	2,425	2,458	21,917	21,348	0	0
... Wind	Utility Scale Facilities	206,454	180,340	14.5%	27,513	25,421	178,743	154,759	119	101	78	59	0	0
... Solar Thermal and Photovoltaic	Utility Scale Facilities	54,286	41,667	30.3%	4,282	2,474	49,411	38,748	519	411	75	33	0	0
... Wood and Wood-Derived Fuels	Utility Scale Facilities	31,569	30,678	2.9%	2,640	2,336	7,802	7,773	62	53	21,065	20,515	0	0
... Other Biomass	Utility Scale Facilities	16,012	16,221	-1.3%	1,067	1,092	12,519	12,496	1,725	1,893	700	740	0	0
... Geothermal	Utility Scale Facilities	12,477	11,838	5.4%	787	767	11,691	11,070	0	0	0	0	0	0
Hydroelectric Pumped Storage	Utility Scale Facilities	-4,548	-4,898	-7.1%	-3,699	-4,109	-848	-789	0	0	0	0	0	0
Other Energy Sources	Utility Scale Facilities	9,380	9,845	-4.7%	438	412	4,705	4,884	770	814	3,467	3,734	0	0
All Energy Sources	Utility Scale Facilities	3,195,009	3,050,125	4.8%	1,787,026	1,735,936	1,288,559	1,196,621	10,103	9,847	109,321	107,721	0	0
Estimated Small Scale Solar Photovoltaic	Small Scale Facilities	23,447	18,967	23.6%	0	0	0	0	7,756	6,058	2,076	1,870	13,615	11,040
Estimated Total Solar Photovoltaic	All Facilities	74,676	57,933	28.9%	4,237	2,460	46,399	36,060	8,275	6,469	2,151	1,903	13,615	11,040
Estimated Total Solar	All Facilities	77,733	60,634	28.2%	4,282	2,474	49,411	38,748	8,275	6,469	2,151	1,903	13,615	11,040
Consumption of Fossil Fuels for Electricity Generation														
Coal (1000 tons)	Utility Scale Facilities	480,074	504,557	-4.9%	358,421	370,689	119,499	131,700	71	70	2,082	2,098	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	22,166	15,016	47.6%	14,044	11,316	7,484	3,229	221	132	417	340	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	2,583	2,677	-3.5%	2,146	2,095	292	418	1	2	144	162	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	8,401,327	7,223,346	16.3%	4,283,396	3,624,906	3,667,795	3,155,972	39,663	37,921	410,473	404,547	0	0
Consumption of Fossil Fuels for Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	10,384	10,898	-4.7%	1,790	2,108	864	847	378	380	7,352	7,562	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	2,100	1,255	67.3%	82	46	235	137	280	161	1,504	911	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	616	736	-16.2%	10	7	68	87	6	11	532	630	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	1,216,323	1,171,586	3.8%	31,521	28,846	249,222	232,140	373,343	380,083	562,236	530,516	0	0
Consumption of Fossil Fuels for Electricity Generation and Useful Thermal Output														
Coal (1000 tons)	Utility Scale Facilities	490,458	515,455	-4.8%	360,211	372,797	120,363	132,547	449	451	9,434	9,661	0	0
Petroleum Liquids (1000 barrels)	Utility Scale Facilities	24,266	16,272	49.1%	14,126	11,362	7,718	3,366	501	293	1,921	1,251	0	0
Petroleum Coke (1000 tons)	Utility Scale Facilities	3,199	3,412	-6.2%	2,155	2,102	360	505	8	13	676	792	0	0
Natural Gas (1000 Mcf)	Utility Scale Facilities	9,617,650	8,394,931	14.6%	4,314,917	3,653,752	3,917,017	3,388,112	413,007	418,004	972,710	935,063	0	0

Sales, Revenue, and Average Price of Electricity to Ultimate Customers for January through September									
	Total U.S. Electric Power Industry								
	Sales of Electricity to Ultimate Customers (million kWh)			Revenue from Sales of Electricity to Ultimate Customers (million dollars)			Average Price of Electricity to Ultimate Customers (cents/kWh)		
Sector	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	Percentage Change
Residential	1,131,523	1,055,512	7.2%	146,363	136,587	7.2%	12.94	12.94	0.0%
Commercial	1,048,601	1,025,681	2.2%	112,057	109,792	2.1%	10.69	10.70	-0.1%
Industrial	718,115	741,785	-3.2%	50,089	51,371	-2.5%	6.98	6.93	0.7%
Transportation	5,821	5,635	3.3%	567	550	3.2%	9.75	9.76	-0.1%
All Sectors	2,904,060	2,828,613	2.7%	309,077	298,300	3.6%	10.64	10.55	0.9%

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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.
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Table ES2.A. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Physical Units, 2018 and 2017

Total (All Sectors)

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal (1000 tons)	49,944	53,538	38.87	38.29	255	297	439,501	485,964	39.31	39.48
Petroleum Liquids (1000 barrels)	1,240	1,083	W	70.30	139	178	15,072	11,477	84.81	68.78
Petroleum Coke (1000 tons)	288	284	W	W	6	6	2,329	2,458	W	W
Natural Gas (1000 Mcf)	970,676	879,186	3.21	3.27	573	800	7,711,048	7,318,962	3.50	3.49

Electric Utilities

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal (1000 tons)	36,855	38,857	40.31	39.69	181	202	325,612	353,749	40.32	41.02
Petroleum Liquids (1000 barrels)	897	792	93.24	71.87	90	118	9,566	8,616	85.16	68.46
Petroleum Coke (1000 tons)	263	274	86.74	59.07	5	5	2,288	2,420	74.73	58.41
Natural Gas (1000 Mcf)	460,962	420,539	3.39	3.66	293	430	3,739,042	3,542,114	3.65	3.73

Independent Power Producers

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal (1000 tons)	12,512	13,963	33.92	33.65	61	73	107,856	125,278	35.53	34.40
Petroleum Liquids (1000 barrels)	318	267	W	W	38	50	5,238	2,662	84.23	69.84
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	444,660	396,942	2.98	2.75	232	319	3,408,654	3,188,027	3.36	3.18

Commercial Sector

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal (1000 tons)	0	3	--	W	0	1	6	18	W	W
Petroleum Liquids (1000 barrels)	0	0	--	--	0	0	0	0	--	--
Petroleum Coke (1000 tons)	0	0	--	--	0	0	0	0	--	--
Natural Gas (1000 Mcf)	723	685	W	W	3	3	6,621	5,568	W	W

Industrial Sector

	Receipts (Physical Units)		Cost (Dollars / Physical Unit)		Number of Plants		Year-to-Date Receipts (Physical Units)		Year-to-Date Cost (Dollars / Physical Unit)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal (1000 tons)	578	715	53.48	W	13	21	6,027	6,919	W	W
Petroleum Liquids (1000 barrels)	25	24	W	W	11	10	267	199	82.49	69.08
Petroleum Coke (1000 tons)	25	9	W	W	1	1	41	39	W	W
Natural Gas (1000 Mcf)	64,330	61,019	W	W	45	48	556,730	583,254	W	W

NM = Not meaningful due to large relative standard error.
W = Withheld to avoid disclosure of individual company data.
Number of Plants represents the number of plants for which receipts data were collected this month.
.... A plant using more than one fuel may be counted multiple times.
Coal includes anthracite, bituminous, subbituminous, lignite, waste coal, synthetic coal, and coal-derived synthesis gas.
Petroleum Liquids include distillate fuel oil, residual fuel oil, jet fuel, kerosene, propane, and waste oil.
Natural Gas includes a small amount of supplemental gaseous fuels that cannot be identified separately.

Table ES2.B. Summary Statistics: Receipts and Cost of Fossil Fuels for the Electric Power Industry by Sector, Btus, 2018 and 2017

Total (All Sectors)

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal	945,615	1,015,150	2.05	2.02	255	297	8,397,456	9,295,097	2.06	2.06
Petroleum Liquids	7,457	6,518	W	11.68	139	178	90,932	68,860	14.03	11.46
Petroleum Coke	8,158	7,915	W	W	6	6	65,816	68,933	W	W
Natural Gas	1,002,649	910,005	3.11	3.16	573	800	7,961,406	7,565,715	3.39	3.37
Fossil Fuels	1,963,879	1,939,587	W	W	733	984	16,515,610	16,998,604	W	W

Electric Utilities

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal	701,123	741,814	2.12	2.08	181	202	6,238,590	6,836,172	2.10	2.12
Petroleum Liquids	5,414	4,823	15.44	11.80	90	118	58,108	52,004	14.01	11.34
Petroleum Coke	7,493	7,658	3.05	2.12	5	5	64,731	67,855	2.64	2.08
Natural Gas	476,033	435,093	3.28	3.54	293	430	3,858,563	3,660,179	3.54	3.61
Fossil Fuels	1,190,064	1,189,388	2.65	2.65	403	554	10,219,992	10,616,210	2.71	2.68

Independent Power Producers

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal	232,368	258,366	1.82	1.82	61	73	2,033,333	2,313,307	1.88	1.86
Petroleum Liquids	1,887	1,543	W	W	38	50	31,159	15,617	14.10	11.90
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	459,798	411,228	2.88	2.66	232	319	3,523,060	3,297,934	3.25	3.08
Fossil Fuels	694,054	671,138	W	W	280	376	5,587,552	5,626,857	2.75	2.53

Commercial Sector

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal	0	72	--	W	0	1	130	411	W	W
Petroleum Liquids	0	0	--	--	0	0	0	0	--	--
Petroleum Coke	0	0	--	--	0	0	0	0	--	--
Natural Gas	744	707	W	W	3	3	6,819	5,753	W	W
Fossil Fuels	744	778	W	W	3	3	6,950	6,163	W	W

Industrial Sector

	Receipts (Billion Btu)		Cost (Dollars / Million Btu)		Number of Plants		Year-to-Date Receipts (Billion Btu)		Year-to-Date Cost (Dollars / Million Btu)	
Fuel	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
Coal	12,124	14,897	2.55	W	13	21	125,403	145,207	W	W
Petroleum Liquids	155	151	W	W	11	10	1,665	1,239	13.23	11.07
Petroleum Coke	664	257	W	W	1	1	1,084	1,078	W	W
Natural Gas	66,074	62,978	W	W	45	48	572,964	601,849	W	W
Fossil Fuels	79,017	78,284	W	W	47	51	701,117	749,374	W	W

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), 2008-September 2018
(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															
2008	1,985,801	31,917	14,325	882,981	11,707	806,208	254,831	864	125,237	-6,288	11,804	4,119,388	N/A	N/A	N/A
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
Year 2016															
January	113,459	1,396	966	110,044	1,195	72,525	25,615	1,486	25,193	-312	1,153	352,719	980	2,380	2,465
February	92,705	1,299	910	98,552	1,062	65,638	24,139	2,242	26,496	-399	1,041	313,685	1,145	3,145	3,386
March	72,173	874	927	103,890	1,197	66,149	27,390	2,617	28,467	-384	1,090	304,390	1,525	3,885	4,143
April	72,113	833	1,006	98,876	1,132	62,732	25,878	2,880	26,787	-452	1,109	292,894	1,703	4,309	4,583
May	81,695	984	974	110,430	1,053	66,576	25,486	3,425	25,286	-321	1,195	316,784	1,879	4,916	5,304
June	116,034	972	1,005	131,395	1,043	67,175	23,237	3,473	22,763	-497	1,180	367,781	1,928	4,990	5,401
July	136,316	1,273	1,049	151,554	1,077	70,349	21,455	3,945	24,428	-784	1,225	411,887	2,000	5,474	5,945
August	135,635	1,258	1,078	154,760	1,064	71,526	19,570	3,969	20,496	-902	1,248	409,701	1,942	5,543	5,911
Sept	114,138	946	980	125,603	1,020	65,448	16,368	3,635	22,894	-715	1,168	351,484	1,735	5,007	5,370
October	99,194	937	635	102,898	913	60,733	17,339	3,191	26,558	-561	1,108	312,945	1,552	4,495	4,743
November	86,940	1,070	799	93,942	1,013	65,179	18,808	2,767	26,052	-607	1,098	297,062	1,257	3,840	4,024
December	118,747	1,166	869	96,364	1,037	71,662	22,528	2,424	30,159	-753	1,139	345,343	1,167	3,500	3,591
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	5,289	952	110,064	996	74,649	25,594	3,413	33,934	-547	1,115	374,398	1,614	4,899	5,027
February	81,922	780	738	96,013	991	64,790	25,532	4,120	30,569	-315	1,001	306,142	1,761	5,689	5,880
March	80,613	811	648	104,939	1,063	67,033	25,950	5,211	34,124	-490	1,114	321,015	2,426	7,379	7,636
April	73,383	854	691	99,447	944	59,133	27,488	6,257	32,931	-377	1,039	301,791	2,736	8,679	8,993
May	85,311	1,022	415	116,110	1,008	67,320	30,433	7,079	30,288	-390	1,075	339,671	3,009	9,658	10,088
June	101,508	1,062	765	130,827	1,010	69,688	27,953	7,811	31,085	-433	1,111	372,386	3,058	10,352	10,869
July	115,472	970	924	167,066	1,102	72,456	24,013	6,943	22,964	-644	1,117	412,383	3,144	9,707	10,087
August	115,218	991	878	164,954	1,224	72,282	21,398	6,982	26,298	-747	1,007	410,485	3,018	9,591	10,000
Sept	96,743	1,040	835	142,745	1,001	64,725	18,663	6,471	24,319	-603	801	356,738	2,681	8,723	9,153
Year to Date															
2016	934,267	9,835	8,894	1,085,104	9,843	608,119	209,137	27,672	222,810	-4,766	10,409	3,121,325	14,836	39,648	42,509
2017	918,528	8,573	6,911	983,306	9,372	598,637	239,108	41,667	239,076	-4,898	9,845	3,050,125	18,967	57,933	60,634
2018	869,110	12,819	6,847	1,132,165	9,339	612,076	227,023	54,286	266,512	-4,548	9,380	3,195,009	23,447	74,676	77,733
Rolling 12 Months Ending in September															
2017	1,223,409	11,746	9,214	1,276,509	12,336	796,212	297,783	50,048	321,845	-6,818	13,190	4,005,475	22,943	69,767	72,992
2018	1,156,417	16,660	8,911	1,445,274	12,436	818,388	288,249	65,906	360,427	-6,145	12,629	4,179,152	28,470	90,751	94,375

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 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), 2008-September 2018
(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													
2008	55,363	76	788	37,300	7,156	8,097	2,481	14,840	254,831	380,932	N/A	N/A	N/A
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
Year 2016													
January	18,466	1,400	86	3,600	915	603	277	1,332	25,615	52,294	980	2,380	2,465
February	20,138	2,000	241	3,406	886	537	285	1,243	24,139	52,877	1,145	3,145	3,386
March	21,939	2,360	257	3,403	949	579	281	1,315	27,390	58,474	1,525	3,885	4,143
April	20,799	2,606	273	2,967	932	593	287	1,209	25,878	55,544	1,703	4,309	4,583
May	18,848	3,037	388	3,187	980	649	280	1,342	25,486	54,197	1,879	4,916	5,304
June	16,303	3,062	412	3,414	934	614	247	1,251	23,237	49,473	1,928	4,990	5,401
July	17,618	3,473	471	3,658	943	635	262	1,311	21,455	49,828	2,000	5,474	5,945
August	13,589	3,602	368	3,722	942	634	285	1,324	19,570	44,035	1,942	5,543	5,911
Sept	16,404	3,272	363	3,407	895	589	272	1,327	16,368	42,897	1,735	5,007	5,370
October	20,335	2,942	249	3,176	839	589	265	1,353	17,339	47,088	1,552	4,495	4,743
November	19,406	2,583	184	3,391	993	602	296	1,364	18,808	47,627	1,257	3,840	4,024
December	23,146	2,333	91	3,615	1,011	640	293	1,454	22,528	55,111	1,167	3,500	3,591
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	26,885	3,285	128	3,779	989	590	275	1,416	25,594	62,941	1,614	4,899	5,027
February	24,077	3,929	191	3,398	941	561	259	1,333	25,532	60,221	1,761	5,689	5,880
March	27,287	4,953	258	3,553	999	599	272	1,414	25,950	65,284	2,426	7,379	7,636
April	26,803	5,943	314	3,107	941	570	256	1,255	27,488	66,677	2,736	8,679	8,993
May	23,542	6,649	430	3,564	932	574	238	1,438	30,433	67,799	3,009	9,658	10,088
June	24,340	7,294	517	3,588	927	630	230	1,370	27,953	66,849	3,058	10,352	10,869
July	16,022	6,562	380	3,709	945	640	212	1,436	24,013	53,920	3,144	9,707	10,087
August	19,507	6,572	409	3,565	951	632	214	1,429	21,398	54,678	3,018	9,591	10,000
Sept	17,991	6,041	430	3,305	880	563	191	1,388	18,663	49,453	2,681	8,723	9,153
Year to Date													
2016	164,106	24,812	2,860	30,764	8,375	5,433	2,476	11,655	209,137	459,619	14,836	39,648	42,509
2017	180,340	38,965	2,701	30,678	8,676	5,216	2,329	11,838	239,108	519,850	18,967	57,933	60,634
2018	206,454	51,229	3,057	31,569	8,504	5,360	2,148	12,477	227,023	547,821	23,447	74,676	77,733
Rolling 12 Months Ending in September													
2017	243,227	46,823	3,225	40,860	11,519	7,047	3,183	16,008	297,783	669,676	22,943	69,767	72,992
2018	280,416	62,281	3,625	42,043	11,371	7,095	2,934	16,567	288,249	714,581	28,470	90,751	94,375

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 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, 2008-September 2018
(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												
2008	1,466,395	22,206	5,918	320,190	46	424,256	229,645	17	11,291	-5,143	545	2,475,367
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
Year 2016												
January	84,012	965	832	52,818	3	37,974	23,579	95	3,303	-230	34	203,384
February	69,852	830	734	48,009	4	34,281	22,015	135	3,624	-332	30	179,182
March	56,982	623	724	49,949	5	34,445	25,125	151	3,696	-291	42	171,452
April	53,542	602	858	46,425	7	34,036	23,742	169	3,887	-367	34	162,936
May	62,093	695	763	52,908	10	36,531	23,508	187	3,098	-257	33	179,569
June	86,611	710	793	63,858	16	37,000	21,716	188	3,034	-409	40	213,557
July	100,856	926	833	71,913	21	37,919	20,030	197	2,837	-678	34	234,890
August	100,156	905	856	72,293	13	37,927	18,241	207	2,432	-787	33	232,277
Sept	83,223	644	807	58,392	23	33,919	15,283	190	3,215	-626	35	195,105
October	72,950	658	418	47,710	7	30,016	16,149	182	3,479	-471	36	171,134
November	64,830	700	596	44,171	22	33,082	17,599	154	3,635	-522	35	164,301
December	87,293	811	667	46,333	22	37,268	20,799	139	4,425	-657	36	197,136
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	2,358	770	55,200	26	39,366	23,664	296	4,419	-475	42	214,312
February	61,029	609	575	46,838	17	33,941	23,504	345	3,931	-226	40	170,605
March	58,552	585	491	50,590	16	35,262	23,793	465	4,181	-408	49	173,577
April	55,319	619	477	48,319	28	30,580	25,150	515	3,871	-295	42	164,625
May	64,011	730	336	58,568	11	34,479	28,051	506	3,348	-309	47	189,778
June	77,886	747	670	65,943	13	36,437	25,826	582	3,510	-339	52	211,327
July	88,147	648	716	82,577	15	38,293	21,964	528	2,723	-522	57	235,146
August	87,383	700	686	80,195	24	38,885	19,240	536	2,973	-626	58	230,053
Sept	73,136	763	639	68,921	3	34,377	16,649	509	3,054	-500	50	197,602
Year to Date												
2016	697,326	6,899	7,200	516,566	104	324,034	193,240	1,520	29,126	-3,979	315	1,772,352
2017	685,288	6,260	5,167	475,224	100	316,034	219,469	2,474	29,617	-4,109	412	1,735,936
2018	654,110	7,760	5,361	557,152	152	321,621	207,842	4,282	32,008	-3,699	438	1,787,026
Rolling 12 Months Ending in September												
2017	910,361	8,429	6,848	613,438	150	416,400	274,016	2,949	41,156	-5,759	519	2,268,507
2018	862,462	10,067	6,905	705,763	200	430,071	264,050	5,156	45,154	-5,038	577	2,325,367

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 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 1.2.B Net Generation by Energy Source: Independent Power Producers, 2008-September 2018
(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												
2008	502,442	8,021	6,737	482,182	3,154	381,952	23,451	847	84,928	-1,145	6,414	1,498,982
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
Year 2016												
January	28,612	379	42	48,969	341	34,551	1,884	1,363	19,168	-82	589	135,816
February	22,057	416	99	42,840	295	31,357	1,991	2,065	20,345	-66	540	121,939
March	14,363	210	138	45,900	355	31,704	2,100	2,420	22,164	-93	549	119,810
April	17,877	188	97	44,832	311	28,696	1,993	2,662	20,487	-84	554	117,612
May	18,842	233	124	49,574	303	30,046	1,847	3,188	19,608	-64	610	124,310
June	28,585	214	131	59,185	335	30,175	1,410	3,229	17,117	-88	595	140,888
July	34,564	291	136	70,645	324	32,430	1,306	3,690	18,856	-106	610	162,745
August	34,607	309	140	73,317	319	33,599	1,217	3,701	15,341	-115	617	163,051
Sept	30,124	258	113	58,805	323	31,529	996	3,394	17,145	-89	557	143,155
October	25,524	232	141	47,044	228	30,717	1,080	2,965	20,549	-90	549	128,939
November	21,446	325	116	41,736	330	32,097	1,122	2,576	19,760	-85	560	119,981
December	30,661	307	124	41,755	296	34,394	1,591	2,250	23,013	-96	613	134,908
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	1,796	3,084	26,761	-72	580	146,217
February	20,198	122	106	41,330	309	30,849	1,893	3,734	24,131	-89	549	123,131
March	21,359	177	100	46,384	330	31,770	2,011	4,693	27,267	-82	570	134,579
April	17,451	191	154	43,138	306	28,553	2,194	5,677	26,540	-82	535	124,658
May	20,649	244	23	49,392	350	32,841	2,230	6,498	24,224	-81	533	136,903
June	22,986	263	NM	56,381	317	33,251	1,990	7,137	24,929	-95	590	147,768
July	26,660	261	135	75,390	348	34,163	1,917	6,337	17,483	-123	594	163,165
August	27,173	243	124	75,497	369	33,398	2,035	6,365	20,658	-121	442	166,182
Sept	22,986	230	125	65,199	315	30,348	1,897	5,887	18,763	-103	312	145,957
Year to Date												
2016	229,632	2,497	1,020	494,065	2,905	284,086	14,745	25,712	170,232	-787	5,220	1,229,327
2017	227,228	1,923	1,138	433,428	2,964	282,603	18,396	38,748	186,098	-789	4,884	1,196,621
2018	208,967	4,535	902	498,767	2,948	290,455	17,962	49,411	210,755	-848	4,705	1,288,559
Rolling 12 Months Ending in September												
2017	304,859	2,786	1,519	563,963	3,818	379,812	22,189	46,538	249,420	-1,059	6,605	1,580,450
2018	285,937	5,893	NM	638,258	3,962	388,317	22,600	60,038	283,619	-1,106	6,348	1,695,111

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 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
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Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
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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.C. Net Generation by Energy Source: Commercial Sector, 2008-September 2018
(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															
2008	1,261	136	6	4,188	0	0	60	0	1,555	0	720	7,926	N/A	N/A	N/A
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
Year 2016															
January	43	8	1	605	0	0	21	26	230	0	89	1,022	346	373	373
February	45	8	1	570	0	0	18	39	210	0	75	967	398	437	437
March	46	3	1	579	0	0	22	44	225	0	90	1,011	520	564	564
April	24	6	0	551	0	0	15	46	221	0	97	961	566	612	612
May	20	6	0	607	0	0	12	48	230	0	96	1,019	616	663	663
June	23	5	0	692	0	0	13	53	220	0	83	1,089	623	676	676
July	24	8	1	831	0	0	15	55	234	0	96	1,263	640	696	696
August	26	7	0	859	0	0	19	58	234	0	95	1,298	620	677	677
Sept	29	4	0	700	0	0	23	48	223	0	87	1,114	556	605	605
October	27	5	0	617	0	0	21	42	218	0	90	1,021	493	536	536
November	35	8	0	521	0	0	17	36	224	0	85	927	393	428	428
December	42	8	1	598	0	0	21	33	228	0	85	1,015	387	420	420
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	674	0	0	23	28	223	0	85	1,122	546	575	575
February	31	8	1	637	0	0	23	36	199	0	73	1,007	599	634	634
March	26	8	1	652	0	0	NM	45	221	0	84	1,061	813	858	858
April	22	9	0	635	0	0	25	57	207	0	82	1,038	901	958	958
May	19	9	0	644	0	0	NM	66	213	0	91	1,068	986	1,052	1,052
June	21	8	0	706	0	0	NM	81	215	0	92	1,147	999	1,080	1,080
July	25	12	0	822	0	0	NM	68	213	0	91	1,250	1,031	1,100	1,100
August	30	10	0	831	0	0	NM	71	217	0	91	1,267	990	1,060	1,060
Sept	29	8	1	747	0	0	14	66	198	0	80	1,144	891	957	957
Year to Date															
2016	279	55	4	5,994	0	0	158	418	2,027	0	808	9,743	4,885	5,303	5,303
2017	241	67	6	6,096	0	0	165	411	2,046	0	814	9,847	6,058	6,469	6,469
2018	246	117	4	6,348	0	0	193	519	1,906	0	770	10,103	7,756	8,275	8,275
Rolling 12 Months Ending in September															
2017	345	89	8	7,831	0	0	224	523	2,716	0	1,075	12,810	7,331	7,854	7,854
2018	334	NM	6	8,294	0	0	NM	628	2,589	0	1,043	13,316	9,382	10,011	10,011

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 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report;
Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.2.D. Net Generation by Energy Source: Industrial Sector, 2008-September 2018
(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															
2008	15,703	1,555	1,664	76,421	8,507	0	1,676	0	27,462	0	4,125	137,113	N/A	N/A	N/A
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
Year 2016															
January	793	45	91	7,653	851	0	130	1	2,492	0	442	12,497	113	115	115
February	750	45	76	7,133	763	0	115	2	2,317	0	396	11,597	124	126	126
March	781	39	63	7,462	837	0	142	2	2,381	0	409	12,117	171	173	173
April	670	37	50	7,067	815	0	128	2	2,192	0	424	11,386	186	189	189
May	740	51	87	7,341	740	0	119	3	2,350	0	456	11,886	206	208	208
June	814	44	81	7,661	692	0	99	3	2,391	0	463	12,248	206	209	209
July	873	48	79	8,165	731	0	104	3	2,501	0	486	12,989	214	217	217
August	847	37	81	8,291	732	0	92	3	2,489	0	503	13,075	209	212	212
Sept	762	41	60	7,706	674	0	65	2	2,312	0	489	12,111	190	192	192
October	693	41	75	7,527	679	0	88	2	2,312	0	433	11,851	174	176	176
November	630	37	87	7,514	662	0	69	2	2,433	0	418	11,852	139	140	140
December	750	40	78	7,678	720	0	117	1	2,493	0	405	12,283	128	129	129
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	81	66	8,134	667	0	112	4	2,531	0	408	12,747	145	150	150
February	664	41	55	7,208	665	0	112	5	2,309	0	339	11,399	154	159	159
March	676	41	56	7,313	717	0	122	7	2,455	0	410	11,799	219	226	226
April	591	35	59	7,355	610	0	119	8	2,313	0	379	11,470	239	247	247
May	632	40	55	7,506	647	0	125	9	2,503	0	405	11,922	265	274	274
June	615	43	77	7,797	680	0	114	11	2,432	0	376	12,144	266	277	277
July	639	50	73	8,277	740	0	113	9	2,546	0	376	12,823	275	284	284
August	633	37	68	8,430	831	0	106	11	2,451	0	416	12,982	267	278	278
Sept	592	38	70	7,878	682	0	103	10	2,303	0	359	12,035	246	255	255
Year to Date															
2016	7,029	384	670	68,478	6,835	0	995	22	21,425	0	4,067	109,904	1,619	1,641	1,641
2017	5,771	323	600	68,558	6,308	0	1,079	33	21,315	0	3,734	107,721	1,870	1,903	1,903
2018	5,787	408	580	69,897	6,239	0	1,026	75	21,843	0	3,467	109,321	2,076	2,151	2,151
Rolling 12 Months Ending in September															
2017	7,844	442	840	91,277	8,368	0	1,353	39	28,553	0	4,991	143,707	2,310	2,349	2,349
2018	7,684	548	755	92,958	8,274	0	1,330	83	29,064	0	4,661	145,358	2,571	2,654	2,654

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

Table 1.2.E. Net Generation by Energy Source: Residential Sector, 2014-September 2018 (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
Year 2016	
January	520
February	622
March	835
April	951
May	1,058
June	1,099
July	1,146
August	1,113
Sept	989
October	884
November	726
December	653
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	1,757
June	1,793
July	1,838
August	1,761
Sept	1,545
Year to Date	
2016	8,332
2017	11,040
2018	13,615
Rolling 12 Months Ending in September	
2017	13,302
2018	16,516

See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 are preliminary.
Totals may not equal sum of components because of independent rounding. NM=Not meaningful due to large standard error. W=Withheld to avoid disclosure of individual company data.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Sources:
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.3.A. Utility Scale Facility Net Generation by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	8,975	8,730	2.8%	208	113	8,393	8,294	109	111	265	212
Connecticut	3,319	2,788	19.0%	8	7	3,222	2,698	34	34	54	49
Maine	887	670	32.3%	0	0	699	528	13	17	175	125
Massachusetts	2,339	2,794	-16.3%	55	24	2,210	2,702	51	48	22	21
New Hampshire	1,498	1,571	-4.6%	74	29	1,415	1,533	6	6	3	3
Rhode Island	752	786	-4.3%	0	0	736	766	5	5	11	15
Vermont	181	121	49.8%	70	53	110	68	0	0	0	0
Middle Atlantic	35,677	34,807	2.5%	2,810	2,784	32,300	31,439	201	204	365	380
New Jersey	6,661	6,616	0.7%	27	12	6,517	6,486	61	55	56	63
New York	10,971	10,981	-0.1%	2,771	2,769	8,004	8,030	114	117	83	65
Pennsylvania	18,044	17,210	4.8%	12	3	17,780	16,923	26	32	226	252
East North Central	49,956	45,695	9.3%	19,195	17,822	29,751	26,937	171	166	839	771
Illinois	15,446	14,929	3.5%	546	434	14,634	14,229	48	36	217	230
Indiana	8,869	7,230	22.7%	6,375	5,666	2,162	1,266	20	23	311	275
Michigan	9,855	8,467	16.4%	7,002	5,914	2,665	2,380	66	69	121	104
Ohio	10,154	9,726	4.4%	903	1,619	9,167	8,034	27	28	58	46
Wisconsin	5,633	5,343	5.4%	4,369	4,189	1,123	1,027	10	10	132	116
West North Central	28,328	27,588	2.7%	23,480	22,568	4,443	4,626	52	50	353	344
Iowa	5,201	4,677	11.2%	4,329	3,566	669	920	18	19	184	172
Kansas	4,268	4,416	-3.4%	2,917	2,957	1,345	1,457	NM	1	5	NM
Minnesota	5,135	4,566	12.5%	3,991	3,580	1,015	853	15	16	114	117
Missouri	6,652	6,695	-0.7%	6,262	6,410	370	270	17	13	3	3
Nebraska	3,053	2,964	3.0%	2,622	2,523	398	404	1	1	32	35
North Dakota	3,327	3,525	-5.6%	2,805	2,947	507	563	0	0	15	16
South Dakota	694	744	-6.8%	555	584	139	160	NM	0	0	0
South Atlantic	73,504	66,139	11.1%	59,325	54,305	12,493	10,255	145	126	1,541	1,452
Delaware	619	662	-6.6%	5	5	509	550	NM	1	104	107
District of Columbia	6	5	15.6%	0	0	0	0	6	5	0	0
Florida	23,344	20,909	11.6%	21,760	19,510	1,161	1,023	5	5	417	371
Georgia	11,798	10,734	9.9%	9,642	9,022	1,714	1,321	NM	1	441	391
Maryland	3,920	3,046	28.7%	413	10	3,416	2,962	77	49	14	24
North Carolina	11,023	10,416	5.8%	9,274	9,110	1,590	1,125	25	29	134	152
South Carolina	9,240	7,734	19.5%	8,154	7,280	940	308	0	0	145	146
Virginia	8,525	6,925	23.1%	6,227	4,966	2,052	1,737	30	36	216	186
West Virginia	5,031	5,707	-11.9%	3,849	4,403	1,111	1,230	0	0	71	75
East South Central	32,442	28,030	15.7%	27,164	23,728	4,526	3,533	17	15	735	754
Alabama	12,823	11,425	12.2%	8,480	7,979	3,980	3,076	0	0	364	370
Kentucky	7,008	5,387	30.1%	6,875	5,263	88	76	0	0	45	48
Mississippi	5,732	4,151	38.1%	5,161	3,639	432	355	0	1	140	156
Tennessee	6,879	7,067	-2.7%	6,649	6,847	26	26	17	14	187	180
West South Central	63,225	60,201	5.0%	23,371	21,114	33,408	33,234	99	78	6,347	5,774
Arkansas	5,497	5,604	-1.9%	4,803	4,938	577	532	NM	4	113	130
Louisiana	9,035	8,733	3.5%	5,783	5,257	780	1,001	16	4	2,456	2,471
Oklahoma	7,573	6,711	12.8%	3,758	3,420	3,731	3,218	0	0	85	72
Texas	41,121	39,153	5.0%	9,027	7,498	28,321	28,483	80	71	3,693	3,101
Mountain	33,304	31,407	6.0%	25,121	24,281	7,889	6,794	50	51	243	281
Arizona	11,399	10,170	12.1%	9,004	8,283	2,381	1,872	14	15	0	0
Colorado	4,572	4,215	8.5%	3,459	3,358	1,104	848	4	3	6	6
Idaho	1,204	1,410	-14.6%	739	922	426	453	4	4	35	32
Montana	2,090	2,311	-9.6%	607	837	1,480	1,471	0	0	3	3
Nevada	3,910	3,420	14.4%	2,829	2,419	1,039	959	13	12	29	29
New Mexico	2,903	2,574	12.8%	2,002	1,902	893	662	9	10	0	0
Utah	3,444	3,252	5.9%	3,057	2,853	338	296	7	7	43	96
Wyoming	3,781	4,057	-6.8%	3,425	3,709	229	232	0	0	128	116
Pacific Contiguous	29,878	31,951	-6.5%	15,934	17,894	12,385	12,455	244	250	1,315	1,352
California	17,287	18,760	-7.9%	6,602	7,717	9,298	9,612	234	242	1,152	1,188
Oregon	4,809	5,007	-4.0%	3,261	3,740	1,489	1,212	8	7	51	49
Washington	7,783	8,184	-4.9%	6,071	6,436	1,599	1,631	2	1	112	116
Pacific Noncontiguous	1,448	1,313	10.3%	993	849	368	376	55	56	33	32
Alaska	566	451	25.5%	513	399	21	20	23	23	9	9
Hawaii	882	862	2.3%	479	450	347	355	32	33	24	23
U.S. Total	356,738	335,861	6.2%	197,602	185,458	145,957	137,942	1,144	1,107	12,035	11,354

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.3.B. Utility Scale Facility Net Generation

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	81,409	79,640	2.2%	2,402	1,878	75,731	74,569	958	982	2,319	2,211
Connecticut	29,752	25,839	15.1%	65	73	28,934	25,005	288	307	465	455
Maine	8,725	8,608	1.4%	0	0	7,079	7,025	126	158	1,520	1,426
Massachusetts	21,909	25,022	-12.4%	517	402	20,737	23,997	448	421	207	203
New Hampshire	13,843	12,983	6.6%	1,113	687	12,657	12,224	49	50	24	24
Rhode Island	5,453	5,527	-1.3%	0	3	5,305	5,374	45	46	103	105
Vermont	1,727	1,660	4.0%	706	713	1,018	945	2	3	0	0
Middle Atlantic	321,830	313,656	2.6%	27,476	26,199	289,250	282,322	1,818	1,801	3,286	3,334
New Jersey	58,551	58,149	0.7%	112	107	57,383	56,976	542	515	514	552
New York	100,919	96,093	5.0%	27,257	26,009	71,976	68,432	992	997	694	655
Pennsylvania	162,361	159,414	1.8%	107	84	159,891	156,913	283	289	2,079	2,127
East North Central	461,674	430,889	7.1%	184,743	177,852	267,314	244,197	1,514	1,464	8,102	7,376
Illinois	143,129	136,701	4.7%	4,543	4,089	135,975	130,227	394	330	2,218	2,056
Indiana	83,890	72,297	16.0%	63,021	57,347	17,738	12,074	204	199	2,927	2,678
Michigan	90,917	85,260	6.6%	63,081	62,055	26,055	21,608	622	626	1,158	971
Ohio	92,238	89,885	2.6%	14,006	17,657	77,513	71,530	203	215	516	484
Wisconsin	51,500	46,745	10.2%	40,092	36,704	10,033	8,759	91	95	1,283	1,187
West North Central	269,654	254,371	6.0%	220,224	210,474	45,623	40,423	474	454	3,333	3,020
Iowa	47,848	43,139	10.9%	36,814	32,478	9,200	9,025	166	156	1,668	1,480
Kansas	39,909	37,881	5.4%	26,567	25,554	13,277	12,286	12	11	53	29
Minnesota	47,800	42,943	11.3%	37,044	34,025	9,454	7,675	148	140	1,155	1,103
Missouri	65,491	65,723	-0.4%	61,316	63,367	4,007	2,188	135	132	33	35
Nebraska	28,133	26,552	6.0%	24,253	22,894	3,578	3,381	14	15	288	263
North Dakota	31,548	29,967	5.3%	26,690	25,412	4,722	4,446	0	0	135	109
South Dakota	8,925	8,166	9.3%	7,539	6,744	1,386	1,422	NM	0	0	0
South Atlantic	630,053	604,393	4.2%	513,268	503,949	101,354	85,215	1,264	1,113	14,167	14,116
Delaware	4,816	6,078	-20.8%	31	16	4,012	5,121	5	5	768	937
District of Columbia	63	52	21.6%	0	0	0	0	63	52	0	0
Florida	187,121	182,684	2.4%	173,646	170,459	9,590	8,299	54	54	3,831	3,872
Georgia	98,558	96,807	1.8%	81,543	81,394	13,017	11,661	7	4	3,991	3,747
Maryland	33,528	25,386	32.1%	2,969	43	29,746	24,723	625	406	188	213
North Carolina	102,154	97,821	4.4%	88,549	87,118	12,014	9,070	214	262	1,377	1,372
South Carolina	77,715	70,333	10.5%	71,699	66,628	4,527	2,354	2	1	1,487	1,350
Virginia	73,443	69,049	6.4%	55,470	54,658	15,829	12,279	293	328	1,850	1,783
West Virginia	52,655	56,183	-6.3%	39,361	43,634	12,618	11,707	0	0	676	842
East South Central	283,058	266,734	6.1%	239,639	229,052	36,394	30,731	162	149	6,864	6,801
Alabama	111,436	105,767	5.4%	78,727	76,971	29,338	25,499	0	0	3,371	3,297
Kentucky	59,722	56,150	6.4%	58,715	55,407	584	287	0	0	423	456
Mississippi	49,431	45,652	8.3%	41,767	39,419	6,234	4,798	6	4	1,424	1,431
Tennessee	62,469	59,164	5.6%	60,429	57,255	238	147	156	146	1,646	1,616
West South Central	563,094	518,817	8.5%	197,930	175,197	307,686	286,310	740	720	56,739	56,590
Arkansas	51,034	45,308	12.6%	44,725	40,750	4,975	3,313	32	33	1,303	1,211
Louisiana	77,670	73,683	5.4%	48,149	42,429	7,271	7,944	123	104	22,127	23,206
Oklahoma	68,099	55,745	22.2%	33,036	28,689	34,365	26,464	0	0	699	592
Texas	366,291	344,082	6.5%	72,020	63,329	261,075	248,588	585	583	32,611	31,581
Mountain	278,911	272,704	2.3%	214,704	214,634	61,429	55,293	435	434	2,343	2,343
Arizona	85,686	80,948	5.9%	72,979	69,787	12,580	11,033	127	127	0	0
Colorado	42,055	40,896	2.8%	31,571	31,823	10,400	8,995	29	23	55	55
Idaho	13,696	12,990	5.4%	8,887	8,739	4,359	3,802	37	38	413	411
Montana	20,158	20,751	-2.9%	9,115	8,993	11,023	11,737	0	0	20	21
Nevada	31,060	29,041	7.0%	21,563	20,635	9,104	8,087	109	95	284	222
New Mexico	23,537	25,590	-8.0%	14,817	19,123	8,624	6,376	80	89	15	1
Utah	28,711	27,686	3.7%	25,202	23,993	3,020	3,007	53	61	436	625
Wyoming	34,007	34,803	-2.3%	30,569	31,539	2,319	2,256	0	0	1,120	1,008
Pacific Contiguous	292,826	296,966	-1.4%	178,124	188,655	100,661	94,463	2,167	2,218	11,873	11,630
California	150,057	160,418	-6.5%	58,612	72,088	79,040	76,065	2,082	2,148	10,324	10,117
Oregon	50,014	47,452	5.4%	37,709	37,552	11,760	9,400	62	52	483	447
Washington	92,754	89,096	4.1%	81,804	79,015	9,861	8,998	23	18	1,067	1,066
Pacific Noncontiguous	12,500	11,957	4.5%	8,515	8,048	3,117	3,099	572	510	296	300
Alaska	5,112	4,620	10.7%	4,561	4,134	194	171	278	227	80	87
Hawaii	7,388	7,338	0.7%	3,954	3,913	2,923	2,928	294	283	216	213
U.S. Total	3,195,009	3,050,125	4.8%	1,787,026	1,735,936	1,288,559	1,196,621	10,103	9,847	109,321	107,721

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Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.4.A. Utility Scale Facility Net Generation from Coal by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	26	10	166.1%	15	2	10	7	0	0	NM	1
Connecticut	6	3	138.9%	0	0	6	3	0	0	0	0
Maine	5	5	-1.0%	0	0	4	4	0	0	NM	1
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	15	2	571.9%	15	2	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	2,860	3,111	-8.1%	0	0	2,846	3,087	0	0	14	24
New Jersey	92	100	-8.1%	0	0	92	100	0	0	0	0
New York	52	57	-8.4%	0	0	52	45	0	0	0	12
Pennsylvania	2,716	2,954	-8.1%	0	0	2,702	2,942	0	0	14	12
East North Central	22,618	21,342	6.0%	12,883	12,308	9,539	8,877	NM	8	189	150
Illinois	5,225	4,831	8.1%	360	324	4,708	4,379	NM	3	154	126
Indiana	6,256	5,178	20.8%	5,814	4,959	437	214	5	5	0	0
Michigan	3,682	3,062	20.3%	3,647	3,041	31	18	0	0	NM	3
Ohio	4,745	5,494	-13.6%	381	1,228	4,363	4,266	0	0	0	1
Wisconsin	2,711	2,777	-2.4%	2,680	2,757	0	0	0	0	31	20
West North Central	15,120	15,245	-0.8%	14,915	15,041	0	0	8	9	196	196
Iowa	2,569	2,137	20.2%	2,435	2,014	0	0	8	7	125	116
Kansas	1,587	1,796	-11.6%	1,587	1,796	0	0	0	0	0	0
Minnesota	1,848	1,829	1.0%	1,818	1,795	0	0	0	0	29	34
Missouri	4,813	5,113	-5.9%	4,813	5,112	0	0	0	1	0	0
Nebraska	1,938	1,829	6.0%	1,906	1,794	0	0	0	0	32	35
North Dakota	2,278	2,365	-3.7%	2,268	2,354	0	0	0	0	NM	11
South Dakota	88	176	-49.7%	88	176	0	0	0	0	0	0
South Atlantic	16,594	16,357	1.5%	15,033	14,333	1,506	1,968	2	2	53	54
Delaware	27	37	-24.7%	0	0	27	37	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	2,818	2,796	0.8%	2,812	2,780	0	5	0	0	6	11
Georgia	3,409	2,975	14.6%	3,392	2,964	0	0	0	0	17	11
Maryland	638	915	-30.2%	0	0	636	910	0	0	2	5
North Carolina	2,852	2,550	11.9%	2,834	2,528	6	8	2	2	10	12
South Carolina	1,635	1,367	19.6%	1,634	1,366	0	0	0	0	2	1
Virginia	652	421	55.0%	604	364	31	43	0	0	17	14
West Virginia	4,562	5,297	-13.9%	3,757	4,331	805	965	0	0	0	0
East South Central	9,823	8,794	11.7%	9,684	8,693	77	43	0	0	61	58
Alabama	2,592	2,165	19.8%	2,588	2,162	0	0	0	0	4	3
Kentucky	5,145	4,035	27.5%	5,145	4,035	0	0	0	0	0	0
Mississippi	358	299	19.8%	281	256	77	43	0	0	0	0
Tennessee	1,727	2,295	-24.7%	1,670	2,240	0	0	0	0	57	55
West South Central	15,172	17,921	-15.3%	8,493	8,596	6,663	9,302	0	0	15	24
Arkansas	2,640	2,448	7.9%	2,173	2,032	462	414	0	0	4	2
Louisiana	1,100	1,148	-4.2%	810	606	290	542	0	0	0	0
Oklahoma	1,090	1,971	-44.7%	902	1,771	176	178	0	0	11	22
Texas	10,342	12,355	-16.3%	4,607	4,187	5,735	8,168	0	0	0	0
Mountain	13,197	14,012	-5.8%	11,727	12,515	1,435	1,415	0	0	35	82
Arizona	2,734	2,897	-5.6%	2,734	2,897	0	0	0	0	0	0
Colorado	2,234	2,382	-6.2%	2,234	2,381	0	0	0	0	0	0
Idaho	NM	1	NM	0	0	0	0	0	0	NM	1
Montana	1,278	1,261	1.4%	17	17	1,260	1,243	0	0	1	1
Nevada	230	206	11.7%	149	132	81	74	0	0	0	0
New Mexico	1,260	1,317	-4.4%	1,260	1,317	0	0	0	0	0	0
Utah	2,149	2,368	-9.2%	2,117	2,285	32	37	0	0	0	46
Wyoming	3,311	3,581	-7.6%	3,217	3,486	62	60	0	0	32	35
Pacific Contiguous	1,141	1,236	-7.7%	336	348	778	861	0	0	27	27
California	24	26	-4.6%	0	0	0	0	0	0	24	26
Oregon	336	348	-3.5%	336	348	0	0	0	0	0	0
Washington	780	862	-9.5%	0	0	778	861	0	0	2	1
Pacific Noncontiguous	192	175	9.6%	51	24	131	143	NM	8	0	0
Alaska	78	49	60.7%	51	24	NM	17	NM	8	0	0
Hawaii	113	126	-10.1%	0	0	113	126	0	0	0	0
U.S. Total	96,743	98,203	-1.5%	73,136	71,859	22,986	25,701	29	27	592	615

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Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	855	1,448	-41.0%	543	166	295	1,273	0	0	16	8
Connecticut	253	96	164.7%	0	0	253	96	0	0	0	0
Maine	58	49	18.2%	0	0	42	41	0	0	16	8
Massachusetts	0	1,136	-100.0%	0	0	0	1,136	0	0	0	0
New Hampshire	543	166	226.3%	543	166	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	35,675	37,107	-3.9%	0	0	35,528	36,786	0	0	147	321
New Jersey	934	910	2.6%	0	0	934	910	0	0	0	0
New York	617	601	2.8%	0	0	606	422	0	0	11	178
Pennsylvania	34,124	35,597	-4.1%	0	0	33,987	35,454	0	0	136	143
East North Central	206,592	209,659	-1.5%	123,246	126,295	81,504	81,808	64	44	1,778	1,513
Illinois	46,395	43,388	6.9%	3,060	3,154	41,927	39,049	29	21	1,378	1,165
Indiana	57,857	53,743	7.7%	54,729	51,837	3,093	1,882	34	23	0	0
Michigan	33,165	32,949	0.7%	32,764	32,582	331	330	0	0	69	37
Ohio	44,191	53,194	-16.9%	8,034	12,641	36,152	40,547	0	0	5	7
Wisconsin	24,985	26,385	-5.3%	24,659	26,081	0	0	0	0	326	304
West North Central	142,009	140,447	1.1%	139,945	138,540	0	1	63	83	2,001	1,823
Iowa	20,962	20,155	4.0%	19,702	18,972	0	0	57	64	1,203	1,118
Kansas	15,396	14,880	3.5%	15,396	14,880	0	0	0	0	0	0
Minnesota	16,739	16,473	1.6%	16,317	16,103	0	0	1	1	422	369
Missouri	48,603	51,445	-5.5%	48,598	51,427	0	1	5	18	0	0
Nebraska	17,317	16,160	7.2%	17,029	15,897	0	0	0	0	288	263
North Dakota	21,078	19,773	6.6%	20,990	19,700	0	0	0	0	88	73
South Dakota	1,914	1,561	22.6%	1,914	1,561	0	0	0	0	0	0
South Atlantic	151,976	165,235	-8.0%	132,033	147,840	19,383	16,782	29	38	530	575
Delaware	277	259	7.1%	0	0	277	259	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	22,884	29,353	-22.0%	22,805	29,165	7	80	0	0	72	108
Georgia	23,679	25,587	-7.5%	23,534	25,464	0	0	0	0	145	123
Maryland	8,329	6,407	30.0%	0	0	8,284	6,352	0	0	45	55
North Carolina	25,701	27,768	-7.4%	25,496	27,530	74	81	24	30	107	127
South Carolina	14,637	14,602	0.2%	14,623	14,585	0	0	0	0	14	16
Virginia	7,634	8,813	-13.4%	7,039	8,288	442	370	5	8	147	146
West Virginia	48,835	52,448	-6.9%	38,535	42,808	10,299	9,640	0	0	0	0
East South Central	90,965	93,261	-2.5%	88,338	90,957	2,072	1,750	0	0	555	554
Alabama	25,736	24,166	6.5%	25,703	24,144	0	0	0	0	33	22
Kentucky	44,286	44,150	0.3%	44,286	44,150	0	0	0	0	0	0
Mississippi	3,833	3,564	7.5%	1,761	1,815	2,072	1,750	0	0	0	0
Tennessee	17,110	21,381	-20.0%	16,588	20,849	0	0	0	0	522	533
West South Central	125,906	144,720	-13.0%	70,205	70,997	55,505	73,468	0	0	196	255
Arkansas	21,658	19,895	8.9%	17,896	17,599	3,728	2,263	0	0	34	32
Louisiana	9,148	9,673	-5.4%	6,028	5,609	3,120	4,064	0	0	0	0
Oklahoma	11,676	13,438	-13.1%	10,279	11,990	1,236	1,225	0	0	162	223
Texas	83,423	101,714	-18.0%	36,002	35,799	47,421	65,915	0	0	0	0
Mountain	109,489	120,444	-9.1%	98,718	108,794	10,443	11,163	0	0	328	488
Arizona	23,120	23,494	-1.6%	23,120	23,494	0	0	0	0	0	0
Colorado	19,412	22,145	-12.3%	19,404	22,138	0	0	0	0	8	7
Idaho	19	15	26.4%	0	0	0	0	0	0	19	15
Montana	9,026	9,801	-7.9%	157	210	8,867	9,588	0	0	2	3
Nevada	1,646	1,646	0.0%	908	911	739	734	0	0	0	0
New Mexico	8,956	14,318	-37.5%	8,956	14,318	0	0	0	0	0	0
Utah	18,368	18,970	-3.2%	18,053	18,482	315	309	0	0	0	179
Wyoming	28,943	30,055	-3.7%	28,121	29,239	523	532	0	0	299	284
Pacific Contiguous	4,156	4,781	-13.1%	839	1,506	3,082	3,042	0	0	235	233
California	218	212	2.8%	0	0	0	0	0	0	218	212
Oregon	839	1,506	-44.3%	839	1,506	0	0	0	0	0	0
Washington	3,098	3,062	1.2%	0	0	3,082	3,042	0	0	17	21
Pacific Noncontiguous	1,487	1,426	4.3%	243	193	1,154	1,157	90	76	0	0
Alaska	487	405	20.4%	243	193	155	136	90	76	0	0
Hawaii	999	1,021	-2.2%	0	0	999	1,021	0	0	0	0
U.S. Total	869,110	918,528	-5.4%	654,110	685,288	208,967	227,228	246	241	5,787	5,771

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

Table 1.5.A. Utility Scale Facility Net Generation from Petroleum Liquids by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	20	22	-7.8%	6	3	12	16	NM	2	NM	1
Connecticut	9	1	720.8%	NM	0	9	1	NM	0	0	0
Maine	NM	10	NM	0	0	NM	9	0	0	NM	1
Massachusetts	6	9	-28.0%	4	1	NM	7	NM	1	0	0
New Hampshire	NM	1	NM	NM	1	NM	0	1	0	0	0
Rhode Island	NM	0	--	0	0	NM	0	0	0	0	0
Vermont	NM	0	NM	NM	0	0	0	0	0	0	0
Middle Atlantic	40	26	55.1%	11	1	26	23	NM	0	2	2
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	24	9	186.7%	11	1	11	6	NM	0	1	2
Pennsylvania	14	17	-16.6%	0	0	13	16	0	0	1	0
East North Central	44	42	2.7%	23	29	18	11	1	1	2	1
Illinois	4	3	27.9%	NM	1	4	3	0	0	0	0
Indiana	10	8	25.4%	9	8	NM	0	0	0	2	1
Michigan	11	13	-19.0%	10	13	0	0	0	0	NM	0
Ohio	16	14	14.7%	NM	5	15	9	0	0	0	0
Wisconsin	NM	3	NM	NM	3	0	0	0	0	NM	0
West North Central	26	20	27.3%	25	19	NM	1	0	0	0	0
Iowa	10	5	75.1%	9	5	0	0	0	0	0	0
Kansas	2	6	-64.7%	2	6	0	0	0	0	0	0
Minnesota	NM	3	NM	NM	2	NM	1	0	0	0	0
Missouri	6	5	28.5%	6	5	0	0	0	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	4	1	303.0%	4	1	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	NM	0	0	0
South Atlantic	173	119	45.4%	139	86	18	22	4	3	12	8
Delaware	2	1	276.9%	0	0	2	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	103	32	218.8%	100	31	0	0	0	0	NM	1
Georgia	13	14	-4.5%	5	7	NM	0	0	0	NM	6
Maryland	6	16	-64.6%	0	0	5	16	NM	0	0	0
North Carolina	12	16	-26.6%	10	15	NM	1	NM	0	NM	1
South Carolina	7	9	-18.7%	6	9	0	0	NM	0	1	0
Virginia	21	26	-16.7%	7	19	10	4	4	2	NM	0
West Virginia	9	6	46.9%	9	6	0	0	0	0	0	0
East South Central	30	17	72.8%	29	17	NM	0	0	0	NM	1
Alabama	NM	2	NM	2	1	NM	0	0	0	NM	0
Kentucky	9	7	42.5%	9	7	0	0	0	0	0	0
Mississippi	6	1	820.3%	6	1	0	0	0	0	0	0
Tennessee	12	8	45.1%	12	8	0	0	0	0	0	0
West South Central	7	9	-20.4%	5	6	1	2	0	0	1	0
Arkansas	2	2	50.8%	2	1	0	0	0	0	0	0
Louisiana	1	1	-6.0%	1	1	0	0	0	0	0	0
Oklahoma	0	1	-21.0%	0	0	0	0	0	0	0	0
Texas	3	5	-45.5%	2	3	1	2	0	0	0	0
Mountain	12	14	-15.4%	11	12	1	1	0	0	0	0
Arizona	2	3	-29.5%	2	3	0	0	0	0	0	0
Colorado	NM	1	NM	NM	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	1	NM	NM	0	0	1	0	0	0	0
Nevada	1	1	-22.9%	1	1	0	0	0	0	0	0
New Mexico	2	3	-24.9%	2	3	0	0	0	0	0	0
Utah	2	3	-13.7%	2	3	0	0	0	0	0	0
Wyoming	3	2	28.8%	3	2	0	0	0	0	0	0
Pacific Contiguous	5	9	-44.9%	3	7	1	0	NM	0	NM	2
California	3	5	-37.6%	3	4	0	0	NM	0	NM	1
Oregon	0	3	-85.6%	0	3	0	0	NM	0	0	0
Washington	NM	1	NM	NM	0	1	0	0	0	NM	1
Pacific Noncontiguous	684	647	5.7%	511	481	153	146	1	0	20	20
Alaska	62	60	2.0%	57	57	0	0	0	0	4	3
Hawaii	623	587	6.1%	454	424	153	146	0	0	16	17
U.S. Total	1,040	925	12.4%	763	661	230	223	8	6	38	34

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

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	1,245	217	473.0%	194	32	992	152	35	25	24	8
Connecticut	360	37	877.3%	NM	3	353	33	NM	1	1	0
Maine	194	38	405.9%	0	0	170	30	1	1	NM	7
Massachusetts	457	111	312.7%	88	10	350	89	NM	11	1	1
New Hampshire	167	24	605.6%	96	14	59	1	12	9	0	0
Rhode Island	NM	5	NM	0	3	NM	0	1	2	0	0
Vermont	NM	3	NM	NM	3	0	0	0	0	0	0
Middle Atlantic	2,157	350	515.7%	564	58	1,538	256	NM	7	31	30
New Jersey	252	31	719.4%	1	0	245	30	5	0	1	0
New York	1,437	159	805.1%	561	57	835	70	NM	4	26	28
Pennsylvania	468	161	191.0%	2	0	459	156	4	3	NM	2
East North Central	473	375	26.3%	240	230	210	129	5	3	19	12
Illinois	52	41	26.7%	NM	7	43	34	0	0	0	0
Indiana	100	84	18.1%	84	76	NM	0	0	0	15	8
Michigan	95	80	18.4%	91	77	0	0	3	2	1	2
Ohio	207	147	40.6%	38	50	166	95	1	0	3	2
Wisconsin	20	22	-10.0%	18	21	1	0	0	0	NM	0
West North Central	270	199	35.8%	256	195	NM	2	2	1	1	1
Iowa	84	72	17.4%	83	71	1	0	0	0	0	0
Kansas	NM	35	NM	NM	35	0	0	0	0	0	0
Minnesota	33	22	50.7%	20	18	NM	2	1	1	1	1
Missouri	72	36	102.0%	72	36	0	0	0	0	0	0
Nebraska	6	4	53.9%	6	4	0	0	0	0	0	0
North Dakota	26	28	-7.0%	26	28	0	0	0	0	0	0
South Dakota	4	3	46.8%	4	3	0	0	NM	0	0	0
South Atlantic	2,587	1,252	106.7%	1,784	999	652	166	46	25	105	61
Delaware	148	8	NM	6	0	142	8	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	469	412	14.0%	437	398	12	2	0	0	NM	12
Georgia	180	91	98.8%	NM	53	46	4	4	2	59	33
Maryland	240	83	190.3%	4	0	232	80	NM	1	3	1
North Carolina	443	162	173.7%	405	146	NM	8	NM	1	NM	7
South Carolina	245	79	211.7%	198	71	39	1	NM	0	8	6
Virginia	739	326	126.5%	554	241	145	62	37	21	NM	3
West Virginia	123	91	34.3%	109	90	14	1	0	0	0	0
East South Central	234	181	29.6%	196	170	25	2	0	0	NM	8
Alabama	58	26	119.7%	26	19	25	2	0	0	NM	6
Kentucky	64	61	5.9%	64	61	0	0	0	0	0	0
Mississippi	NM	8	NM	NM	6	0	0	0	0	4	2
Tennessee	89	86	4.4%	88	85	0	0	0	0	1	1
West South Central	126	116	9.1%	NM	63	21	49	1	0	6	3
Arkansas	NM	35	NM	NM	12	5	22	0	0	3	1
Louisiana	NM	13	NM	NM	13	0	0	0	0	0	0
Oklahoma	13	10	27.8%	12	9	0	0	0	0	1	1
Texas	49	58	-14.7%	30	29	NM	27	1	0	3	1
Mountain	135	161	-16.2%	118	146	17	15	0	0	0	0
Arizona	38	41	-7.2%	38	41	0	0	0	0	0	0
Colorado	8	5	62.0%	8	5	0	0	0	0	0	0
Idaho	0	0	10.8%	0	0	0	0	0	0	0	0
Montana	14	12	23.9%	NM	0	14	11	0	0	0	0
Nevada	8	8	-4.7%	6	5	2	3	0	0	0	0
New Mexico	13	31	-57.0%	13	31	0	0	0	0	0	0
Utah	25	30	-16.9%	24	29	1	1	0	0	0	0
Wyoming	28	34	-17.0%	28	34	0	0	0	0	0	0
Pacific Contiguous	78	61	26.1%	30	36	12	11	NM	1	35	14
California	59	36	63.2%	26	26	5	3	0	0	28	7
Oregon	NM	8	NM	NM	8	0	0	NM	0	0	0
Washington	15	17	-11.8%	NM	2	7	8	0	0	7	7
Pacific Noncontiguous	5,514	5,662	-2.6%	4,280	4,330	1,056	1,140	5	5	173	186
Alaska	582	674	-13.7%	547	635	0	0	3	3	32	36
Hawaii	4,932	4,987	-1.1%	3,733	3,695	1,056	1,140	2	2	141	150
U.S. Total	12,819	8,573	49.5%	7,760	6,260	4,535	1,923	117	67	408	323

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

Table 1.6.A. Utility Scale Facility Net Generation from Petroleum Coke by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
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	17	13	24.0%	0	0	0	0	0	0	17	13
New Jersey	6	7	-15.2%	0	0	0	0	0	0	6	7
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	6	NM	0	0	0	0	0	0	NM	6
East North Central	191	179	6.8%	89	68	87	96	0	0	15	15
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	95	72	32.0%	82	57	0	0	0	0	13	15
Ohio	88	96	-8.1%	0	0	87	96	0	0	1	0
Wisconsin	8	11	-28.9%	8	11	0	0	0	0	0	0
West North Central	1	1	-52.3%	0	0	0	0	1	1	0	0
Iowa	1	1	-52.3%	0	0	0	0	1	1	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	206	126	63.8%	186	116	0	0	0	0	NM	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	186	116	59.8%	186	116	0	0	0	0	0	0
Georgia	NM	10	NM	0	0	0	0	0	0	NM	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	383	353	8.3%	364	339	0	0	0	0	18	14
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	377	347	8.4%	364	339	0	0	0	0	12	8
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	NM	6	NM	0	0	0	0	0	0	NM	6
Mountain	38	39	-3.6%	0	0	38	39	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	38	39	-3.6%	0	0	38	39	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	835	712	17.3%	639	523	125	136	1	1	70	52

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

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 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	124	132	-5.9%	0	0	0	0	0	0	124	132
New Jersey	43	56	-22.7%	0	0	0	0	0	0	43	56
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	81	76	6.6%	0	0	0	0	0	0	81	76
East North Central	1,539	1,621	-5.1%	852	703	601	810	0	0	86	109
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	851	750	13.4%	774	642	0	0	0	0	77	109
Ohio	610	810	-24.7%	0	0	601	810	0	0	9	0
Wisconsin	78	61	27.3%	78	61	0	0	0	0	0	0
West North Central	40	29	40.9%	0	0	0	0	4	6	36	23
Iowa	40	29	40.9%	0	0	0	0	4	6	36	23
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,458	791	84.2%	1,290	690	0	0	0	0	168	101
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	1,290	690	86.9%	1,290	690	0	0	0	0	0	0
Georgia	168	101	66.1%	0	0	0	0	0	0	168	101
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	427	-100.0%	0	427	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	427	-100.0%	0	427	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	3,385	3,583	-5.5%	3,219	3,347	0	0	0	0	166	236
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	3,326	3,511	-5.2%	3,219	3,347	0	0	0	0	108	164
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	58	73	-20.0%	0	0	0	0	0	0	58	73
Mountain	301	328	-8.3%	0	0	301	328	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	301	328	-8.3%	0	0	301	328	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	6,847	6,911	-0.9%	5,361	5,167	902	1,138	4	6	580	600

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

Table 1.7.A. Utility Scale Facility Net Generation from Natural Gas by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	4,622	4,552	1.5%	29	17	4,378	4,343	87	85	127	107
Connecticut	1,757	1,175	49.6%	4	6	1,665	1,086	34	34	54	49
Maine	187	120	55.2%	0	0	146	98	3	3	38	20
Massachusetts	1,660	2,036	-18.5%	NM	9	1,572	1,964	45	42	21	20
New Hampshire	303	463	-34.6%	3	2	296	457	1	1	3	3
Rhode Island	716	758	-5.5%	0	0	700	738	5	5	11	15
Vermont	0	0	-50.0%	0	0	0	0	0	0	0	0
Middle Atlantic	16,564	14,797	11.9%	862	853	15,379	13,623	99	108	223	214
New Jersey	3,906	3,384	15.4%	NM	19	3,838	3,315	17	18	32	32
New York	4,991	4,431	12.6%	842	832	4,009	3,486	75	79	64	34
Pennsylvania	7,667	6,982	9.8%	1	1	7,533	6,822	7	11	127	148
East North Central	11,430	8,616	32.7%	3,558	2,990	7,477	5,269	139	127	256	230
Illinois	1,726	1,275	35.3%	177	103	1,460	1,078	44	34	45	61
Indiana	1,968	1,521	29.4%	485	642	1,364	778	12	15	107	86
Michigan	2,572	2,134	20.6%	934	691	1,541	1,360	51	47	45	35
Ohio	3,485	2,347	48.5%	494	363	2,949	1,945	26	27	17	12
Wisconsin	1,679	1,339	25.4%	1,468	1,191	163	107	6	4	42	36
West North Central	3,184	1,841	73.0%	2,771	1,490	313	258	26	27	74	65
Iowa	866	611	41.8%	803	549	NM	0	6	8	57	54
Kansas	340	147	130.9%	335	146	0	0	0	0	5	NM
Minnesota	1,011	417	142.4%	823	290	170	112	8	8	9	7
Missouri	630	512	23.0%	474	352	143	147	11	11	3	3
Nebraska	138	55	152.8%	138	55	0	0	0	0	0	0
North Dakota	78	58	33.5%	77	57	0	0	0	0	1	1
South Dakota	121	41	198.1%	121	41	0	0	0	0	0	0
South Atlantic	36,503	30,080	21.4%	28,462	24,245	7,583	5,392	86	62	372	381
Delaware	548	596	-8.1%	4	4	470	506	0	0	74	86
District of Columbia	2	3	-38.0%	0	0	0	0	2	3	0	0
Florida	17,499	14,965	16.9%	16,529	14,122	832	721	2	2	136	120
Georgia	5,097	4,539	12.3%	3,589	3,424	1,457	1,067	0	0	51	48
Maryland	1,633	662	146.5%	411	10	1,140	596	74	48	7	8
North Carolina	3,995	3,291	21.4%	3,154	2,818	820	458	NM	7	14	9
South Carolina	2,687	1,629	65.0%	1,827	1,355	851	265	0	0	10	9
Virginia	4,828	4,141	16.6%	2,925	2,483	1,846	1,603	1	1	55	54
West Virginia	213	253	-15.6%	22	30	167	177	0	0	24	46
East South Central	13,210	10,261	28.7%	8,654	6,640	4,339	3,406	17	14	201	201
Alabama	5,718	4,761	20.1%	1,690	1,627	3,926	3,033	0	0	101	101
Kentucky	1,447	918	57.7%	1,346	828	86	75	0	0	15	15
Mississippi	4,511	3,735	20.8%	4,149	3,397	326	297	0	1	36	41
Tennessee	1,535	847	81.2%	1,470	788	0	2	17	14	48	44
West South Central	33,695	27,060	24.5%	11,381	8,648	16,632	13,407	91	71	5,590	4,934
Arkansas	1,517	1,447	4.8%	1,401	1,313	88	109	NM	3	25	21
Louisiana	5,536	5,135	7.8%	3,102	2,795	407	366	16	4	2,011	1,970
Oklahoma	4,394	2,672	64.4%	2,582	1,355	1,767	1,295	0	0	46	23
Texas	22,247	17,806	24.9%	4,296	3,184	14,371	11,638	73	64	3,508	2,920
Mountain	11,522	8,635	33.4%	8,392	6,319	2,965	2,150	35	37	131	129
Arizona	4,802	3,347	43.5%	2,893	1,940	1,898	1,394	11	13	0	0
Colorado	1,463	1,156	26.5%	1,134	956	328	199	0	0	1	2
Idaho	396	381	4.0%	238	210	146	153	3	3	NM	14
Montana	40	40	-0.4%	28	26	12	13	0	0	0	0
Nevada	2,747	2,393	14.8%	2,526	2,171	187	187	6	5	28	29
New Mexico	1,099	761	44.4%	703	554	387	197	9	9	0	0
Utah	893	497	79.7%	847	448	6	6	6	6	33	36
Wyoming	82	61	35.4%	24	13	0	0	0	0	59	48
Pacific Contiguous	11,689	12,036	-2.9%	4,491	4,963	6,131	5,978	167	171	899	925
California	8,335	9,031	-7.7%	2,646	3,190	4,639	4,764	161	167	889	911
Oregon	1,937	1,738	11.5%	944	988	982	741	5	4	NM	5
Washington	1,417	1,267	11.9%	900	785	511	473	1	0	5	9
Pacific Noncontiguous	326	233	39.9%	321	227	0	0	0	0	5	6
Alaska	326	233	39.9%	321	227	0	0	0	0	5	6
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	142,745	118,112	20.9%	68,921	56,393	65,199	53,827	747	701	7,878	7,191

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	38,546	38,984	-1.1%	225	202	36,515	37,023	733	738	1,074	1,022
Connecticut	14,325	11,508	24.5%	31	47	13,545	10,702	285	305	464	454
Maine	1,720	1,969	-12.7%	0	0	1,410	1,703	23	22	287	244
Massachusetts	15,137	17,349	-12.7%	163	127	14,397	16,663	380	364	197	195
New Hampshire	2,281	2,907	-21.5%	31	27	2,221	2,848	6	8	24	24
Rhode Island	5,082	5,250	-3.2%	0	0	4,942	5,108	38	38	103	105
Vermont	1	1	-6.4%	1	1	0	0	1	1	0	0
Middle Atlantic	126,463	120,618	4.8%	8,402	7,890	115,256	110,145	903	931	1,901	1,652
New Jersey	29,831	29,506	1.1%	145	167	29,230	28,898	160	169	297	272
New York	38,880	36,909	5.3%	8,251	7,718	29,512	28,275	642	662	474	254
Pennsylvania	57,752	54,204	6.5%	6	5	56,514	52,973	101	101	1,130	1,125
East North Central	101,615	74,003	37.3%	35,242	25,240	62,592	45,446	1,173	1,124	2,608	2,193
Illinois	13,281	11,772	12.8%	1,390	865	11,028	10,052	356	305	507	550
Indiana	19,184	12,921	48.5%	7,605	4,892	10,355	7,013	137	145	1,087	871
Michigan	24,455	19,291	26.8%	8,192	6,308	15,358	12,254	436	418	469	312
Ohio	30,890	20,318	52.0%	5,685	4,743	24,857	15,254	192	204	156	118
Wisconsin	13,805	9,700	42.3%	12,369	8,432	996	873	52	53	389	342
West North Central	25,561	15,599	63.9%	21,966	13,280	2,771	1,649	242	209	582	460
Iowa	6,449	3,054	111.2%	5,970	2,690	NM	0	75	61	405	304
Kansas	3,323	1,574	111.1%	3,273	1,546	0	0	0	0	50	28
Minnesota	7,831	5,293	47.9%	6,584	4,472	1,079	655	79	76	89	91
Missouri	5,527	4,110	34.5%	3,718	3,011	1,692	995	86	72	31	33
Nebraska	1,026	528	94.1%	1,023	528	0	0	3	1	0	0
North Dakota	560	531	5.4%	553	526	0	0	0	0	7	5
South Dakota	845	508	66.4%	845	508	0	0	0	0	0	0
South Atlantic	279,381	250,854	11.4%	225,118	205,786	50,285	41,208	711	506	3,267	3,354
Delaware	4,096	5,517	-25.8%	18	11	3,511	4,786	0	0	567	720
District of Columbia	21	19	9.0%	0	0	0	0	21	19	0	0
Florida	132,081	123,572	6.9%	124,666	117,380	6,230	5,094	15	19	1,169	1,079
Georgia	41,991	40,091	4.7%	30,782	30,145	10,738	9,490	0	0	471	455
Maryland	10,578	4,808	120.0%	2,957	36	6,951	4,311	600	395	69	67
North Carolina	33,321	28,792	15.7%	28,121	24,694	5,025	3,962	66	67	109	69
South Carolina	17,341	12,847	35.0%	13,602	10,800	3,645	1,957	0	0	94	90
Virginia	38,865	34,138	13.8%	24,823	22,595	13,489	11,038	9	6	544	499
West Virginia	1,088	1,071	1.6%	148	125	695	570	0	0	244	375
East South Central	106,682	91,022	17.2%	71,383	60,560	33,306	28,527	157	147	1,836	1,787
Alabama	45,297	40,039	13.1%	15,529	13,896	28,843	25,248	0	0	925	895
Kentucky	11,466	7,883	45.5%	10,757	7,440	566	269	0	0	143	173
Mississippi	40,131	35,216	14.0%	35,901	31,880	3,887	3,000	6	4	338	332
Tennessee	9,788	7,884	24.2%	9,197	7,344	11	10	151	144	429	387
West South Central	283,659	240,838	17.8%	95,698	75,815	137,867	115,406	667	660	49,427	48,957
Arkansas	15,645	13,366	17.1%	14,419	12,250	963	892	28	28	236	196
Louisiana	47,825	44,906	6.5%	26,216	22,807	3,394	3,112	123	104	18,092	18,883
Oklahoma	33,566	23,744	41.4%	20,149	14,181	13,132	9,389	0	0	286	174
Texas	186,623	158,822	17.5%	34,915	26,577	120,379	102,013	516	527	30,813	29,705
Mountain	79,948	67,576	18.3%	62,029	52,477	16,412	13,661	307	323	1,200	1,115
Arizona	27,721	22,911	21.0%	19,297	15,785	8,316	7,017	108	109	0	0
Colorado	12,904	9,675	33.4%	10,778	8,164	2,112	1,495	0	0	14	15
Idaho	2,334	2,050	13.9%	1,089	1,071	1,126	847	29	29	90	102
Montana	326	312	4.3%	259	229	66	81	0	0	2	2
Nevada	20,982	20,283	3.4%	19,065	18,431	1,586	1,588	49	44	282	220
New Mexico	8,724	7,081	23.2%	5,481	4,419	3,150	2,573	78	88	15	1
Utah	6,268	4,702	33.3%	5,862	4,263	56	58	43	53	307	329
Wyoming	690	562	22.7%	199	115	1	1	0	0	489	446
Pacific Contiguous	87,731	81,438	7.7%	34,558	31,651	43,763	40,362	1,455	1,456	7,955	7,968
California	66,539	64,805	2.7%	22,659	22,472	34,656	33,070	1,401	1,416	7,823	7,846
Oregon	12,519	9,560	31.0%	6,629	5,046	5,788	4,427	38	29	64	57
Washington	8,673	7,073	22.6%	5,271	4,133	3,319	2,865	16	10	68	65
Pacific Noncontiguous	2,578	2,374	8.6%	2,531	2,322	0	0	0	2	47	50
Alaska	2,578	2,374	8.6%	2,531	2,322	0	0	0	2	47	50
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,132,165	983,306	15.1%	557,152	475,224	498,767	433,428	6,348	6,096	69,897	68,558

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.7.C. Utility Scale Facility Net Generation from Natural Gas by Technology: Total (All Sectors), 2008-September 2018 (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						
2008	693,958	80,144	107,316	1,482	80	882,981
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
Year 2016						
January	97,555	7,212	4,933	295	50	110,044
February	86,920	6,841	4,491	253	47	98,552
March	87,256	9,126	7,184	275	49	103,890
April	80,910	9,788	7,843	278	56	98,876
May	92,066	9,681	8,328	301	53	110,430
June	108,301	11,690	10,993	345	66	131,395
July	120,441	15,821	14,812	402	78	151,554
August	124,933	15,905	13,421	421	80	154,760
Sept	104,442	11,340	9,422	333	65	125,603
October	84,780	9,990	7,788	276	65	102,898
November	80,168	8,609	4,859	252	54	93,942
December	84,473	7,426	4,129	282	53	96,364
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	10,674	6,232	364	11	110,064
February	85,094	6,493	4,140	277	10	96,013
March	89,751	9,049	5,778	350	10	104,939
April	82,019	10,962	6,097	355	13	99,447
May	92,471	13,275	9,896	451	18	116,110
June	107,092	13,122	10,132	463	17	130,827
July	131,302	20,325	14,638	778	23	167,066
August	131,140	19,540	13,518	733	22	164,954
Sept	116,190	15,277	10,711	549	18	142,745

Values for 2017 and prior years are final. Values for 2018 are preliminary.
The 'Natural Gas Other' category consists of power plants with prime movers of Fuel Cells and Other Prime Movers that consume natural gas.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report; and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 1.8.A. Utility Scale Facility Net Generation from Other Gases by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	50	51	-2.7%	0	0	0	0	0	0	50	51
New Jersey	16	18	-14.2%	0	0	0	0	0	0	16	18
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	34	33	3.8%	0	0	0	0	0	0	34	33
East North Central	371	365	1.5%	3	0	168	175	0	0	200	190
Illinois	16	18	-11.2%	0	0	0	0	0	0	16	18
Indiana	169	160	5.1%	0	0	0	0	0	0	169	160
Michigan	127	118	7.6%	3	0	123	118	0	0	0	0
Ohio	60	70	-13.8%	0	0	45	58	0	0	15	12
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	4	4	8.3%	0	0	0	0	0	0	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	8.3%	0	0	0	0	0	0	4	4
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	31	23	31.3%	0	0	0	0	0	0	31	23
Delaware	29	20	45.6%	0	0	0	0	0	0	29	20
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1	0	35.0%	0	0	0	0	0	0	1	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	1	3	-58.1%	0	0	0	0	0	0	1	3
East South Central	1	1	-19.2%	0	0	0	0	0	0	1	1
Alabama	0	0	-100.0%	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	1	1	-3.0%	0	0	0	0	0	0	1	1
West South Central	332	415	-20.1%	0	0	88	136	0	0	243	280
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	174	211	-17.4%	0	0	0	0	0	0	174	211
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	158	205	-22.9%	0	0	88	136	0	0	69	69
Mountain	32	30	7.3%	0	0	1	1	0	0	31	29
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	1	1	-3.4%	0	0	1	1	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	1	1	-50.1%	0	0	0	0	0	0	1	1
Wyoming	30	28	10.0%	0	0	0	0	0	0	30	28
Pacific Contiguous	175	165	5.8%	0	0	58	33	0	0	117	132
California	117	132	-11.1%	0	0	0	0	0	0	117	132
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	58	33	72.8%	0	0	58	33	0	0	0	0
Pacific Noncontiguous	5	4	13.9%	0	0	0	0	0	0	5	4
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	5	4	13.9%	0	0	0	0	0	0	5	4
U.S. Total	1,001	1,060	-5.6%	3	0	315	346	0	0	682	715

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 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	471	491	-3.9%	0	0	1	0	0	0	470	491
New Jersey	157	166	-5.7%	0	0	0	0	0	0	157	166
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	314	324	-3.0%	0	0	1	0	0	0	313	324
East North Central	3,507	3,495	0.4%	152	100	1,536	1,601	0	0	1,820	1,794
Illinois	148	139	6.2%	0	0	0	0	0	0	148	139
Indiana	1,556	1,522	2.3%	0	0	0	0	0	0	1,556	1,522
Michigan	1,277	1,238	3.1%	152	100	1,125	1,138	0	0	0	0
Ohio	527	596	-11.7%	0	0	411	464	0	0	116	133
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	38	30	28.2%	0	0	0	0	0	0	38	30
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	38	30	28.2%	0	0	0	0	0	0	38	30
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	213	237	-10.2%	0	0	0	0	0	0	213	237
Delaware	192	207	-7.5%	0	0	0	0	0	0	192	207
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	4	4	-1.4%	0	0	0	0	0	0	4	4
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	17	25	-34.3%	0	0	0	0	0	0	17	25
East South Central	9	19	-53.7%	0	0	0	0	0	0	9	19
Alabama	1	8	-88.0%	0	0	0	0	0	0	1	8
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	8	11	-28.9%	0	0	0	0	0	0	8	11
West South Central	3,292	3,489	-5.6%	0	0	1,057	1,088	0	0	2,236	2,400
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,449	1,660	-12.7%	0	0	0	0	0	0	1,449	1,660
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	1,843	1,829	0.8%	0	0	1,057	1,088	0	0	787	740
Mountain	280	276	1.3%	0	0	10	13	0	0	270	263
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	10	13	-25.2%	0	0	10	13	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	11	-65.8%	0	0	0	0	0	0	4	11
Wyoming	266	252	5.7%	0	0	0	0	0	0	266	252
Pacific Contiguous	1,486	1,298	14.5%	0	0	345	262	0	0	1,141	1,036
California	1,141	1,036	10.1%	0	0	0	0	0	0	1,141	1,036
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	345	262	31.8%	0	0	345	262	0	0	0	0
Pacific Noncontiguous	43	38	14.8%	0	0	0	0	0	0	43	38
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	43	38	14.8%	0	0	0	0	0	0	43	38
U.S. Total	9,339	9,372	-0.4%	152	100	2,948	2,964	0	0	6,239	6,308

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.9.A. Utility Scale Facility Net Generation from Nuclear Energy by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	2,587	2,863	-9.6%	0	0	2,587	2,863	0	0	0	0
Connecticut	1,397	1,488	-6.1%	0	0	1,397	1,488	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	308	477	-35.4%	0	0	308	477	0	0	0	0
New Hampshire	882	897	-1.7%	0	0	882	897	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	12,238	13,356	-8.4%	0	0	12,238	13,356	0	0	0	0
New Jersey	2,383	2,897	-17.8%	0	0	2,383	2,897	0	0	0	0
New York	2,962	3,713	-20.2%	0	0	2,962	3,713	0	0	0	0
Pennsylvania	6,894	6,746	2.2%	0	0	6,894	6,746	0	0	0	0
East North Central	12,703	13,111	-3.1%	2,153	1,925	10,550	11,186	0	0	0	0
Illinois	7,589	8,209	-7.6%	0	0	7,589	8,209	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	2,729	2,502	9.1%	2,153	1,925	576	576	0	0	0	0
Ohio	1,535	1,552	-1.1%	0	0	1,535	1,552	0	0	0	0
Wisconsin	851	848	0.3%	0	0	851	848	0	0	0	0
West North Central	3,432	3,928	-12.6%	3,294	3,500	138	428	0	0	0	0
Iowa	138	428	-67.8%	0	0	138	428	0	0	0	0
Kansas	871	871	0.0%	871	871	0	0	0	0	0	0
Minnesota	1,075	1,195	-10.0%	1,075	1,195	0	0	0	0	0	0
Missouri	863	864	-0.1%	863	864	0	0	0	0	0	0
Nebraska	485	570	-14.9%	485	570	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	15,621	16,330	-4.3%	14,374	15,065	1,246	1,266	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,873	2,355	-20.4%	1,873	2,355	0	0	0	0	0	0
Georgia	2,509	2,544	-1.4%	2,509	2,544	0	0	0	0	0	0
Maryland	1,246	1,266	-1.5%	0	0	1,246	1,266	0	0	0	0
North Carolina	2,836	3,453	-17.9%	2,836	3,453	0	0	0	0	0	0
South Carolina	4,572	4,583	-0.2%	4,572	4,583	0	0	0	0	0	0
Virginia	2,583	2,130	21.3%	2,583	2,130	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	6,846	6,955	-1.6%	6,846	6,955	0	0	0	0	0	0
Alabama	3,327	3,662	-9.1%	3,327	3,662	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	725	-14	NM	725	-14	0	0	0	0	0	0
Tennessee	2,794	3,308	-15.5%	2,794	3,308	0	0	0	0	0	0
West South Central	6,046	6,344	-4.7%	2,458	2,840	3,588	3,504	0	0	0	0
Arkansas	953	1,325	-28.1%	953	1,325	0	0	0	0	0	0
Louisiana	1,505	1,515	-0.7%	1,505	1,515	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	3,588	3,504	2.4%	0	0	3,588	3,504	0	0	0	0
Mountain	2,808	2,853	-1.6%	2,808	2,853	0	0	0	0	0	0
Arizona	2,808	2,853	-1.6%	2,808	2,853	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	2,444	2,359	3.6%	2,444	2,359	0	0	0	0	0	0
California	1,615	1,623	-0.5%	1,615	1,623	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	829	736	12.7%	829	736	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	64,725	68,098	-5.0%	34,377	35,496	30,348	32,602	0	0	0	0

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

Table 1.9.B. Utility Scale Facility Net Generation from Nuclear Energy

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	24,835	23,688	4.8%	0	0	24,835	23,688	0	0	0	0
Connecticut	13,546	12,897	5.0%	0	0	13,546	12,897	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	3,116	3,562	-12.5%	0	0	3,116	3,562	0	0	0	0
New Hampshire	8,172	7,229	13.0%	0	0	8,172	7,229	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	119,220	118,568	0.6%	0	0	119,220	118,568	0	0	0	0
New Jersey	25,215	25,706	-1.9%	0	0	25,215	25,706	0	0	0	0
New York	31,507	30,838	2.2%	0	0	31,507	30,838	0	0	0	0
Pennsylvania	62,498	62,024	0.8%	0	0	62,498	62,024	0	0	0	0
East North Central	118,867	117,266	1.4%	18,942	20,459	99,925	96,807	0	0	0	0
Illinois	73,318	72,266	1.5%	0	0	73,318	72,266	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	24,132	24,754	-2.5%	18,942	20,459	5,190	4,296	0	0	0	0
Ohio	13,552	12,872	5.3%	0	0	13,552	12,872	0	0	0	0
Wisconsin	7,865	7,373	6.7%	0	0	7,865	7,373	0	0	0	0
West North Central	33,912	35,410	-4.2%	30,327	31,472	3,586	3,938	0	0	0	0
Iowa	3,586	3,938	-9.0%	0	0	3,586	3,938	0	0	0	0
Kansas	6,464	7,945	-18.6%	6,464	7,945	0	0	0	0	0	0
Minnesota	11,130	10,550	5.5%	11,130	10,550	0	0	0	0	0	0
Missouri	7,929	7,831	1.2%	7,929	7,831	0	0	0	0	0	0
Nebraska	4,804	5,145	-6.6%	4,804	5,145	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	153,544	152,183	0.9%	142,534	141,032	11,010	11,151	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	22,245	21,889	1.6%	22,245	21,889	0	0	0	0	0	0
Georgia	25,468	24,673	3.2%	25,468	24,673	0	0	0	0	0	0
Maryland	11,010	11,151	-1.3%	0	0	11,010	11,151	0	0	0	0
North Carolina	30,910	31,468	-1.8%	30,910	31,468	0	0	0	0	0	0
South Carolina	41,825	40,276	3.8%	41,825	40,276	0	0	0	0	0	0
Virginia	22,086	22,726	-2.8%	22,086	22,726	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	62,181	60,806	2.3%	62,181	60,806	0	0	0	0	0	0
Alabama	29,908	31,967	-6.4%	29,908	31,967	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	4,087	5,718	-28.5%	4,087	5,718	0	0	0	0	0	0
Tennessee	28,185	23,120	21.9%	28,185	23,120	0	0	0	0	0	0
West South Central	54,517	47,688	14.3%	22,638	19,237	31,879	28,451	0	0	0	0
Arkansas	9,988	8,586	16.3%	9,988	8,586	0	0	0	0	0	0
Louisiana	12,650	10,651	18.8%	12,650	10,651	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	31,879	28,451	12.1%	0	0	31,879	28,451	0	0	0	0
Mountain	24,322	24,560	-1.0%	24,322	24,560	0	0	0	0	0	0
Arizona	24,322	24,560	-1.0%	24,322	24,560	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	20,677	18,469	12.0%	20,677	18,469	0	0	0	0	0	0
California	13,484	12,907	4.5%	13,484	12,907	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	7,193	5,562	29.3%	7,193	5,562	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	612,076	598,637	2.2%	321,621	316,034	290,455	282,603	0	0	0	0

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 1.10.A. Utility Scale Facility Net Generation from Hydroelectric (Conventional) Power by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	639	306	109.0%	90	42	519	247	0	0	29	16
Connecticut	31	10	210.5%	3	1	28	9	0	0	0	0
Maine	282	147	91.6%	0	0	253	131	0	0	29	16
Massachusetts	89	32	177.3%	23	8	65	24	0	0	0	0
New Hampshire	129	57	127.3%	28	14	101	43	0	0	0	0
Rhode Island	0	0	NM	0	0	0	0	0	0	0	0
Vermont	108	60	80.3%	36	20	72	39	0	0	0	0
Middle Atlantic	2,682	2,452	9.4%	1,976	1,981	702	467	0	0	3	3
New Jersey	2	0	NM	0	0	2	0	0	0	0	0
New York	2,402	2,393	0.4%	1,965	1,979	434	410	0	0	3	3
Pennsylvania	278	59	373.4%	11	2	267	57	0	0	0	0
East North Central	300	393	-23.6%	248	353	39	24	0	0	13	16
Illinois	12	9	36.2%	5	4	7	5	0	0	0	0
Indiana	27	23	17.2%	27	23	0	0	0	0	0	0
Michigan	83	140	-40.7%	76	128	NM	9	0	0	NM	2
Ohio	44	21	113.0%	24	21	NM	0	0	0	0	0
Wisconsin	133	200	-33.3%	116	177	NM	10	0	0	12	13
West North Central	705	729	-3.2%	684	704	13	15	0	0	8	10
Iowa	46	51	-8.8%	46	50	1	0	0	0	0	0
Kansas	3	1	111.8%	0	0	3	1	0	0	0	0
Minnesota	59	84	-29.3%	42	60	NM	13	0	0	8	10
Missouri	109	66	65.5%	109	66	0	0	0	0	0	0
Nebraska	75	84	-10.9%	75	84	0	0	0	0	0	0
North Dakota	130	146	-10.9%	130	146	0	0	0	0	0	0
South Dakota	283	297	-4.8%	283	297	0	0	0	0	0	0
South Atlantic	1,349	713	89.2%	1,008	615	292	70	2	1	46	27
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	19	11	78.7%	19	11	0	0	0	0	0	0
Georgia	219	187	16.8%	217	186	NM	0	0	0	0	1
Maryland	245	44	457.0%	0	0	245	44	0	0	0	0
North Carolina	400	256	56.1%	395	254	NM	2	2	0	NM	0
South Carolina	195	24	700.7%	191	24	NM	1	0	0	0	0
Virginia	130	110	17.7%	125	106	5	4	0	0	0	0
West Virginia	141	80	76.2%	62	36	34	19	0	0	45	26
East South Central	1,986	1,492	33.2%	1,985	1,491	NM	1	0	0	0	0
Alabama	869	523	66.2%	869	523	0	0	0	0	0	0
Kentucky	356	385	-7.6%	355	384	NM	1	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	762	584	30.5%	762	584	0	0	0	0	0	0
West South Central	653	666	-1.9%	571	570	82	95	NM	0	0	0
Arkansas	277	270	2.5%	273	266	NM	5	0	0	0	0
Louisiana	75	87	-13.5%	0	0	75	87	0	0	0	0
Oklahoma	188	196	-4.0%	188	196	0	0	0	0	0	0
Texas	113	112	0.4%	110	109	3	3	NM	0	0	0
Mountain	1,974	2,416	-18.3%	1,893	2,318	79	96	2	2	0	0
Arizona	486	526	-7.5%	486	526	0	0	0	0	0	0
Colorado	105	36	189.1%	91	28	NM	7	2	2	0	0
Idaho	539	769	-29.9%	488	699	51	71	0	0	0	0
Montana	555	789	-29.7%	547	778	NM	11	0	0	0	0
Nevada	154	115	33.9%	148	109	NM	6	0	0	0	0
New Mexico	NM	7	NM	NM	7	0	0	0	0	0	0
Utah	63	92	-31.6%	63	92	0	0	0	0	0	0
Wyoming	60	82	-27.2%	58	80	1	1	0	0	0	0
Pacific Contiguous	8,280	9,802	-15.5%	8,113	9,589	166	212	NM	1	0	0
California	2,266	2,841	-20.2%	2,136	2,669	129	171	NM	1	0	0
Oregon	1,932	2,329	-17.1%	1,916	2,310	NM	19	0	0	0	0
Washington	4,082	4,632	-11.9%	4,061	4,609	21	22	0	0	0	0
Pacific Noncontiguous	95	99	-4.6%	79	86	3	1	NM	11	NM	2
Alaska	88	95	-7.8%	78	85	0	0	NM	11	0	0
Hawaii	7	4	75.3%	0	1	3	1	0	0	NM	2
U.S. Total	18,663	19,067	-2.1%	16,649	17,749	1,897	1,228	14	14	103	75

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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 September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	5,820	5,890	-1.2%	832	849	4,702	4,754	3	3	283	284
Connecticut	272	278	-2.1%	28	21	245	257	0	0	0	0
Maine	2,603	2,599	0.2%	0	0	2,325	2,320	0	0	278	279
Massachusetts	810	857	-5.4%	205	208	597	640	3	3	5	5
New Hampshire	1,140	1,124	1.4%	262	271	878	854	0	0	0	0
Rhode Island	2	2	25.3%	0	0	2	2	0	0	0	0
Vermont	992	1,031	-3.7%	338	349	655	682	0	0	0	0
Middle Atlantic	25,336	25,049	1.1%	18,885	18,626	6,403	6,364	4	5	44	54
New Jersey	25	12	102.0%	0	0	25	12	0	0	0	0
New York	22,819	22,453	1.6%	18,786	18,547	3,985	3,847	4	5	44	54
Pennsylvania	2,492	2,583	-3.5%	99	79	2,393	2,505	0	0	0	0
East North Central	4,138	3,791	9.1%	3,560	3,408	433	237	1	1	144	146
Illinois	104	95	10.1%	42	36	62	58	1	1	0	0
Indiana	241	230	4.8%	241	230	0	0	0	0	0	0
Michigan	1,317	1,261	4.5%	1,210	1,157	87	83	0	0	20	22
Ohio	404	209	93.8%	219	209	185	0	0	0	0	0
Wisconsin	2,070	1,997	3.7%	1,847	1,777	99	96	0	0	124	124
West North Central	10,152	9,871	2.8%	9,876	9,582	182	175	0	0	94	114
Iowa	803	838	-4.2%	798	832	5	6	0	0	0	0
Kansas	19	23	-17.8%	0	0	19	23	0	0	0	0
Minnesota	959	922	4.0%	706	661	159	146	0	0	94	114
Missouri	957	913	4.8%	957	913	0	0	0	0	0	0
Nebraska	1,196	1,146	4.4%	1,196	1,146	0	0	0	0	0	0
North Dakota	2,037	1,987	2.6%	2,037	1,987	0	0	0	0	0	0
South Dakota	4,181	4,043	3.4%	4,181	4,043	0	0	0	0	0	0
South Atlantic	11,253	10,445	7.7%	8,411	7,861	2,402	2,119	11	10	429	456
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	170	180	-5.5%	170	180	0	0	0	0	0	0
Georgia	1,890	1,864	1.4%	1,869	1,844	NM	5	0	0	9	15
Maryland	1,955	1,685	16.0%	0	0	1,955	1,685	0	0	0	0
North Carolina	3,292	3,011	9.3%	3,241	2,975	35	27	9	9	NM	0
South Carolina	1,674	1,412	18.5%	1,627	1,376	45	35	2	1	0	0
Virginia	984	923	6.6%	935	874	49	49	0	0	0	0
West Virginia	1,287	1,370	-6.0%	569	611	304	318	0	0	414	441
East South Central	17,832	16,548	7.8%	17,824	16,541	NM	8	0	0	0	0
Alabama	7,529	6,934	8.6%	7,529	6,934	0	0	0	0	0	0
Kentucky	3,449	3,212	7.4%	3,441	3,205	NM	8	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	6,855	6,402	7.1%	6,855	6,402	0	0	0	0	0	0
West South Central	5,685	5,395	5.4%	4,922	4,634	761	759	NM	1	0	0
Arkansas	2,409	2,314	4.1%	2,368	2,282	41	32	0	0	0	0
Louisiana	692	703	-1.5%	0	0	692	703	0	0	0	0
Oklahoma	1,646	1,579	4.3%	1,646	1,579	0	0	0	0	0	0
Texas	937	799	17.2%	908	773	27	25	NM	1	0	0
Mountain	27,855	27,368	1.8%	26,646	26,164	1,197	1,192	12	12	0	0
Arizona	5,483	5,418	1.2%	5,483	5,418	0	0	0	0	0	0
Colorado	1,569	1,809	-13.3%	1,361	1,555	196	241	12	12	0	0
Idaho	8,468	8,304	2.0%	7,664	7,540	804	764	0	0	0	0
Montana	8,666	8,519	1.7%	8,543	8,398	122	121	0	0	0	0
Nevada	1,591	1,284	23.9%	1,529	1,232	61	52	0	0	0	0
New Mexico	157	155	1.4%	157	155	0	0	0	0	0	0
Utah	1,025	1,006	1.9%	1,020	998	5	8	0	0	0	0
Wyoming	897	876	2.5%	889	868	9	7	0	0	0	0
Pacific Contiguous	117,553	133,671	-12.1%	115,701	130,875	1,843	2,778	NM	18	0	0
California	21,895	36,761	-40.4%	20,620	34,534	1,266	2,209	NM	18	0	0
Oregon	29,373	30,334	-3.2%	29,124	30,085	249	249	0	0	0	0
Washington	66,285	66,576	-0.4%	65,957	66,256	328	320	0	0	0	0
Pacific Noncontiguous	1,399	1,078	29.8%	1,184	928	32	10	151	115	32	25
Alaska	1,319	1,037	27.2%	1,167	922	0	0	151	115	0	0
Hawaii	81	42	93.9%	17	6	32	10	0	0	32	25
U.S. Total	227,023	239,108	-5.1%	207,842	219,469	17,962	18,396	193	165	1,026	1,079

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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, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	976	864	13.0%	68	49	799	723	15	17	94	76
Connecticut	75	70	8.0%	0	0	75	69	NM	0	NM	0
Maine	384	355	8.2%	0	0	285	272	5	7	94	76
Massachusetts	245	205	19.8%	6	6	234	194	5	4	0	0
New Hampshire	164	146	12.3%	27	10	133	131	4	5	0	0
Rhode Island	35	28	23.8%	0	0	35	28	0	1	0	0
Vermont	73	60	20.4%	34	32	38	28	0	0	0	0
Middle Atlantic	1,164	919	26.7%	11	8	1,034	784	63	59	56	68
New Jersey	216	176	23.1%	11	8	172	141	32	26	NM	1
New York	514	345	49.0%	0	0	479	312	20	20	15	13
Pennsylvania	435	399	9.0%	0	0	383	332	11	13	40	54
East North Central	2,284	1,610	41.9%	274	179	1,865	1,293	15	19	131	119
Illinois	872	559	56.1%	3	3	868	556	NM	0	0	0
Indiana	409	316	29.4%	40	34	361	274	2	1	7	6
Michigan	575	439	30.9%	134	90	379	290	7	11	55	47
Ohio	181	133	35.8%	NM	2	154	110	1	1	23	20
Wisconsin	248	163	52.1%	95	50	103	62	4	5	46	46
West North Central	5,825	5,775	0.9%	1,779	1,787	3,966	3,914	15	10	66	64
Iowa	1,571	1,443	8.9%	1,036	947	531	491	3	3	2	2
Kansas	1,465	1,595	-8.2%	122	139	1,342	1,455	NM	1	0	0
Minnesota	1,107	1,006	10.0%	217	221	823	718	NM	5	64	61
Missouri	237	127	86.3%	NM	3	227	124	6	0	0	0
Nebraska	416	426	-2.3%	17	21	398	404	1	1	0	0
North Dakota	829	947	-12.5%	321	384	507	563	0	0	0	0
South Dakota	201	230	-13.0%	61	71	139	160	0	0	0	0
South Atlantic	3,016	2,437	23.7%	451	205	1,668	1,379	39	44	859	810
Delaware	12	9	29.9%	NM	1	10	7	NM	1	1	1
District of Columbia	4	2	88.7%	0	0	0	0	4	2	0	0
Florida	607	428	41.7%	241	96	209	192	4	3	153	138
Georgia	626	580	7.9%	32	20	255	253	NM	0	338	306
Maryland	124	112	10.7%	NM	1	115	100	3	1	5	11
North Carolina	889	799	11.2%	45	44	742	633	14	19	88	103
South Carolina	245	210	16.6%	29	35	85	42	0	0	131	133
Virginia	403	226	78.1%	102	8	145	83	13	17	143	117
West Virginia	106	70	51.7%	0	0	106	70	0	0	0	0
East South Central	595	585	1.7%	16	10	109	83	NM	1	469	492
Alabama	314	312	0.8%	NM	4	54	43	0	0	257	266
Kentucky	43	41	6.2%	13	7	NM	1	0	0	30	33
Mississippi	131	130	1.0%	0	0	28	15	0	0	103	115
Tennessee	106	102	4.0%	0	0	26	24	NM	1	80	77
West South Central	7,070	7,347	-3.8%	107	126	6,553	6,785	8	7	401	429
Arkansas	107	112	-4.3%	NM	0	23	4	0	1	83	107
Louisiana	227	229	-1.3%	NM	NM	7	6	0	0	219	223
Oklahoma	1,904	1,880	1.2%	95	111	1,782	1,742	0	0	27	27
Texas	4,833	5,126	-5.7%	NM	15	4,741	5,033	7	7	72	72
Mountain	3,681	3,364	9.4%	301	276	3,345	3,063	14	12	21	13
Arizona	565	540	4.6%	79	60	484	478	NM	2	0	0
Colorado	783	661	18.4%	19	19	761	641	NM	1	0	0
Idaho	261	253	3.1%	13	13	228	229	1	1	19	11
Montana	154	152	0.7%	15	15	136	135	0	0	2	2
Nevada	777	702	10.6%	4	3	765	692	8	7	0	0
New Mexico	531	485	9.3%	25	21	505	464	NM	0	0	0
Utah	323	272	18.9%	22	18	300	253	1	1	0	0
Wyoming	288	298	-3.1%	123	127	165	170	0	0	0	0
Pacific Contiguous	6,063	6,232	-2.7%	543	593	5,230	5,346	76	79	214	215
California	4,853	4,999	-2.9%	198	196	4,516	4,662	73	75	66	67
Oregon	601	585	2.7%	65	91	488	448	3	3	45	43
Washington	609	648	-6.0%	280	306	225	236	NM	1	104	104
Pacific Noncontiguous	114	123	-7.2%	14	16	81	86	19	21	NM	0
Alaska	13	14	-9.6%	NM	7	NM	4	3	4	NM	0
Hawaii	101	109	-6.9%	8	9	77	83	16	17	0	0
U.S. Total	30,790	29,258	5.2%	3,563	3,250	24,649	23,455	265	268	2,313	2,285

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

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	9,155	8,370	9.4%	607	628	7,589	6,803	137	152	822	787
Connecticut	645	623	3.5%	3	3	641	620	NM	1	NM	0
Maine	3,872	3,647	6.2%	0	0	3,003	2,793	52	69	817	785
Massachusetts	2,100	1,708	23.0%	60	56	1,989	1,607	46	42	4	2
New Hampshire	1,505	1,497	0.5%	182	208	1,292	1,256	31	33	0	0
Rhode Island	306	269	13.5%	0	0	300	264	5	5	0	0
Vermont	728	626	16.4%	363	360	364	263	2	2	0	0
Middle Atlantic	11,685	10,473	11.6%	80	66	10,487	9,277	554	526	563	605
New Jersey	1,800	1,462	23.1%	80	66	1,443	1,150	268	238	9	7
New York	5,337	4,768	11.9%	0	0	5,024	4,455	175	172	139	141
Pennsylvania	4,548	4,244	7.2%	0	0	4,021	3,671	112	115	415	457
East North Central	24,849	20,568	20.8%	3,030	1,920	20,430	17,305	167	177	1,223	1,166
Illinois	9,658	8,818	9.5%	41	28	9,610	8,787	7	3	0	0
Indiana	4,727	3,565	32.6%	362	311	4,289	3,179	16	16	60	60
Michigan	5,962	5,257	13.4%	1,490	1,246	3,869	3,427	93	105	510	479
Ohio	1,850	1,743	6.2%	32	18	1,590	1,496	10	11	218	218
Wisconsin	2,652	1,186	123.6%	1,104	318	1,073	416	40	42	435	410
West North Central	57,329	52,327	9.6%	17,686	17,123	38,966	34,546	139	130	539	529
Iowa	15,924	15,051	5.8%	10,262	9,912	5,608	5,080	30	25	24	34
Kansas	14,659	13,420	9.2%	1,389	1,148	13,259	12,264	12	11	0	-2
Minnesota	10,801	9,385	15.1%	2,151	2,094	8,098	6,760	42	37	510	493
Missouri	2,405	1,271	89.2%	43	33	2,315	1,193	44	43	2	3
Nebraska	3,784	3,570	6.0%	195	175	3,578	3,381	11	14	0	0
North Dakota	7,776	7,580	2.6%	3,051	3,132	4,722	4,446	0	0	2	2
South Dakota	1,980	2,051	-3.4%	595	629	1,386	1,422	0	0	0	0
South Atlantic	28,368	22,951	23.6%	4,132	2,517	15,751	12,204	353	395	8,133	7,835
Delaware	103	87	18.4%	6	5	82	68	5	5	9	10
District of Columbia	43	33	28.9%	0	0	0	0	43	33	0	0
Florida	5,748	4,261	34.9%	2,032	757	2,183	1,999	38	35	1,495	1,469
Georgia	5,555	5,332	4.2%	252	205	2,220	2,162	3	3	3,080	2,962
Maryland	1,166	1,020	14.4%	8	7	1,064	911	23	11	71	91
North Carolina	8,088	6,204	30.4%	375	305	6,624	4,786	113	155	976	958
South Carolina	2,476	1,877	31.9%	336	313	793	355	0	0	1,347	1,209
Virginia	3,873	2,949	31.3%	1,121	926	1,469	734	128	154	1,156	1,136
West Virginia	1,315	1,189	10.7%	0	0	1,315	1,189	0	0	0	0
East South Central	5,583	4,969	12.4%	153	110	983	445	5	2	4,443	4,412
Alabama	2,907	2,627	10.6%	33	11	470	249	0	0	2,404	2,366
Kentucky	410	392	4.5%	120	99	10	10	0	0	280	284
Mississippi	1,358	1,144	18.7%	0	0	276	49	0	0	1,082	1,095
Tennessee	909	806	12.8%	0	0	227	137	5	2	678	667
West South Central	86,082	72,129	19.3%	1,217	1,176	80,862	67,018	71	59	3,933	3,875
Arkansas	1,268	1,090	16.3%	NM	1	237	105	4	5	1,025	978
Louisiana	2,049	2,070	-1.0%	NM	2	65	65	0	0	1,981	2,002
Oklahoma	21,254	17,032	24.8%	1,047	1,022	19,960	15,816	0	0	246	194
Texas	61,512	51,938	18.4%	166	151	60,599	51,032	67	54	681	700
Mountain	36,186	31,706	14.1%	2,985	2,678	32,811	28,663	117	99	274	266
Arizona	4,965	4,529	9.6%	680	493	4,266	4,017	19	19	0	0
Colorado	8,336	7,470	11.6%	238	209	8,078	7,247	18	11	2	2
Idaho	2,825	2,573	9.8%	135	128	2,429	2,191	8	9	253	246
Montana	1,590	1,520	4.6%	156	156	1,418	1,348	0	0	16	16
Nevada	6,812	5,797	17.5%	34	33	6,716	5,710	60	51	2	2
New Mexico	5,688	4,006	42.0%	211	201	5,474	3,803	NM	2	0	0
Utah	2,853	2,814	1.4%	200	175	2,644	2,631	10	8	0	0
Wyoming	3,118	2,998	4.0%	1,331	1,282	1,786	1,716	0	0	0	0
Pacific Contiguous	60,364	56,140	7.5%	6,261	5,730	51,413	47,794	701	744	1,988	1,873
California	46,045	43,626	5.5%	1,795	1,763	42,985	40,640	670	714	595	509
Oregon	7,250	6,015	20.5%	1,114	908	5,693	4,695	24	23	419	390
Washington	7,069	6,499	8.8%	3,352	3,059	2,735	2,459	7	7	974	974
Pacific Noncontiguous	1,197	1,108	8.0%	139	143	875	791	182	174	1	1
Alaska	147	132	11.5%	75	65	39	36	33	30	1	1
Hawaii	1,049	976	7.5%	64	77	836	755	149	144	0	0
U.S. Total	320,798	280,742	14.3%	36,289	32,090	260,166	224,846	2,425	2,458	21,917	21,348

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

Table 1.12.A. Utility Scale Facility Net Generation from Hydroelectric (Pumped Storage) Power by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	-38	-35	6.7%	0	0	-38	-35	0	0	0	0
Connecticut	1	1	-42.2%	0	0	1	1	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-38	-36	5.5%	0	0	-38	-36	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	-116	-107	8.4%	-51	-59	-65	-49	0	0	0	0
New Jersey	-3	-16	-79.1%	-3	-16	0	0	0	0	0	0
New York	-47	-43	11.0%	-47	-43	0	0	0	0	0	0
Pennsylvania	-65	-49	34.7%	0	0	-65	-49	0	0	0	0
East North Central	-37	-32	14.2%	-37	-32	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	-37	-32	14.2%	-37	-32	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	-7	7	-195.8%	-7	7	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	-7	7	-195.8%	-7	7	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	-328	-360	-8.9%	-328	-360	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	-104	-124	-16.0%	-104	-124	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	-105	-92	13.8%	-105	-92	0	0	0	0	0	0
Virginia	-119	-144	-17.3%	-119	-144	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-58	-80	-27.3%	-58	-80	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	-58	-80	-27.3%	-58	-80	0	0	0	0	0	0
West South Central	-9	-12	-26.0%	-9	-12	0	0	0	0	0	0
Arkansas	1	1	-47.5%	1	1	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-9	-13	-28.4%	-9	-13	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-16	-21	-22.2%	-16	-21	0	0	0	0	0	0
Arizona	3	5	-44.2%	3	5	0	0	0	0	0	0
Colorado	-19	-26	-26.5%	-19	-26	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	5	34	-85.3%	5	34	0	0	0	0	0	0
California	5	34	-84.4%	5	34	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	-245.4%	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	-603	-606	-0.5%	-500	-522	-103	-84	0	0	0	0

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

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	-347	-333	4.3%	0	0	-347	-333	0	0	0	0
Connecticut	-1	-2	-41.2%	0	0	-1	-2	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	-345	-330	4.6%	0	0	-345	-330	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	-957	-897	6.7%	-456	-441	-502	-456	0	0	0	0
New Jersey	-115	-127	-9.7%	-115	-127	0	0	0	0	0	0
New York	-341	-314	8.5%	-341	-314	0	0	0	0	0	0
Pennsylvania	-502	-456	10.0%	0	0	-502	-456	0	0	0	0
East North Central	-535	-515	3.9%	-535	-515	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	-535	-515	3.9%	-535	-515	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	-2	115	-101.7%	-2	115	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	-2	115	-101.7%	-2	115	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	-2,035	-2,776	-26.7%	-2,035	-2,776	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	-434	-989	-56.2%	-434	-989	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	-513	-793	-35.4%	-513	-793	0	0	0	0	0	0
Virginia	-1,088	-993	9.6%	-1,088	-993	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	-483	-545	-11.3%	-483	-545	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	-483	-545	-11.3%	-483	-545	0	0	0	0	0	0
West South Central	-67	-73	-7.9%	-67	-73	0	0	0	0	0	0
Arkansas	31	20	55.8%	31	20	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	-98	-93	5.6%	-98	-93	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	-180	-254	-29.2%	-180	-254	0	0	0	0	0	0
Arizona	39	-4	NM	39	-4	0	0	0	0	0	0
Colorado	-219	-249	-12.3%	-219	-249	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	58	380	-84.7%	58	380	0	0	0	0	0	0
California	27	376	-92.7%	27	376	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	31	4	691.9%	31	4	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	-4,548	-4,898	-7.1%	-3,699	-4,109	-848	-789	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, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	142	150	-5.1%	0	0	125	131	5	7	12	12
Connecticut	42	40	4.2%	0	0	42	40	0	0	0	0
Maine	28	33	-16.2%	0	0	10	14	5	7	12	12
Massachusetts	68	72	-5.6%	0	0	68	73	0	0	0	0
New Hampshire	4	4	1.3%	0	0	4	4	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	177	189	-6.3%	0	0	140	147	36	37	1	5
New Jersey	42	49	-14.3%	0	0	29	33	12	11	1	5
New York	74	77	-3.6%	0	0	56	58	18	18	0	0
Pennsylvania	62	64	-3.3%	0	0	55	56	7	8	0	0
East North Central	52	69	-25.1%	1	1	8	7	9	12	34	50
Illinois	1	24	-94.2%	0	0	-1	-1	0	0	3	25
Indiana	30	23	26.3%	0	0	0	0	2	1	28	22
Michigan	18	20	-10.5%	0	0	9	9	7	10	2	1
Ohio	1	-1	-217.0%	0	0	0	-1	0	0	1	1
Wisconsin	2	2	11.0%	1	1	0	0	0	0	NM	1
West North Central	37	37	0.0%	18	21	12	9	3	3	4	4
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	-0.5%	0	0	0	0	0	0	0	0
Minnesota	33	32	2.6%	14	16	12	9	3	3	4	4
Missouri	0	0	-100.0%	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	4	4	-9.8%	4	4	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	341	313	8.7%	0	0	180	158	12	16	149	140
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	238	205	16.2%	0	0	120	104	0	0	119	101
Georgia	8	9	-12.8%	0	0	0	0	0	0	8	9
Maryland	28	31	-11.6%	0	0	28	31	0	0	0	0
North Carolina	39	50	-23.5%	0	0	18	23	0	0	20	27
South Carolina	3	3	-9.1%	0	0	1	1	0	0	2	3
Virginia	26	16	69.5%	0	0	15	0	12	16	0	0
West Virginia	-1	-1	-0.7%	0	0	-1	-1	0	0	0	0
East South Central	8	4	73.1%	7	2	0	0	0	0	NM	2
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	7	2	209.6%	7	2	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	2	NM	0	0	0	0	0	0	NM	2
West South Central	-122	96	-227.2%	0	0	-200	3	0	0	78	93
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	39	58	-32.5%	0	0	0	0	0	0	39	58
Oklahoma	6	4	44.1%	0	0	6	4	0	0	0	0
Texas	-168	34	-600.4%	0	0	-206	-1	0	0	38	34
Mountain	56	64	-11.6%	7	8	25	28	0	0	25	28
Arizona	0	0	122.7%	0	0	0	0	0	0	0	0
Colorado	5	5	7.6%	0	0	1	1	0	0	4	4
Idaho	6	6	-6.3%	0	0	0	0	0	0	6	6
Montana	24	27	-10.7%	0	0	24	27	0	0	0	0
Nevada	2	3	-14.7%	2	3	0	0	0	0	0	0
New Mexico	0	0	-144.4%	0	0	0	0	0	0	0	0
Utah	14	19	-28.7%	5	6	0	0	0	0	9	13
Wyoming	6	5	28.1%	0	0	0	0	0	0	6	5
Pacific Contiguous	78	78	-1.0%	0	1	22	25	0	0	56	52
California	69	69	-0.8%	0	1	13	16	0	0	56	52
Oregon	3	4	-21.7%	0	0	3	4	0	0	0	0
Washington	6	5	9.7%	0	0	6	6	0	0	0	0
Pacific Noncontiguous	33	32	2.5%	17	16	0	0	16	16	0	0
Alaska	0	0	-11.5%	0	0	0	0	0	0	0	0
Hawaii	33	32	2.3%	17	16	0	0	16	16	0	0
U.S. Total	801	1,033	-22.5%	50	49	312	508	80	90	359	386

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

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	1,299	1,374	-5.4%	0	0	1,150	1,207	50	65	100	103
Connecticut	352	403	-12.8%	0	0	352	403	0	0	0	0
Maine	278	305	-8.9%	0	0	129	138	50	65	100	103
Massachusetts	635	630	0.8%	0	0	635	630	0	0	0	0
New Hampshire	35	36	-2.4%	0	0	35	36	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	1,657	1,765	-6.1%	0	1	1,318	1,382	333	332	7	50
New Jersey	408	427	-4.4%	0	1	292	270	109	107	7	50
New York	663	680	-2.6%	0	0	506	525	157	155	0	0
Pennsylvania	586	658	-10.9%	0	0	519	588	67	70	0	0
East North Central	629	626	0.5%	15	11	84	55	105	115	425	445
Illinois	174	183	-5.0%	0	0	-12	-19	0	0	186	202
Indiana	225	232	-3.2%	0	0	0	0	16	14	209	218
Michigan	198	194	1.8%	0	0	96	82	89	101	12	12
Ohio	8	-4	-292.0%	-2	-3	0	-8	0	0	10	6
Wisconsin	25	20	22.2%	17	13	0	0	0	0	8	7
West North Central	344	344	-0.2%	171	166	106	112	25	25	43	41
Iowa	0	2	-100.0%	0	0	0	0	0	0	0	2
Kansas	4	3	8.3%	0	0	0	0	0	0	4	3
Minnesota	306	298	2.8%	137	126	106	112	25	25	39	35
Missouri	1	2	-68.0%	1	2	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	33	38	-13.7%	33	38	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,308	3,220	2.7%	0	0	1,872	1,584	114	139	1,321	1,497
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	2,229	2,323	-4.0%	0	0	1,158	1,123	0	0	1,071	1,200
Georgia	60	58	3.6%	0	0	0	0	0	0	60	58
Maryland	250	233	7.5%	0	0	250	233	0	0	0	0
North Carolina	399	417	-4.3%	0	0	233	206	0	0	166	211
South Carolina	29	33	-11.2%	0	0	6	5	0	0	24	28
Virginia	349	167	109.5%	0	0	235	27	114	139	0	0
West Virginia	-10	-10	-8.1%	0	0	-10	-10	0	0	0	0
East South Central	55	46	18.7%	47	26	0	0	0	0	8	20
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	47	26	82.1%	47	26	0	0	0	0	0	0
Mississippi	0	2	-100.0%	0	0	0	0	0	0	0	2
Tennessee	8	18	-59.0%	0	0	0	0	0	0	8	18
West South Central	509	933	-45.4%	0	0	-266	71	0	0	775	862
Arkansas	5	3	52.3%	0	0	0	0	0	0	5	3
Louisiana	497	496	0.1%	0	0	0	0	0	0	497	496
Oklahoma	41	34	20.8%	0	0	37	33	0	0	4	0
Texas	-34	399	-108.4%	0	0	-303	37	0	0	270	362
Mountain	574	537	6.9%	66	69	238	257	0	0	270	211
Arizona	-1	-1	60.5%	0	0	-1	-1	0	0	0	0
Colorado	45	42	7.3%	0	0	14	11	0	0	31	31
Idaho	50	48	3.9%	0	0	0	0	0	0	50	48
Montana	225	247	-8.8%	0	0	225	247	0	0	0	0
Nevada	22	23	-2.5%	22	23	0	0	0	0	0	0
New Mexico	0	0	-81.7%	0	0	0	0	0	0	0	0
Utah	168	152	10.6%	44	46	0	0	0	0	124	106
Wyoming	65	27	142.9%	0	0	0	0	0	0	65	27
Pacific Contiguous	723	728	-0.6%	0	8	205	214	0	0	519	506
California	648	658	-1.6%	0	9	129	144	0	0	519	506
Oregon	30	29	4.9%	0	0	31	29	0	0	0	0
Washington	45	41	11.1%	0	0	45	41	0	0	0	0
Pacific Noncontiguous	282	271	4.0%	139	132	0	2	143	138	0	0
Alaska	-2	-2	-15.9%	-2	-2	0	0	0	0	0	0
Hawaii	284	274	3.8%	141	134	0	2	143	138	0	0
U.S. Total	9,380	9,845	-4.7%	438	412	4,705	4,884	770	814	3,467	3,734

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

Table 1.14.A. Utility Scale Facility Net Generation from Wind by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	231	212	9.3%	16	16	213	193	NM	2	0	0
Connecticut	NM	1	NM	0	0	NM	1	0	0	0	0
Maine	152	140	8.1%	0	0	152	140	0	0	0	0
Massachusetts	16	19	-16.6%	NM	5	10	12	NM	2	0	0
New Hampshire	27	25	9.3%	0	0	27	25	0	0	0	0
Rhode Island	10	9	18.5%	0	0	10	8	0	1	0	0
Vermont	25	18	40.9%	12	11	14	7	0	0	0	0
Middle Atlantic	524	332	57.9%	0	0	524	332	NM	0	0	0
New Jersey	NM	1	NM	0	0	NM	1	0	0	0	0
New York	283	137	105.7%	0	0	282	137	NM	0	0	0
Pennsylvania	240	194	23.9%	0	0	240	194	0	0	0	0
East North Central	1,761	1,110	58.6%	191	110	1,564	997	NM	0	NM	3
Illinois	833	519	60.4%	NM	1	832	518	NM	0	0	0
Indiana	332	249	33.0%	0	0	332	249	0	0	0	0
Michigan	359	230	56.3%	123	80	236	150	0	0	0	0
Ohio	111	63	75.7%	NM	0	105	60	0	0	NM	2
Wisconsin	126	49	158.7%	66	29	60	19	0	0	0	0
West North Central	5,502	5,496	0.1%	1,736	1,737	3,763	3,756	NM	3	0	0
Iowa	1,554	1,426	8.9%	1,033	945	521	481	0	0	0	0
Kansas	1,459	1,590	-8.2%	122	139	1,336	1,450	NM	1	0	0
Minnesota	842	772	9.1%	188	184	652	586	NM	2	0	0
Missouri	212	114	85.8%	0	0	212	114	0	0	0	0
Nebraska	406	416	-2.5%	11	13	395	403	0	0	0	0
North Dakota	829	947	-12.5%	321	384	507	563	0	0	0	0
South Dakota	200	230	-13.0%	61	71	139	160	0	0	0	0
South Atlantic	173	146	18.6%	0	0	172	145	0	0	0	0
Delaware	0	0	-4.5%	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	38	35	8.7%	0	0	38	35	0	0	0	0
North Carolina	28	40	-29.8%	0	0	28	40	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	106	70	51.7%	0	0	106	70	0	0	0	0
East South Central	NM	3	NM	0	0	NM	3	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	NM	3	NM	0	0	NM	3	0	0	0	0
West South Central	6,285	6,661	-5.6%	100	122	6,180	6,534	5	4	0	1
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	1,869	1,848	1.1%	89	108	1,780	1,740	0	0	0	0
Texas	4,416	4,813	-8.2%	NM	14	4,400	4,794	5	4	0	1
Mountain	1,790	1,698	5.4%	169	173	1,620	1,525	NM	0	0	0
Arizona	29	39	-25.8%	0	0	29	39	0	0	0	0
Colorado	662	576	14.9%	19	18	643	558	0	0	0	0
Idaho	171	175	-2.6%	12	12	159	163	0	0	0	0
Montana	148	148	-0.3%	15	15	133	133	0	0	0	0
Nevada	20	25	-20.3%	0	0	20	25	0	0	0	0
New Mexico	403	385	4.9%	0	0	403	384	NM	0	0	0
Utah	68	52	31.9%	0	0	68	52	0	0	0	0
Wyoming	288	298	-3.1%	123	127	165	170	0	0	0	0
Pacific Contiguous	1,683	2,149	-21.7%	386	419	1,296	1,730	0	0	1	0
California	773	1,199	-35.6%	70	74	702	1,124	0	0	1	0
Oregon	440	466	-5.6%	60	85	380	380	0	0	0	0
Washington	471	485	-2.9%	257	259	214	225	0	0	0	0
Pacific Noncontiguous	40	48	-16.7%	NM	7	34	42	0	0	0	0
Alaska	9	10	-7.0%	NM	7	NM	4	0	0	0	0
Hawaii	31	38	-19.2%	0	0	31	38	0	0	0	0
U.S. Total	17,991	17,855	0.8%	2,604	2,583	15,369	15,257	11	11	NM	4

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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 September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	2,718	2,364	15.0%	182	167	2,511	2,176	23	21	2	1
Connecticut	10	9	11.8%	0	0	10	9	0	0	0	0
Maine	1,784	1,598	11.6%	0	0	1,784	1,598	0	0	0	0
Massachusetts	178	166	7.5%	45	44	113	106	18	15	2	1
New Hampshire	336	282	19.2%	0	0	336	282	0	0	0	0
Rhode Island	116	104	11.9%	0	0	111	98	5	5	0	0
Vermont	294	206	43.0%	137	122	157	83	0	0	0	0
Middle Atlantic	6,052	5,288	14.4%	0	0	6,047	5,285	NM	2	2	1
New Jersey	17	16	10.1%	0	0	17	16	0	0	0	0
New York	3,311	2,916	13.5%	0	0	3,305	2,913	NM	2	2	1
Pennsylvania	2,724	2,357	15.6%	0	0	2,724	2,357	0	0	0	0
East North Central	19,936	15,958	24.9%	2,215	1,284	17,657	14,624	6	7	58	43
Illinois	9,267	8,407	10.2%	10	9	9,253	8,394	NM	3	0	0
Indiana	4,060	2,978	36.4%	0	0	4,060	2,977	0	1	0	0
Michigan	3,931	3,346	17.5%	1,400	1,196	2,532	2,149	0	0	0	0
Ohio	1,213	1,111	9.2%	11	8	1,147	1,062	2	3	53	38
Wisconsin	1,464	117	NM	793	70	666	41	0	0	5	5
West North Central	54,363	49,912	8.9%	17,236	16,709	37,094	33,171	33	31	0	0
Iowa	15,749	14,884	5.8%	10,231	9,891	5,516	4,989	2	3	0	0
Kansas	14,608	13,372	9.2%	1,387	1,147	13,209	12,214	12	11	0	0
Minnesota	8,368	7,429	12.6%	1,835	1,796	6,514	5,616	19	18	0	0
Missouri	2,197	1,117	96.7%	0	0	2,197	1,117	0	0	0	0
Nebraska	3,688	3,483	5.9%	137	114	3,552	3,369	0	0	0	0
North Dakota	7,774	7,578	2.6%	3,051	3,132	4,722	4,446	0	0	0	0
South Dakota	1,979	2,049	-3.5%	595	629	1,384	1,420	0	0	0	0
South Atlantic	2,120	1,958	8.2%	0	0	2,116	1,955	4	4	0	0
Delaware	4	4	3.2%	0	0	0	0	4	4	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	407	410	-0.7%	0	0	407	410	0	0	0	0
North Carolina	394	356	10.6%	0	0	394	356	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	1,315	1,189	10.7%	0	0	1,315	1,189	0	0	0	0
East South Central	42	31	36.8%	0	0	42	31	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	42	31	36.8%	0	0	42	31	0	0	0	0
West South Central	78,553	65,923	19.2%	1,153	1,144	77,349	64,741	41	29	NM	8
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	20,938	16,799	24.6%	993	996	19,944	15,803	0	0	0	0
Texas	57,615	49,123	17.3%	160	148	57,405	48,938	41	29	NM	8
Mountain	19,912	17,170	16.0%	1,845	1,765	18,059	15,400	NM	3	2	2
Arizona	455	395	15.2%	0	0	455	395	0	0	0	0
Colorado	7,321	6,589	11.1%	233	208	7,083	6,377	NM	1	2	2
Idaho	1,935	1,766	9.6%	125	119	1,810	1,647	0	0	0	0
Montana	1,543	1,495	3.2%	156	156	1,387	1,339	0	0	0	0
Nevada	284	251	13.4%	0	0	284	251	0	0	0	0
New Mexico	4,605	3,032	51.9%	0	0	4,603	3,030	NM	2	0	0
Utah	650	645	0.8%	0	0	650	645	0	0	0	0
Wyoming	3,118	2,998	4.0%	1,331	1,282	1,786	1,716	0	0	0	0
Pacific Contiguous	22,226	21,256	4.6%	4,807	4,286	17,411	16,961	4	4	4	4
California	10,679	11,127	-4.0%	691	704	9,979	10,415	4	4	4	4
Oregon	5,852	5,032	16.3%	1,063	855	4,789	4,176	0	0	0	0
Washington	5,696	5,097	11.8%	3,053	2,727	2,643	2,370	0	0	0	0
Pacific Noncontiguous	532	480	10.8%	75	65	457	415	0	0	0	0
Alaska	113	101	12.2%	75	65	39	36	0	0	0	0
Hawaii	419	379	10.5%	0	0	419	379	0	0	0	0
U.S. Total	206,454	180,340	14.5%	27,513	25,421	178,743	154,759	119	101	78	59

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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 1.15.A. Utility Scale Facility Net Generation from Biomass by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	580	551	5.3%	44	28	429	434	13	14	94	76
Connecticut	63	65	-4.4%	0	0	63	65	0	0	0	0
Maine	231	214	8.0%	0	0	132	131	5	7	94	76
Massachusetts	97	100	-3.0%	0	0	94	97	3	2	0	0
New Hampshire	137	122	12.9%	27	10	106	107	4	5	0	0
Rhode Island	21	18	14.9%	0	0	21	18	0	0	0	0
Vermont	32	33	-1.6%	17	17	NM	15	0	0	0	0
Middle Atlantic	442	468	-5.5%	0	0	346	358	43	44	54	66
New Jersey	74	80	-8.3%	0	0	60	68	14	13	0	0
New York	185	189	-2.2%	0	0	152	157	19	19	15	13
Pennsylvania	183	198	-7.6%	0	0	134	133	10	12	39	53
East North Central	440	437	0.7%	57	48	244	254	13	18	125	116
Illinois	34	34	-0.7%	2	2	31	32	0	0	0	0
Indiana	37	37	2.0%	25	25	4	4	2	1	7	6
Michigan	198	199	-0.6%	0	0	136	141	7	11	55	47
Ohio	53	56	-5.0%	NM	0	35	38	1	1	17	18
Wisconsin	118	111	5.8%	29	21	39	40	4	5	46	45
West North Central	175	211	-17.0%	41	49	57	91	12	7	66	64
Iowa	16	16	-1.7%	NM	2	9	10	3	2	2	2
Kansas	NM	5	NM	0	0	NM	5	0	0	0	0
Minnesota	133	175	-23.6%	29	37	39	73	2	3	64	61
Missouri	13	7	92.7%	NM	3	NM	4	6	0	0	0
Nebraska	8	9	-8.8%	6	7	0	0	1	1	0	0
North Dakota	0	0	-100.0%	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	1,554	1,469	5.8%	173	79	500	550	23	30	858	809
Delaware	5	4	9.2%	0	0	NM	4	0	0	1	1
District of Columbia	4	2	88.7%	0	0	0	0	4	2	0	0
Florida	394	358	9.8%	65	38	172	180	3	3	153	138
Georgia	410	401	2.1%	0	0	71	94	0	0	338	306
Maryland	41	51	-19.5%	0	0	34	40	2	0	5	11
North Carolina	188	230	-18.3%	0	0	100	119	NM	7	88	103
South Carolina	194	200	-3.3%	29	35	34	32	0	0	131	133
Virginia	319	221	44.4%	78	6	85	81	13	17	143	117
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	505	529	-4.5%	8	5	28	32	0	0	469	492
Alabama	277	287	-3.6%	0	0	20	21	0	0	257	266
Kentucky	39	39	-0.5%	8	5	NM	1	0	0	30	33
Mississippi	104	117	-10.7%	0	0	NM	2	0	0	103	115
Tennessee	86	86	-0.8%	0	0	6	9	0	0	79	77
West South Central	458	489	-6.4%	0	0	54	58	3	3	401	428
Arkansas	90	108	-16.7%	0	0	7	1	0	1	83	107
Louisiana	226	229	-1.3%	0	0	7	6	0	0	219	223
Oklahoma	29	29	0.0%	0	0	NM	2	0	0	27	27
Texas	112	123	-8.6%	0	0	38	49	3	3	71	71
Mountain	77	69	11.5%	NM	1	52	53	2	2	21	13
Arizona	NM	19	NM	0	0	NM	19	0	0	0	0
Colorado	15	13	11.8%	0	0	15	13	0	0	0	0
Idaho	32	25	29.3%	NM	1	11	12	1	1	19	11
Montana	2	2	1.1%	0	0	0	0	0	0	2	2
Nevada	NM	4	NM	0	0	NM	4	0	0	0	0
New Mexico	1	1	10.3%	0	0	1	1	0	0	0	0
Utah	7	4	53.1%	0	0	NM	4	1	1	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	681	736	-7.6%	33	62	379	396	60	67	208	212
California	459	485	-5.3%	5	9	338	349	57	63	60	64
Oregon	83	88	-6.3%	NM	6	30	37	3	3	45	43
Washington	139	163	-15.1%	23	47	11	11	NM	1	104	104
Pacific Noncontiguous	28	31	-11.0%	4	6	NM	5	19	21	NM	0
Alaska	3	4	-16.6%	0	0	0	0	3	4	NM	0
Hawaii	25	28	-10.3%	4	6	NM	5	16	17	0	0
U.S. Total	4,940	4,990	-1.0%	362	278	2,094	2,231	187	205	2,296	2,276

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NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	5,157	5,216	-1.1%	368	413	3,864	3,893	108	126	817	785
Connecticut	541	582	-7.0%	0	0	541	582	0	0	0	0
Maine	2,078	2,045	1.6%	0	0	1,209	1,191	52	69	817	785
Massachusetts	892	883	1.0%	0	0	869	861	23	22	0	0
New Hampshire	1,168	1,215	-3.8%	182	208	955	974	31	33	0	0
Rhode Island	159	154	3.5%	0	0	159	154	0	0	0	0
Vermont	319	338	-5.6%	186	204	131	132	2	2	0	0
Middle Atlantic	4,184	4,213	-0.7%	0	0	3,244	3,223	396	399	544	591
New Jersey	728	682	6.6%	0	0	602	559	126	124	0	0
New York	1,710	1,702	0.5%	0	0	1,406	1,397	167	165	137	140
Pennsylvania	1,747	1,829	-4.5%	0	0	1,236	1,268	104	111	407	450
East North Central	4,260	4,179	1.9%	592	507	2,352	2,382	153	168	1,163	1,121
Illinois	342	368	-7.2%	29	17	313	351	0	0	0	0
Indiana	354	351	0.7%	241	240	37	37	16	15	60	60
Michigan	1,900	1,861	2.1%	0	0	1,297	1,278	93	105	510	479
Ohio	515	546	-5.7%	11	2	335	359	5	6	163	178
Wisconsin	1,150	1,052	9.2%	311	248	369	358	39	42	431	405
West North Central	1,768	1,851	-4.5%	430	404	695	822	104	97	539	529
Iowa	161	163	-1.4%	19	17	90	91	28	22	24	34
Kansas	44	44	-0.7%	0	0	44	47	0	0	0	-2
Minnesota	1,371	1,456	-5.9%	313	297	525	647	23	19	510	493
Missouri	120	111	7.8%	40	30	36	37	42	42	2	3
Nebraska	70	74	-6.1%	59	60	0	0	11	14	0	0
North Dakota	2	2	45.6%	0	0	0	0	0	0	2	2
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	15,288	14,704	4.0%	1,779	1,490	5,153	5,087	226	293	8,129	7,834
Delaware	47	47	0.4%	0	0	38	37	0	0	9	10
District of Columbia	43	33	28.9%	0	0	0	0	43	33	0	0
Florida	3,856	3,705	4.1%	488	269	1,843	1,935	33	33	1,491	1,469
Georgia	3,780	3,704	2.0%	0	0	701	743	0	0	3,080	2,962
Maryland	408	394	3.6%	0	0	322	298	15	5	71	91
North Carolina	2,012	2,078	-3.2%	0	0	1,029	1,052	8	68	976	958
South Carolina	1,990	1,835	8.4%	336	313	306	313	0	0	1,347	1,209
Virginia	3,152	2,908	8.4%	954	909	915	710	128	154	1,156	1,136
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	4,777	4,750	0.6%	78	85	262	254	0	0	4,438	4,412
Alabama	2,588	2,540	1.9%	0	0	185	173	0	0	2,404	2,366
Kentucky	366	378	-3.1%	78	85	8	10	0	0	280	284
Mississippi	1,091	1,103	-1.1%	0	0	9	8	0	0	1,082	1,095
Tennessee	733	730	0.4%	0	0	61	63	0	0	672	667
West South Central	4,624	4,510	2.5%	0	0	672	615	28	29	3,924	3,867
Arkansas	1,099	1,065	3.2%	0	0	70	82	4	5	1,025	978
Louisiana	2,046	2,068	-1.0%	0	0	65	65	0	0	1,981	2,002
Oklahoma	262	207	26.7%	0	0	16	13	0	0	246	194
Texas	1,216	1,171	3.9%	0	0	520	455	24	24	672	692
Mountain	785	778	0.8%	10	9	488	492	18	16	269	262
Arizona	139	157	-11.6%	0	0	139	157	0	0	0	0
Colorado	125	126	-1.0%	0	0	125	126	0	0	0	0
Idaho	379	363	4.2%	10	9	107	100	8	9	253	246
Montana	16	16	0.9%	0	0	0	0	0	0	16	16
Nevada	51	43	19.3%	0	0	51	43	0	0	0	0
New Mexico	15	13	16.3%	0	0	15	13	0	0	0	0
Utah	60	60	0.0%	0	0	50	53	10	8	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	6,478	6,439	0.6%	415	478	3,551	3,463	572	644	1,941	1,854
California	4,328	4,328	0.0%	71	100	3,169	3,123	540	614	548	491
Oregon	778	709	9.7%	46	46	290	251	24	23	419	390
Washington	1,372	1,402	-2.1%	298	332	92	89	7	7	974	974
Pacific Noncontiguous	259	255	1.4%	36	43	40	37	182	174	1	1
Alaska	34	31	9.3%	0	0	0	0	33	30	1	1
Hawaii	225	224	0.3%	36	43	40	37	149	144	0	0
U.S. Total	47,581	46,898	1.5%	3,708	3,429	20,321	20,269	1,787	1,945	21,765	21,255

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

Table 1.16.A. Utility Scale Facility Net Generation from Geothermal by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
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	342	285	19.9%	22	18	320	267	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	7	6	6.2%	0	0	7	6	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	296	243	21.4%	0	0	296	243	0	0	0	0
New Mexico	1	1	98.6%	0	0	1	1	0	0	0	0
Utah	39	35	10.6%	22	18	17	17	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	1,019	985	3.5%	66	66	953	918	0	0	0	0
California	1,004	970	3.5%	66	66	938	904	0	0	0	0
Oregon	16	15	6.7%	0	0	16	15	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	27	27	-1.1%	0	0	27	27	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	27	27	-1.1%	0	0	27	27	0	0	0	0
U.S. Total	1,388	1,297	7.0%	88	85	1,300	1,212	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 1.16.B. Utility Scale Facility Net Generation from Geothermal

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	0	0	--	0	0	0	0	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	0	0	--	0	0	0	0	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0	0	0	0	0
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	0	0	--	0	0	0	0	0	0	0	0
East North Central	0	0	--	0	0	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	0	0	--	0	0	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	0	0	--	0	0	0	0	0	0	0	0
West North Central	0	0	--	0	0	0	0	0	0	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	0	0	--	0	0	0	0	0	0	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	0	0	--	0	0	0	0	0	0	0	0
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	0	0	--	0	0	0	0	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	0	0	--	0	0	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	3,095	2,716	13.9%	200	175	2,896	2,541	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	59	59	-0.5%	0	0	59	59	0	0	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	2,677	2,309	15.9%	0	0	2,677	2,309	0	0	0	0
New Mexico	9	10	-6.5%	0	0	9	10	0	0	0	0
Utah	350	338	3.6%	200	175	151	163	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	9,142	8,878	3.0%	587	593	8,555	8,286	0	0	0	0
California	9,001	8,746	2.9%	587	591	8,414	8,155	0	0	0	0
Oregon	140	132	6.0%	0	2	140	131	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	240	243	-1.1%	0	0	240	243	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	240	243	-1.1%	0	0	240	243	0	0	0	0
U.S. Total	12,477	11,838	5.4%	787	767	11,691	11,070	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 1.17.A. Net Generation from Solar Photovoltaic by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors							Electric Power Sector				Commercial Sector						Industrial Sector						Residential Sector	
								Electric Utilities		Independent Power Producers															
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	419	313	34.0%	165	102	254	211	8	6	156	95	NM	112	NM	1	143	111	NM	9	NM	0	10	9	101	91
Connecticut	54	42	30.9%	12	4	42	38	0	0	12	3	NM	14	NM	0	17	14	NM	2	NM	0	2	2	23	22
Maine	NM	5	NM	NM	1	5	4	0	0	NM	1	2	1	0	0	2	1	0	0	0	0	0	0	3	3
Massachusetts	309	231	33.5%	133	86	176	145	NM	1	130	84	NM	87	NM	1	112	87	7	7	0	0	7	7	56	51
New Hampshire	10	8	18.4%	0	0	10	8	0	0	0	0	3	2	0	0	3	2	1	1	0	0	1	1	6	5
Rhode Island	NM	7	NM	NM	1	9	5	0	0	NM	1	4	3	0	0	4	3	0	0	0	0	0	0	4	3
Vermont	27	20	34.0%	15	10	12	11	5	4	10	6	4	4	0	0	4	4	NM	NM	0	0	NM	NM	8	7
Middle Atlantic	534	416	28.5%	198	119	336	297	11	8	164	95	179	147	21	15	158	132	NM	17	NM	2	18	16	161	150
New Jersey	305	245	24.2%	141	94	164	151	11	8	110	72	104	91	19	14	85	77	NM	10	NM	1	11	9	68	65
New York	182	131	39.1%	46	18	137	113	0	0	45	17	NM	43	NM	0	60	43	2	2	0	0	2	2	76	69
Pennsylvania	47	39	19.6%	11	7	36	33	0	0	9	5	NM	13	NM	1	13	12	NM	6	NM	1	5	5	18	16
East North Central	134	97	37.7%	84	63	50	34	26	21	57	42	NM	21	NM	0	30	21	3	2	0	0	2	2	17	12
Illinois	16	12	25.5%	6	6	10	6	NM	0	5	6	NM	4	NM	0	6	4	NM	0	0	0	NM	0	3	2
Indiana	50	34	48.2%	40	30	10	4	15	9	25	21	7	2	0	0	7	2	0	0	0	0	0	0	3	2
Michigan	26	17	54.0%	18	10	8	7	10	10	7	0	4	3	0	0	4	3	0	0	0	0	0	0	4	3
Ohio	31	26	19.7%	16	14	15	12	NM	1	14	12	NM	9	NM	0	11	9	1	1	0	0	1	1	3	3
Wisconsin	NM	9	NM	NM	3	7	5	0	0	NM	3	NM	2	NM	0	3	2	1	1	0	0	1	1	3	2
West North Central	195	104	86.5%	149	69	46	36	NM	1	146	67	23	18	0	0	23	18	2	1	0	0	2	1	22	16
Iowa	NM	10	NM	NM	1	13	9	NM	1	NM	0	8	6	0	0	8	6	0	0	0	0	0	0	4	3
Kansas	NM	2	NM	NM	1	3	2	NM	0	NM	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Minnesota	140	65	113.7%	132	60	8	6	NM	0	131	59	3	2	0	0	3	2	1	0	0	0	1	0	4	3
Missouri	33	25	33.4%	12	6	21	19	0	0	11	6	10	10	0	0	10	10	0	0	0	0	0	0	11	9
Nebraska	NM	2	NM	NM	1	1	1	0	0	NM	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
North Dakota	0	0	9.3%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	NM	0	NM	NM	0	0	0	0	0	NM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	1,475	976	51.1%	1,284	816	191	160	274	119	995	684	73	60	15	13	57	47	NM	22	NM	0	25	22	108	91
Delaware	16	13	24.1%	7	5	9	8	NM	1	6	4	NM	3	NM	0	3	2	1	0	0	0	1	0	6	5
District of Columbia	6	5	38.2%	0	0	6	5	0	0	0	0	4	3	0	0	4	3	0	0	0	0	0	0	3	2
Florida	245	88	179.0%	209	63	36	24	171	51	37	12	NM	8	NM	0	9	7	NM	1	NM	0	1	1	26	16
Georgia	239	199	19.9%	217	179	22	NM	32	20	184	159	NM	NM	NM	0	NM	NM	NM	NM	0	0	NM	NM	NM	NM
Maryland	113	94	20.0%	45	26	68	68	NM	1	43	25	NM	18	NM	1	20	18	3	3	0	0	3	3	44	47
North Carolina	691	544	26.9%	672	529	18	15	45	44	614	473	23	21	13	12	10	9	1	1	0	0	1	1	8	6
South Carolina	74	23	225.5%	51	10	23	13	0	0	51	10	6	3	0	0	6	3	2	1	0	0	2	1	15	9
Virginia	91	11	766.1%	83	5	8	6	23	2	60	3	3	2	0	0	3	2	0	0	0	0	0	0	5	4
West Virginia	1	1	19.7%	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	101	65	55.4%	87	53	13	12	8	5	78	47	NM	9	NM	1	9	8	NM	0	NM	0	NM	0	4	3
Alabama	NM	26	NM	38	25	NM	NM	NM	4	34	21	1	0	0	0	1	0	0	0	0	0	0	0	NM	NM
Kentucky	8	4	87.1%	5	2	3	2	4	2	NM	0	2	1	0	0	2	1	0	0	0	0	0	0	1	1
Mississippi	28	14	96.9%	27	14	1	1	0	0	27	14	1	1	0	0	1	1	NM	NM	0	0	NM	NM	0	0
Tennessee	26	20	26.1%	18	13	8	8	0	0	17	12	NM	6	NM	1	6	6	NM	NM	NM	0	NM	NM	2	2
West South Central	413	259	59.6%	327	197	86	62	7	4	320	192	19	13	0	0	19	12	0	0	0	0	0	0	67	49
Arkansas	19	4	343.0%	17	3	2	1	NM	0	16	3	1	0	0	0	1	0	0	0	0	0	0	0	1	NM
Louisiana	NM	17	NM	NM	NM	19	17	NM	NM	0	0	1	1	0	0	1	1	0	0	0	0	0	0	18	16
Oklahoma	7	4	87.4%	6	3	1	1	6	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Texas	368	234	57.4%	304	190	64	43	NM	1	303	189	17	12	0	0	17	11	0	0	0	0	0	0	47	32
Mountain	1,702	1,510	12.7%	1,339	1,207	363	303	109	84	1,218	1,112	115	106	12	10	104	95	7	5	0	0	7	5	253	203
Arizona	629	569	10.4%	430	400	198	169	79	60	349	338	NM	57	NM	2	59	55	2	1	0	0	2	1	137	113
Colorado	159	119	33.5%	106	72	53	47	NM	0	104	71	NM	20	NM	1	19	19	NM	NM	0	0	NM	NM	34	28
Idaho	56	49	13.6%	52	47	4	2	0	0	52	47	1	NM	0	0	1	NM	0	0	0	0	0	0	3	1
Montana	NM	4	NM	NM	2	2	2	0	0	NM	2	1	NM	0	0	1	NM	0	0	0	0	0	0	1	1
Nevada	459	443	3.7%	412	406	46	37	4	3	401	396	17	16	8	7	9	9	3	2	0	0	3	2	34	26
New Mexico	147	117	26.0%	125	99	23	18	25	21	100	78	8	6	0	0	8	6	0	0	0	0	0	0	15	12
Utah	247	209	18.0%	209	181	37	29	0	0	209	181	7	6	0	0	7	6	1	1	0	0	1	1	29	22
Wyoming	1	0	33.9%	0	0	1	NM	0	0	0	0	0	NM	0	0	0	NM	0	0	0	0	0	0	0	0
Pacific Contiguous	3,642	3,150	15.6%	2,389	2,124	1,253	1,026	57	47	2,311	2,064	329	245	16	12	313	233	187	170	6	2	182	168	759	625
California	3,540	3,101	14.1%	2,326	2,107	1,214	994	56	46	2,248	2,048	317	234	16	12	301	223	186	168	6	2	180	167	733	605
Oregon	85	36	136.8%	63	17	22	19	NM	1	62	16	9	8	0	0	9	8	2	2	0	0	2	2	11	9
Washington	17	13	31.3%	0	0	17	13	0	0	0	0	3	2	0	0	3	2	0	NM	0	0	0	NM	14	11
Pacific Noncontiguous	109	101	7.3%	19	16	89	85	3	3	16	13	35	32	0	0	35	32	0	0	0	0	0	0	54	53
Alaska	0	0	57.5%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hawaii	108	101	7.2%	19	16	89	85	3	3	16	13	35	31	0	0	35	31	0	0	0	0	0	0	53	53
U.S. Total	8,723	6,991	24.8%	6,041	4,766	2,681	2,225	504	298	5,461	4,412	957	761	66	52	891	709	255	227	10	4	246	223	1,545	1,293

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report;
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.17.B. Net Generation from Solar Photovoltaic by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector						Commercial Sector						Industrial Sector						Residential Sector	
				Electric Utilities		Independent Power Producers																	
	Estimated Generation From Utility and Small Scale Facilities			Generation at Utility Scale Facilities		Estimated Small Scale Generation		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Generation From Utility and Small Scale Facilities		Generation at Utility Scale Facilities		Estimated Small Scale Generation		Estimated Small Scale Generation	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	3,581	2,588	38.4%	1,279	789	2,302	1,798	57	49	1,214	734	1,271	938	6	6	1,265	932	94	80	2	1	92	79	945	787
Connecticut	494	364	35.9%	94	32	400	332	3	3	90	29	155	126	NM	1	155	126	20	17	NM	0	20	17	226	189
Maine	55	37	48.5%	10	4	45	33	0	0	10	4	15	12	0	0	15	12	0	0	0	0	0	0	30	21
Massachusetts	2,615	1,886	38.7%	1,030	659	1,586	1,227	16	12	1,007	641	997	725	5	5	992	720	66	57	2	1	64	56	530	452
New Hampshire	88	71	24.5%	0	0	88	71	0	0	0	0	26	21	0	0	26	21	6	4	0	0	6	4	57	46
Rhode Island	103	54	89.8%	30	12	73	43	0	0	30	12	38	21	0	0	38	21	0	0	0	0	0	0	35	22
Vermont	224	175	28.1%	115	82	109	93	39	34	76	48	39	33	0	0	39	33	2	1	0	0	2	1	68	58
Middle Atlantic	4,576	3,567	28.3%	1,448	972	3,128	2,595	80	66	1,196	769	1,565	1,295	155	124	1,411	1,171	180	153	17	13	163	140	1,554	1,285
New Jersey	2,617	2,103	24.4%	1,055	764	1,562	1,339	80	66	824	576	930	820	142	115	788	705	110	89	9	7	101	82	673	552
New York	1,543	1,116	38.2%	316	150	1,227	966	0	0	312	146	506	357	4	4	501	353	14	11	0	0	14	11	711	602
Pennsylvania	416	348	19.6%	77	58	339	290	0	0	61	47	130	118	8	5	122	113	56	53	8	7	48	46	169	130
East North Central	1,058	710	49.0%	654	432	404	278	223	129	421	298	258	169	8	2	250	166	23	18	2	2	21	17	134	96
Illinois	125	89	41.1%	50	43	76	46	2	2	44	41	53	29	NM	0	49	29	1	0	0	0	1	0	26	16
Indiana	390	262	48.7%	313	235	77	26	121	71	192	165	51	13	0	0	51	13	2	1	0	0	2	1	24	13
Michigan	197	105	88.3%	131	50	66	55	91	50	40	0	34	28	0	0	34	28	1	1	0	0	1	1	31	26
Ohio	246	192	27.9%	122	86	124	106	9	7	108	75	95	82	3	2	92	79	7	7	2	2	5	5	27	22
Wisconsin	100	62	60.3%	38	17	61	45	0	0	37	17	26	17	NM	0	24	17	11	9	0	0	11	9	26	19
West North Central	1,584	865	83.1%	1,198	564	386	301	20	9	1,177	553	191	157	1	1	190	156	15	8	0	0	15	8	181	138
Iowa	115	75	53.0%	13	4	102	71	11	4	NM	0	64	44	0	0	64	44	3	3	0	0	3	3	34	24
Kansas	28	17	68.1%	7	4	21	13	NM	1	5	3	8	4	0	0	8	4	0	0	0	0	0	0	13	9
Minnesota	1,130	547	106.5%	1,062	499	68	48	3	2	1,059	497	25	20	0	0	25	20	8	4	0	0	8	4	35	24
Missouri	273	207	32.0%	87	43	186	164	4	2	82	39	91	87	1	1	90	86	3	1	0	0	3	1	93	77
Nebraska	34	16	111.2%	26	12	8	4	0	0	26	12	3	1	0	0	3	1	0	0	0	0	0	0	5	3
North Dakota	0	0	4.8%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Dakota	3	2	5.2%	NM	2	1	1	0	0	NM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Atlantic	12,722	7,684	65.6%	10,915	6,275	1,807	1,409	2,308	1,013	8,481	5,162	648	536	123	99	525	438	244	193	NM	1	240	193	1,042	779
Delaware	140	110	27.6%	52	36	88	74	6	5	44	31	27	23	NM	1	26	22	7	4	0	0	7	4	56	47
District of Columbia	56	40	37.9%	0	0	56	40	0	0	0	0	34	23	0	0	34	23	0	0	0	0	0	0	22	18
Florida	2,169	763	184.2%	1,848	543	321	221	1,499	475	340	65	88	74	5	2	83	72	12	8	NM	1	8	7	230	141
Georgia	1,987	1,801	10.3%	1,775	1,627	212	174	252	205	1,519	1,420	30	26	3	2	27	23	171	138	0	0	171	138	14	12
Maryland	1,047	810	29.3%	351	216	696	594	8	7	335	203	197	169	7	5	189	164	30	27	0	0	30	27	477	403
North Carolina	5,845	3,916	49.3%	5,682	3,770	163	146	375	305	5,202	3,378	196	176	105	88	91	89	5	6	0	0	5	6	67	52
South Carolina	679	145	368.2%	486	42	192	103	0	0	486	42	48	24	0	0	48	24	17	10	0	0	17	10	127	69
Virginia	791	92	764.3%	721	41	70	51	167	17	554	24	25	19	0	0	25	19	1	0	0	0	1	0	44	31
West Virginia	8	6	21.4%	0	0	8	6	0	0	0	0	2	2	0	0	2	2	0	0	0	0	0	0	6	5
East South Central	879	291	202.1%	764	188	115	103	75	26	678	160	83	74	5	2	78	72	7	1	6	0	1	1	36	31
Alabama	327	94	249.4%	318	87	8	6	33	11	285	76	6	4	0	0	6	4	1	0	0	0	1	0	2	2
Kentucky	69	34	101.8%	44	15	25	20	42	14	NM	1	15	12	0	0	15	12	0	0	0	0	0	0	10	8
Mississippi	276	49	468.9%	267	41	9	8	0	0	267	41	5	5	0	0	5	5	0	0	0	0	0	0	4	3
Tennessee	207	115	80.5%	134	45	73	69	0	0	124	43	57	53	5	2	53	51	6	0	6	0	0	0	20	18
West South Central	3,659	2,232	63.9%	2,905	1,696	754	536	63	32	2,841	1,662	167	114	1	2	166	113	2	0	0	0	2	0	586	424
Arkansas	185	32	474.3%	168	25	17	8	NM	1	167	23	6	3	0	0	6	3	1	0	0	0	1	0	10	5
Louisiana	179	159	12.7%	NM	2	177	157	NM	2	0	0	11	6	0	0	11	6	0	0	0	0	0	0	166	151
Oklahoma	63	30	108.9%	54	26	9	4	54	26	0	0	3	1	0	0	3	1	0	0	0	0	0	0	5	3
Texas	3,232	2,011	60.7%	2,681	1,644	551	367	6	3	2,674	1,639	147	104	1	2	146	102	0	0	0	0	0	0	405	265
Mountain	14,628	12,931	13.1%	11,474	10,311	3,155	2,621	930	729	10,448	9,500	1,025	936	94	80	931	856	52	42	2	2	50	40	2,173	1,725
Arizona	5,456	4,852	12.5%	3,704	3,379	1,752	1,473	680	493	3,005	2,867	551	514	19	19	532	495	16	13	0	0	16	13	1,204	965
Colorado	1,355	1,173	15.5%	890	755	465	418	5	1	870	744	188	177	15	10	173	167	2	2	0	0	2	2	290	249
Idaho	478	397	20.5%	453	385	26	13	0	0	453	385	4	3	0	0	4	3	1	0	0	0	1	0	21	9
Montana	47	22	119.2%	31	9	16	12	0	0	31	9	5	3	0	0	5	3	0	0	0	0	0	0	11	9
Nevada	3,926	3,385	16.0%	3,544	3,060	382	325	34	33	3,449	2,974	142	130	60	51	82	79	26	21	2	2	24	19	276	227
New Mexico	1,258	1,106	13.8%	1,058	951	200	155	211	201	847	750	71	58	0	0	71	58	1	1	0	0	1	1	129	96
Utah	2,101	1,992	5.4%	1,793	1,771	308	222	0	0	1,793	1,771	62	49	0	0	62	49	6	6	0	0	6	6	239	166
Wyoming	5	4	34.1%	0	0	5	4	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	3	2
Pacific Contiguous	31,022	26,177	18.5%	20,427	17,610	10,596	8,567	452	373	19,806	17,127	2,751	1,972	126	96	2,625	1,876	1,533	1,406	43	14	1,491	1,391	6,480	5,300
California	30,240	25,784	17.3%	19,946	17,468	10,294	8,316	446	368	19,332	16,990	2,658	1,888	126	96	2,532	1,792	1,520	1,393	43	14	1,478	1,379	6,284	5,145
Oregon	654	294	122.5%	480	142	174	152	6	5	474	137	73	67	0	0	73	67	13	13	0	0	13	13	88	72
Washington	129	100	28.7%	0	0	128	99	0	0	0	0	20	16	0	0	20	16	0	0	0	0	0	0	108	83
Pacific Noncontiguous	966	888	8.9%	165	130	801	758	28	34	137	96	315	279	0	0	315	279	2	2	0	0	2	2	484	476
Alaska	3	2	50.6%	0	0	3	2	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	2	1
Hawaii	964	886	8.8%	165	130	799	756	28	34	137	96	314	279	0	0	314	279	2	2	0	0	2	2	483	475
U.S. Total	74,676	57,933	28.9%	51,229	38,965	23,447	18,967	4,237	2,460	46,399	36,060	8,275	6,469	519	411	7,756	6,058	2,151	1,903	75	33	2,076	1,870	13,615	11,040

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report;
Estimated small scale solar photovoltaic generation and small scale solar photovoltaic capacity are based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 1.18.A. Utility Scale Facility Net Generation from Solar Thermal by State, by Sector, September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
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	7	-34.1%	4	7	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	7	-34.1%	4	7	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	134	105	27.3%	0	0	134	105	0	0	0	0
Arizona	90	82	10.4%	0	0	90	82	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	44	24	85.2%	0	0	44	24	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	291	237	22.7%	0	0	291	237	0	0	0	0
California	291	237	22.7%	0	0	291	237	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	430	349	23.0%	4	7	425	343	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

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

by State, by Sector, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	Generation at Utility Scale Facilities			Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities		Generation at Utility Scale Facilities	
Census Division and State	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 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	45	13	234.5%	45	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	45	13	234.5%	45	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	921	731	26.1%	0	0	921	731	0	0	0	0
Arizona	666	597	11.5%	0	0	666	597	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	255	133	91.2%	0	0	255	133	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	2,091	1,957	6.8%	0	0	2,091	1,957	0	0	0	0
California	2,091	1,957	6.8%	0	0	2,091	1,957	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	3,057	2,701	13.2%	45	13	3,012	2,688	0	0	0	0

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Chapter 2

Consumption of Fossil Fuels

Table 2.1.A. Coal: Consumption for Electricity Generation, by Sector, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	1,042,335	760,326	276,565	369	5,075
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
Year 2016					
January	61,983	45,395	16,319	12	258
February	50,516	37,538	12,717	13	248
March	39,864	30,983	8,616	13	252
April	39,065	28,614	10,238	7	206
May	45,032	33,712	11,064	6	249
June	63,186	46,191	16,721	7	266
July	74,132	53,946	19,894	7	285
August	73,798	53,681	19,827	8	282
Sept	62,335	44,665	17,407	8	254
October	54,537	39,319	14,974	8	237
November	48,076	35,090	12,758	10	218
December	64,847	47,058	17,512	12	266
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	11,471	9	243
March	44,388	32,273	11,864	8	243
April	40,554	30,358	9,980	6	210
May	47,469	35,222	12,011	6	230
June	56,030	42,467	13,338	6	219
July	63,805	48,286	15,283	7	229
August	63,710	47,867	15,612	9	222
Sept	53,945	40,309	13,416	8	212
Year to Date					
2016	509,911	374,726	132,803	81	2,300
2017	504,557	370,689	131,700	70	2,098
2018	480,074	358,421	119,499	71	2,082
Rolling 12 Months Ending in September					
2017	672,017	492,155	176,944	100	2,819
2018	639,428	472,122	164,443	96	2,767

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 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, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	22,168	0	3,689	1,652	16,827
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
Year 2016					
January	1,624	288	133	63	1,140
February	1,503	277	130	62	1,034
March	1,433	232	117	61	1,023
April	1,215	204	103	39	870
May	1,264	215	90	31	929
June	1,353	241	97	39	976
July	1,472	278	118	39	1,036
August	1,434	270	112	42	1,010
Sept	1,257	216	97	41	903
October	1,260	224	105	42	889
November	1,256	233	99	50	875
December	1,515	301	136	63	1,015
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	1,266	215	139	45	868
March	1,242	205	96	43	897
April	1,107	183	80	39	805
May	1,097	171	79	35	811
June	1,089	192	91	36	770
July	1,068	201	81	40	746
August	1,032	195	77	41	720
Sept	1,079	193	79	42	765
Year to Date					
2016	12,556	2,222	996	417	8,921
2017	10,898	2,108	847	380	7,562
2018	10,384	1,790	864	378	7,352
Rolling 12 Months Ending in September					
2017	14,929	2,866	1,187	536	10,341
2018	14,153	2,483	1,174	513	9,982

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 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, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	1,064,503	760,326	280,254	2,021	21,902
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
Year 2016					
January	63,607	45,683	16,452	75	1,397
February	52,019	37,815	12,846	75	1,282
March	41,297	31,215	8,733	74	1,275
April	40,280	28,818	10,341	46	1,076
May	46,297	33,928	11,154	37	1,178
June	64,539	46,432	16,818	46	1,243
July	75,604	54,224	20,012	46	1,321
August	75,232	53,951	19,938	49	1,292
Sept	63,592	44,881	17,504	50	1,157
October	55,798	39,543	15,079	50	1,126
November	49,331	35,322	12,857	60	1,093
December	66,362	47,359	17,648	75	1,280
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	45,630	32,478	11,961	51	1,140
April	41,661	30,541	10,059	45	1,015
May	48,566	35,393	12,091	41	1,041
June	57,119	42,659	13,430	42	988
July	64,873	48,487	15,364	47	975
August	64,742	48,061	15,688	49	943
Sept	55,025	40,502	13,496	51	977
Year to Date					
2016	522,467	376,948	133,799	498	11,221
2017	515,455	372,797	132,547	451	9,661
2018	490,458	360,211	120,363	449	9,434
Rolling 12 Months Ending in September					
2017	686,946	495,020	178,130	635	13,160
2018	653,581	474,606	165,618	609	12,749

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 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, 2008-September 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	53,846	38,995	13,152	160	1,538
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
Year 2016					
January	2,472	1,727	685	12	48
February	2,230	1,474	698	12	46
March	1,495	1,096	355	4	40
April	1,421	1,055	320	8	38
May	1,662	1,212	386	8	56
June	1,693	1,275	364	7	48
July	2,287	1,711	514	11	52
August	2,231	1,644	537	10	39
Sept	1,620	1,128	441	7	44
October	1,629	1,156	423	7	43
November	1,672	1,249	372	11	40
December	1,995	1,410	530	12	43
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	9,044	4,359	4,541	66	77
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	1,689	1,166	439	28	56
August	1,745	1,257	425	25	38
Sept	1,775	1,346	373	20	37
Year to Date					
2016	17,110	12,322	4,300	78	410
2017	15,016	11,316	3,229	132	340
2018	22,166	14,044	7,484	221	417
Rolling 12 Months Ending in September					
2017	20,312	15,132	4,552	161	466
2018	28,845	18,296	9,716	280	552

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

Table 2.2.B. Petroleum Liquids: Consumption for Useful Thermal Output, by Sector, 2008-September 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	7,533	0	1,311	461	5,762
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
Year 2016					
January	231	12	24	43	153
February	316	17	39	27	233
March	178	3	28	7	140
April	174	3	16	17	138
May	198	3	18	14	163
June	181	6	13	14	149
July	185	2	12	28	142
August	153	3	15	18	117
Sept	143	3	14	9	117
October	174	3	18	9	144
November	167	4	14	35	113
December	178	9	33	26	110
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	716	49	107	108	452
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	173	3	11	30	129
August	195	4	39	25	128
Sept	170	6	12	17	135
Year to Date					
2016	1,759	52	179	176	1,352
2017	1,255	46	137	161	911
2018	2,100	82	235	280	1,504
Rolling 12 Months Ending in September					
2017	1,774	63	204	230	1,278
2018	2,858	108	317	357	2,076

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 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, 2008-September 2018 (Thousand Barrels)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	61,379	38,995	14,463	621	7,300
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
Year 2016					
January	2,702	1,739	709	55	200
February	2,546	1,491	737	38	279
March	1,673	1,099	383	12	180
April	1,594	1,058	337	24	175
May	1,860	1,216	403	22	219
June	1,875	1,281	377	21	197
July	2,472	1,713	527	38	194
August	2,384	1,647	552	28	156
Sept	1,763	1,131	455	16	161
October	1,803	1,159	441	16	187
November	1,838	1,254	386	46	153
December	2,173	1,419	563	37	154
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	9,760	4,408	4,648	175	530
February	1,516	1,095	229	40	151
March	1,574	1,062	310	35	168
April	1,677	1,132	361	35	150
May	1,944	1,300	438	37	169
June	2,048	1,348	435	36	229
July	1,862	1,169	450	58	186
August	1,940	1,260	463	50	166
Sept	1,945	1,352	384	36	173
Year to Date					
2016	18,868	12,374	4,479	254	1,762
2017	16,272	11,362	3,366	293	1,251
2018	24,266	14,126	7,718	501	1,921
Rolling 12 Months Ending in September					
2017	22,086	15,194	4,756	391	1,744
2018	31,702	18,404	10,033	637	2,628

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

Table 2.3.A. Petroleum Coke: Consumption for Electricity Generation, by Sector, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	5,417	2,296	2,704	1	416
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
Year 2016					
January	342	302	16	0	23
February	330	271	39	0	19
March	362	283	63	0	17
April	382	325	43	0	14
May	370	296	52	0	23
June	380	308	52	0	21
July	400	324	56	0	20
August	419	337	61	0	21
Sept	376	311	49	0	16
October	250	171	61	0	18
November	307	239	46	0	21
December	336	260	55	0	20
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	346	284	41	0	21
August	332	272	39	0	20
Sept	316	259	39	0	18
Year to Date					
2016	3,361	2,756	430	1	174
2017	2,677	2,095	418	2	162
2018	2,583	2,146	292	1	144
Rolling 12 Months Ending in September					
2017	3,569	2,766	579	2	221
2018	3,396	2,782	416	2	196

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 are preliminary. See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms.
Petroleum Coke includes petroleum coke-derived synthesis gas. Prior to 2011, petroleum coke-derived synthesis gas was included in Other Gases.
See the Technical Notes for fuel conversion factors.
Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report.

Table 2.3.B. Petroleum Coke: Consumption for Useful Thermal Output, by Sector, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	897	0	119	9	769
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
Year 2016					
January	86	1	11	2	73
February	95	0	10	2	83
March	85	0	11	2	72
April	73	1	7	0	66
May	96	0	7	0	89
June	100	0	9	0	91
July	101	1	9	1	91
August	101	1	10	0	91
Sept	75	1	10	0	64
October	92	1	11	0	80
November	99	0	10	0	89
December	95	1	10	2	83
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	71	1	9	0	61
August	69	1	9	0	59
Sept	72	1	7	1	63
Year to Date					
2016	812	4	82	7	718
2017	736	7	87	11	630
2018	616	10	68	6	532
Rolling 12 Months Ending in September					
2017	1,022	9	118	12	883
2018	858	13	96	10	738

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

Table 2.3.C. Petroleum Coke: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	6,314	2,296	2,823	10	1,184
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
Year 2016					
January	427	302	27	3	96
February	425	272	49	2	102
March	447	283	74	2	89
April	455	326	50	0	80
May	466	296	58	0	112
June	480	308	60	0	111
July	502	325	65	1	111
August	520	337	71	0	112
Sept	451	311	59	0	80
October	342	172	72	0	99
November	406	240	56	0	110
December	431	261	65	2	103
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	417	285	49	0	82
August	401	273	49	0	79
Sept	389	260	47	1	81
Year to Date					
2016	4,173	2,760	512	8	892
2017	3,412	2,102	505	13	792
2018	3,199	2,155	360	8	676
Rolling 12 Months Ending in September					
2017	4,591	2,775	698	15	1,104
2018	4,254	2,795	513	12	934

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

Table 2.4.A. Natural Gas: Consumption for Electricity Generation, by Sector, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	6,895,843	2,730,134	3,612,197	33,403	520,109
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
Year 2016					
January	786,040	390,246	347,970	3,499	44,325
February	702,082	352,877	304,311	3,344	41,550
March	758,344	377,953	333,147	3,493	43,751
April	734,600	362,063	327,542	3,278	41,717
May	819,345	407,178	365,297	3,620	43,251
June	985,722	497,616	439,024	4,109	44,973
July	1,157,589	569,028	535,036	5,188	48,337
August	1,168,337	564,916	549,161	5,384	48,875
Sept	932,041	451,574	431,159	4,223	45,086
October	760,610	368,087	345,831	3,675	43,017
November	679,004	333,973	298,069	2,944	44,018
December	686,396	343,384	294,829	3,547	44,637
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	803,870	419,727	332,226	4,156	47,761
February	717,459	356,653	314,825	3,973	42,008
March	771,201	387,856	336,457	4,116	42,772
April	726,677	369,327	309,622	3,909	43,820
May	872,078	456,403	367,132	4,107	44,437
June	972,168	510,433	411,722	4,434	45,579
July	1,252,609	638,618	560,343	5,137	48,511
August	1,220,963	608,370	557,994	5,166	49,433
Sept	1,064,303	536,010	477,474	4,666	46,154
Year to Date					
2016	8,044,100	3,973,451	3,632,646	36,138	401,865
2017	7,223,346	3,624,906	3,155,972	37,921	404,547
2018	8,401,327	4,283,396	3,667,795	39,663	410,473
Rolling 12 Months Ending in September					
2017	9,349,356	4,670,349	4,094,701	48,086	536,220
2018	10,685,742	5,413,373	4,673,810	51,802	546,756

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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 2.4.B. Natural Gas: Consumption for Useful Thermal Output, by Sector, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	793,537	0	326,048	32,813	434,676
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	1,558,826	38,740	309,982	493,553	716,551
Year 2016					
January	102,014	3,434	32,304	7,160	59,117
February	92,405	3,264	29,348	6,354	53,439
March	95,161	3,002	30,664	6,298	55,197
April	88,634	2,286	27,002	6,104	53,241
May	92,471	2,888	29,069	6,096	54,418
June	96,618	3,649	30,019	6,907	56,043
July	102,867	3,805	32,099	8,142	58,821
August	105,025	3,723	33,436	8,377	59,489
Sept	95,330	2,973	29,581	6,850	55,926
October	92,360	2,740	27,138	6,125	56,357
November	90,321	2,812	27,191	5,773	54,544
December	98,660	3,520	29,054	6,758	59,328
Year 2017					
January	127,084	3,704	27,262	35,582	60,537
February	112,941	3,216	23,651	31,076	54,998
March	124,225	3,489	27,021	35,064	58,651
April	116,153	2,985	23,807	33,697	55,663
May	122,901	3,093	24,244	37,919	57,644
June	135,248	2,722	25,799	48,279	58,448
July	153,446	3,441	27,792	59,383	62,830
August	148,112	3,216	27,487	56,164	61,245
Sept	131,476	2,980	25,078	42,918	60,501
October	127,664	3,046	25,407	38,592	60,619
November	120,505	3,119	24,763	33,275	59,348
December	139,071	3,729	27,671	41,603	66,067
Year 2018					
January	143,718	3,580	29,041	44,014	67,082
February	129,472	3,168	26,534	39,844	59,926
March	135,672	3,311	28,121	40,356	63,885
April	128,365	2,981	25,434	39,362	60,588
May	129,536	3,149	26,428	40,286	59,673
June	132,500	3,535	26,778	41,046	61,139
July	141,471	4,154	30,260	43,383	63,675
August	141,825	4,146	29,291	44,204	64,184
Sept	133,764	3,498	27,336	40,848	62,083
Year to Date					
2016	870,524	29,024	273,521	62,287	505,693
2017	1,171,586	28,846	232,140	380,083	530,516
2018	1,216,323	31,521	249,222	373,343	562,236
Rolling 12 Months Ending in September					
2017	1,452,927	37,919	315,524	398,739	700,746
2018	1,603,563	41,414	327,064	486,814	748,271

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 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 2.4.C. Natural Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	7,689,380	2,730,134	3,938,245	66,216	954,785
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	11,066,586	4,793,623	4,471,969	543,613	1,257,381
Year 2016					
January	888,054	393,680	380,273	10,658	103,442
February	794,487	356,141	333,659	9,697	94,990
March	853,505	380,955	363,811	9,791	98,949
April	823,234	364,349	354,544	9,383	94,958
May	911,816	410,066	394,365	9,716	97,669
June	1,082,340	501,265	469,043	11,016	101,016
July	1,260,455	572,833	567,135	13,330	107,158
August	1,273,362	568,640	582,596	13,761	108,365
Sept	1,027,371	454,547	460,740	11,073	101,012
October	852,970	370,827	372,969	9,800	99,374
November	769,325	336,785	325,260	8,716	98,563
December	785,056	346,904	323,883	10,305	103,965
Year 2017					
January	806,541	341,068	318,555	39,794	107,124
February	700,316	295,109	273,710	34,839	96,659
March	814,462	354,430	317,746	39,109	103,177
April	763,105	334,841	292,208	37,235	98,821
May	843,360	377,474	322,585	41,739	101,561
June	1,008,176	438,743	412,291	52,679	104,462
July	1,258,163	555,742	526,084	64,326	112,011
August	1,191,526	520,111	501,908	60,967	108,540
Sept	1,009,284	436,234	423,025	47,317	102,707
October	919,337	388,373	384,170	42,697	104,097
November	806,851	343,314	322,841	37,051	103,645
December	945,466	408,184	376,845	45,861	114,576
Year 2018					
January	947,588	423,307	361,266	48,171	114,844
February	846,931	359,821	341,359	43,817	101,934
March	906,873	391,167	364,578	44,472	106,656
April	855,042	372,307	335,056	43,271	104,408
May	1,001,614	459,552	393,559	44,392	104,110
June	1,104,667	513,969	438,500	45,480	106,718
July	1,394,080	642,771	590,603	48,519	112,186
August	1,362,788	612,516	587,285	49,370	113,617
Sept	1,198,067	539,507	504,810	45,514	108,236
Year to Date					
2016	8,914,624	4,002,475	3,906,167	98,425	907,557
2017	8,394,931	3,653,752	3,388,112	418,004	935,063
2018	9,617,650	4,314,917	3,917,017	413,007	972,710
Rolling 12 Months Ending in September					
2017	10,802,283	4,708,268	4,410,224	446,825	1,236,965
2018	12,289,305	5,454,788	5,000,874	538,616	1,295,027

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, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	195,777	20,465	169,547	5,235	530
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
Year 2016					
January	22,612	2,036	18,360	1,865	351
February	21,859	2,088	17,744	1,705	323
March	23,337	2,187	19,021	1,786	343
April	22,556	2,080	18,805	1,340	331
May	23,744	2,120	19,554	1,717	354
June	22,668	1,896	18,683	1,768	320
July	23,052	1,950	19,047	1,734	321
August	23,038	2,011	18,978	1,726	324
Sept	21,757	2,010	17,792	1,678	278
October	20,377	1,922	16,583	1,610	263
November	24,047	1,941	20,036	1,762	307
December	24,510	2,041	20,392	1,753	324
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	23,947	2,006	20,218	1,492	232
August	24,698	2,059	20,932	1,494	214
Sept	21,204	1,702	17,849	1,454	198
Year to Date					
2016	204,623	18,376	167,983	15,319	2,945
2017	209,192	18,784	172,398	15,117	2,892
2018	214,847	19,890	178,242	14,301	2,413
Rolling 12 Months Ending in September					
2017	278,125	24,688	229,408	20,243	3,786
2018	283,767	26,181	234,895	19,305	3,387

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, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	1,025	0	454	433	138
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
Year 2016					
January	352	0	202	84	66
February	340	0	189	86	65
March	358	0	196	86	75
April	355	0	201	88	66
May	356	0	194	90	72
June	344	0	193	85	66
July	335	0	181	87	66
August	332	0	181	82	68
Sept	327	0	187	81	59
October	301	0	157	87	56
November	378	0	227	86	66
December	387	0	230	91	65
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
Year to Date					
2016	3,098	2	1,725	770	601
2017	3,000	2	1,473	840	685
2018	2,930	7	1,591	671	661
Rolling 12 Months Ending in September					
2017	4,065	2	2,087	1,104	872
2018	3,870	7	2,067	930	867

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.C. Landfill Gas: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-September 2018 (Million Cubic Feet)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	196,802	20,465	170,001	5,668	668
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
Year 2016					
January	22,964	2,036	18,562	1,949	417
February	22,200	2,088	17,933	1,791	388
March	23,694	2,187	19,217	1,873	417
April	22,911	2,081	19,005	1,428	397
May	24,100	2,120	19,748	1,807	425
June	23,012	1,896	18,876	1,853	386
July	23,387	1,950	19,229	1,822	386
August	23,370	2,011	19,159	1,808	392
Sept	22,084	2,010	17,978	1,759	337
October	20,678	1,922	16,740	1,697	319
November	24,425	1,941	20,263	1,848	373
December	24,897	2,042	20,622	1,845	388
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	24,211	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
Year to Date					
2016	207,721	18,379	169,707	16,089	3,545
2017	212,191	18,786	173,870	15,957	3,578
2018	217,777	19,897	179,833	14,972	3,074
Rolling 12 Months Ending in September					
2017	282,190	24,690	231,495	21,347	4,658
2018	287,638	26,188	236,961	20,235	4,254

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, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	19,805	509	17,487	1,809	0
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
Year 2016					
January	1,398	34	1,161	202	1
February	1,283	27	1,081	174	1
March	1,344	41	1,091	211	1
April	1,413	40	1,153	219	1
May	1,463	44	1,205	214	1
June	1,468	40	1,202	225	1
July	1,486	37	1,212	236	1
August	1,509	42	1,233	233	1
Sept	1,397	43	1,142	210	1
October	1,378	37	1,127	213	1
November	1,379	39	1,127	212	1
December	1,476	38	1,220	218	0
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
Year to Date					
2016	12,761	349	10,479	1,924	9
2017	12,341	327	10,110	1,899	6
2018	12,430	348	10,294	1,780	8
Rolling 12 Months Ending in September					
2017	16,574	442	13,584	2,541	8
2018	16,437	443	13,565	2,419	11

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, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	2,328	0	806	1,514	8
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
Year 2016					
January	191	0	80	92	18
February	189	0	87	88	14
March	219	0	96	104	19
April	181	0	65	98	18
May	182	0	70	96	17
June	172	0	73	81	18
July	186	0	74	96	16
August	191	0	71	96	23
Sept	176	0	64	95	18
October	179	0	65	95	19
November	180	0	68	94	17
December	185	0	71	98	16
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
Year to Date					
2016	1,688	0	681	846	160
2017	1,636	0	628	849	158
2018	1,414	0	555	713	146
Rolling 12 Months Ending in September					
2017	2,180	0	833	1,137	211
2018	1,902	0	741	965	196

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

Table 2.6.C. Biogenic Municipal Solid Waste: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-September 2018 (Thousand Tons)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	22,134	509	18,294	3,323	8
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
Year 2016					
January	1,589	34	1,241	295	19
February	1,472	27	1,167	262	15
March	1,563	41	1,188	315	19
April	1,594	40	1,218	317	18
May	1,646	44	1,274	310	18
June	1,640	40	1,275	305	19
July	1,673	37	1,286	332	17
August	1,700	42	1,304	330	25
Sept	1,573	43	1,206	305	19
October	1,557	37	1,192	308	20
November	1,559	39	1,195	306	18
December	1,661	38	1,291	316	16
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
Year to Date					
2016	14,449	349	11,160	2,771	169
2017	13,977	327	10,738	2,748	164
2018	13,844	348	10,849	2,493	154
Rolling 12 Months Ending in September					
2017	18,754	442	14,416	3,677	218
2018	18,340	443	14,306	3,384	207

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

Table 2.7.A. Wood / Wood Waste Biomass: Consumption for Electricity Generation, by Sector, 2008-September 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	338,786	29,150	130,122	287	179,227
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
Year 2016					
January	31,835	4,082	13,250	40	14,463
February	30,721	3,797	13,249	41	13,634
March	30,380	3,388	13,073	23	13,897
April	25,323	2,547	10,177	31	12,569
May	26,827	2,497	10,522	14	13,794
June	29,961	3,835	11,762	59	14,305
July	32,167	4,067	13,230	51	14,818
August	33,526	4,113	14,559	72	14,782
Sept	30,502	3,489	13,145	51	13,817
October	27,598	2,574	11,139	29	13,857
November	29,176	2,597	12,211	20	14,349
December	31,967	4,051	13,200	42	14,674
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	32,264	4,532	13,000	63	14,668
February	28,875	3,645	11,706	42	13,482
March	30,272	4,010	11,813	36	14,414
April	25,869	2,208	10,102	16	13,542
May	30,796	3,455	12,419	32	14,890
June	31,124	4,157	12,647	53	14,267
July	31,808	4,337	12,558	59	14,854
August	30,312	4,299	11,616	69	14,328
Sept	27,931	3,607	10,844	52	13,428
Year to Date					
2016	271,242	31,814	112,966	382	126,079
2017	271,343	31,236	114,116	343	125,648
2018	269,250	34,250	106,704	422	127,874
Rolling 12 Months Ending in September					
2017	360,084	40,458	150,665	434	168,527
2018	361,878	45,821	144,465	539	171,054

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

Table 2.7.B. Wood / Wood Waste Biomass: Consumption for Useful Thermal Output, by Sector, 2008-September 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	923,889	0	18,075	1,123	904,690
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
Year 2016					
January	84,483	1,087	2,270	460	80,665
February	79,157	1,150	2,299	415	75,293
March	79,225	1,084	1,926	288	75,928
April	74,954	732	1,780	353	72,089
May	78,419	949	1,753	280	75,437
June	79,180	707	1,832	415	76,225
July	80,796	943	1,826	384	77,644
August	81,164	931	1,794	442	77,998
Sept	75,314	513	1,918	395	72,488
October	76,347	508	1,450	347	74,041
November	80,391	1,132	1,898	340	77,021
December	100,410	1,214	2,159	401	96,636
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	88,471	859	2,073	454	85,086
February	83,125	832	2,122	474	79,698
March	85,627	994	2,053	493	82,086
April	84,957	913	1,784	339	81,920
May	84,885	946	1,779	319	81,841
June	85,398	968	1,815	402	82,214
July	88,781	914	2,034	382	85,450
August	90,409	847	2,034	417	87,111
Sept	82,161	918	1,655	336	79,252
Year to Date					
2016	712,693	8,096	17,398	3,431	683,767
2017	770,876	8,782	16,899	3,124	742,071
2018	773,814	8,192	17,348	3,616	744,658
Rolling 12 Months Ending in September					
2017	1,028,025	11,636	22,406	4,213	989,769
2018	1,039,364	11,066	23,435	5,014	999,849

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Table 2.7.C. Wood / Wood Waste Biomass: Consumption for Electricity Generation and Useful Thermal Output, by Sector, 2008-September 2018 (Billion Btus)

		Electric Power Sector			
Period	Total (all sectors)	Electric Utilities	Independent Power Producers	Commercial Sector	Industrial Sector
Annual Totals					
2008	1,262,675	29,150	148,198	1,410	1,083,917
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
Year 2016					
January	116,318	5,169	15,520	500	95,128
February	109,878	4,947	15,548	456	88,928
March	109,606	4,471	14,999	311	89,825
April	100,276	3,279	11,956	384	84,657
May	105,246	3,446	12,275	294	89,231
June	109,140	4,542	13,594	474	90,530
July	112,964	5,010	15,056	435	92,462
August	114,690	5,044	16,353	514	92,780
Sept	105,816	4,002	15,063	446	86,306
October	103,946	3,083	12,589	376	87,898
November	109,567	3,729	14,108	360	91,370
December	132,377	5,265	15,360	443	111,310
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	120,735	5,391	15,073	517	99,754
February	112,000	4,477	13,828	516	93,179
March	115,899	5,004	13,866	528	96,501
April	110,825	3,122	11,886	356	95,462
May	115,681	4,401	14,198	351	96,731
June	116,522	5,124	14,462	455	96,481
July	120,589	5,251	14,592	441	100,304
August	120,721	5,146	13,650	486	101,439
Sept	110,092	4,525	12,499	388	92,679
Year to Date					
2016	983,934	39,910	130,364	3,813	809,847
2017	1,042,219	40,018	131,015	3,467	867,719
2018	1,043,064	42,442	124,053	4,038	872,531
Rolling 12 Months Ending in September					
2017	1,388,109	52,095	173,071	4,647	1,158,297
2018	1,401,242	56,886	167,900	5,553	1,170,903

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Table 2.8.A. Consumption of Coal for Electricity Generation by State, by Sector, September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	12	6	120.0%	6	1	6	4	0	0	NM	0
Connecticut	6	3	80.0%	0	0	6	3	0	0	0	0
Maine	1	1	-17.0%	0	0	1	1	0	0	NM	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	6	1	340.0%	6	1	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,567	1,676	-6.5%	0	0	1,563	1,668	0	0	4	8
New Jersey	40	42	-6.5%	0	0	40	42	0	0	0	0
New York	21	22	-3.6%	0	0	21	18	0	0	0	4
Pennsylvania	1,506	1,611	-6.5%	0	0	1,502	1,607	0	0	4	4
East North Central	12,106	11,181	8.3%	7,031	6,564	5,010	4,563	2	2	63	52
Illinois	3,206	2,913	10.0%	200	181	2,958	2,687	1	1	48	45
Indiana	3,166	2,574	23.0%	2,948	2,464	217	109	1	1	0	0
Michigan	2,120	1,758	21.0%	2,104	1,748	15	9	0	0	1	1
Ohio	2,002	2,304	-13.0%	181	547	1,821	1,758	0	0	0	0
Wisconsin	1,611	1,631	-1.2%	1,598	1,625	0	0	0	0	13	6
West North Central	9,479	9,564	-0.9%	9,385	9,467	0	0	2	2	92	95
Iowa	1,461	1,195	22.0%	1,416	1,157	0	0	2	2	43	36
Kansas	1,031	1,169	-12.0%	1,031	1,169	0	0	0	0	0	0
Minnesota	1,073	1,065	0.8%	1,060	1,046	0	0	0	0	14	19
Missouri	2,790	3,003	-7.1%	2,790	3,003	0	0	0	0	0	0
Nebraska	1,222	1,114	9.6%	1,190	1,077	0	0	0	0	32	37
North Dakota	1,847	1,906	-3.1%	1,843	1,903	0	0	0	0	4	3
South Dakota	55	110	-50.0%	55	110	0	0	0	0	0	0
South Atlantic	7,376	7,150	3.2%	6,685	6,263	672	872	1	1	19	15
Delaware	17	18	-4.3%	0	0	17	18	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	1,271	1,302	-2.4%	1,270	1,297	0	2	0	0	1	2
Georgia	1,733	1,520	14.0%	1,730	1,517	0	0	0	0	3	2
Maryland	284	402	-29.0%	0	0	283	401	0	0	1	1
North Carolina	1,144	988	16.0%	1,139	981	2	4	1	1	2	2
South Carolina	687	571	20.0%	686	570	0	0	0	0	0	0
Virginia	300	191	57.0%	272	167	16	18	0	0	11	7
West Virginia	1,941	2,159	-10.0%	1,588	1,730	353	429	0	0	0	0
East South Central	4,960	4,496	10.0%	4,867	4,438	79	46	0	0	13	12
Alabama	1,360	1,112	22.0%	1,359	1,111	0	0	0	0	1	1
Kentucky	2,474	1,947	27.0%	2,474	1,947	0	0	0	0	0	0
Mississippi	251	202	24.0%	171	157	79	46	0	0	0	0
Tennessee	875	1,235	-29.0%	862	1,224	0	0	0	0	12	11
West South Central	10,105	11,884	-15.0%	5,558	5,475	4,540	6,396	0	0	7	13
Arkansas	1,569	1,387	13.0%	1,313	1,160	255	226	0	0	1	0
Louisiana	794	748	6.1%	590	385	204	364	0	0	0	0
Oklahoma	700	1,254	-44.0%	584	1,130	110	111	0	0	6	12
Texas	7,043	8,495	-17.0%	3,072	2,801	3,971	5,695	0	0	0	0
Mountain	7,482	7,891	-5.2%	6,528	6,960	945	913	0	0	9	18
Arizona	1,512	1,560	-3.1%	1,512	1,560	0	0	0	0	0	0
Colorado	1,278	1,340	-4.6%	1,278	1,340	0	0	0	0	0	0
Idaho	NM	0	NM	0	0	0	0	0	0	NM	0
Montana	838	803	4.3%	18	16	820	787	0	0	0	0
Nevada	144	123	17.0%	97	79	47	44	0	0	0	0
New Mexico	659	745	-12.0%	659	745	0	0	0	0	0	0
Utah	1,017	1,117	-9.0%	984	1,070	33	38	0	0	0	10
Wyoming	2,033	2,202	-7.7%	1,980	2,149	45	44	0	0	8	8
Pacific Contiguous	729	761	-4.2%	202	201	522	555	0	0	6	5
California	5	5	-2.5%	0	0	0	0	0	0	5	5
Oregon	202	201	0.5%	202	201	0	0	0	0	0	0
Washington	523	555	-5.9%	0	0	522	555	0	0	1	0
Pacific Noncontiguous	128	105	22.0%	46	20	79	82	3	3	0	0
Alaska	64	37	72.0%	46	20	14	14	3	3	0	0
Hawaii	64	68	-5.8%	0	0	64	68	0	0	0	0
U.S. Total	53,945	54,713	-1.4%	40,309	39,390	13,416	15,098	8	8	212	218

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.8.B. Consumption of Coal for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	422	721	-41.0%	243	78	177	641	0	0	3	3
Connecticut	168	73	130.0%	0	0	168	73	0	0	0	0
Maine	12	11	3.9%	0	0	9	9	0	0	3	3
Massachusetts	0	559	-100.0%	0	0	0	559	0	0	0	0
New Hampshire	243	78	213.0%	243	78	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	18,547	18,919	-2.0%	0	0	18,498	18,814	0	0	50	105
New Jersey	392	385	1.9%	0	0	392	385	0	0	0	0
New York	251	243	3.5%	0	0	248	184	0	0	4	59
Pennsylvania	17,904	18,291	-2.1%	0	0	17,858	18,245	0	0	46	46
East North Central	110,125	108,579	1.4%	66,468	66,395	43,046	41,630	18	11	593	543
Illinois	28,108	26,023	8.0%	1,710	1,696	25,957	23,904	10	6	432	417
Indiana	29,196	26,349	11.0%	27,632	25,417	1,557	926	8	5	0	0
Michigan	18,995	18,775	1.2%	18,801	18,604	162	159	0	0	32	12
Ohio	18,979	22,126	-14.0%	3,608	5,484	15,371	16,641	0	0	1	1
Wisconsin	14,846	15,307	-3.0%	14,718	15,194	0	0	0	0	128	113
West North Central	89,206	87,471	2.0%	88,279	86,600	0	0	16	22	911	848
Iowa	11,861	11,359	4.4%	11,461	10,988	0	0	14	17	385	353
Kansas	9,856	9,624	2.4%	9,856	9,624	0	0	0	0	0	0
Minnesota	9,731	9,598	1.4%	9,522	9,402	0	0	0	1	209	196
Missouri	28,510	30,087	-5.2%	28,509	30,083	0	0	1	4	0	0
Nebraska	10,937	9,813	11.0%	10,651	9,536	0	0	0	0	286	277
North Dakota	17,123	16,013	6.9%	17,091	15,990	0	0	0	0	32	23
South Dakota	1,189	977	22.0%	1,189	977	0	0	0	0	0	0
South Atlantic	66,622	71,788	-7.2%	58,032	64,251	8,406	7,333	8	10	176	193
Delaware	161	132	22.0%	0	0	161	132	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	10,178	13,184	-23.0%	10,162	13,128	3	36	0	0	14	20
Georgia	12,478	13,217	-5.6%	12,449	13,190	0	0	0	0	29	27
Maryland	3,637	2,768	31.0%	0	0	3,626	2,754	0	0	11	14
North Carolina	10,189	10,821	-5.8%	10,135	10,751	26	38	7	8	21	25
South Carolina	6,119	6,029	1.5%	6,116	6,025	0	0	0	0	3	3
Virginia	3,753	4,204	-11.0%	3,448	3,933	205	165	1	2	99	105
West Virginia	20,107	21,433	-6.2%	15,723	17,224	4,384	4,209	0	0	0	0
East South Central	46,238	47,645	-3.0%	43,933	45,657	2,183	1,870	0	0	121	118
Alabama	13,098	12,494	4.8%	13,087	12,486	0	0	0	0	11	7
Kentucky	21,271	21,201	0.3%	21,271	21,201	0	0	0	0	0	0
Mississippi	3,274	2,950	11.0%	1,091	1,080	2,183	1,870	0	0	0	0
Tennessee	8,594	11,000	-22.0%	8,483	10,889	0	0	0	0	111	111
West South Central	82,932	97,262	-15.0%	45,351	45,720	37,484	51,411	0	0	97	131
Arkansas	12,583	11,620	8.3%	10,547	10,333	2,030	1,282	0	0	6	6
Louisiana	6,324	6,711	-5.8%	4,164	4,016	2,160	2,695	0	0	0	0
Oklahoma	7,533	8,592	-12.0%	6,643	7,700	800	766	0	0	90	125
Texas	56,492	70,339	-20.0%	23,998	23,671	32,494	46,668	0	0	0	0
Mountain	62,416	68,376	-8.7%	55,389	60,933	6,944	7,334	0	0	83	109
Arizona	12,648	12,647	0.0%	12,648	12,647	0	0	0	0	0	0
Colorado	11,258	12,596	-11.0%	11,256	12,595	0	0	0	0	2	2
Idaho	4	3	23.0%	0	0	0	0	0	0	4	3
Montana	5,981	6,406	-6.6%	156	202	5,824	6,203	0	0	1	1
Nevada	937	962	-2.6%	512	535	425	427	0	0	0	0
New Mexico	4,950	8,173	-39.0%	4,950	8,173	0	0	0	0	0	0
Utah	8,807	8,968	-1.8%	8,498	8,622	308	309	0	0	0	37
Wyoming	17,831	18,619	-4.2%	17,369	18,158	387	396	0	0	76	65
Pacific Contiguous	2,652	2,932	-9.5%	517	895	2,086	1,988	0	0	49	49
California	44	43	2.8%	0	0	0	0	0	0	44	43
Oregon	517	895	-42.0%	517	895	0	0	0	0	0	0
Washington	2,091	1,994	4.9%	0	0	2,086	1,988	0	0	5	6
Pacific Noncontiguous	913	865	5.6%	209	160	675	678	29	27	0	0
Alaska	360	302	19.0%	209	160	121	115	29	27	0	0
Hawaii	554	563	-1.7%	0	0	554	563	0	0	0	0
U.S. Total	480,074	504,557	-4.9%	358,421	370,689	119,499	131,700	71	70	2,082	2,098

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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, September 2018 and September 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	36	48	-25.0%	11	6	22	39	2	2	1	1
Connecticut	17	3	465.0%	NM	1	16	2	NM	0	0	0
Maine	2	21	-93.0%	0	0	1	19	0	1	1	1
Massachusetts	11	20	-44.0%	7	2	NM	17	NM	1	0	0
New Hampshire	3	3	-11.0%	2	2	NM	0	1	0	0	0
Rhode Island	NM	0	NM	0	0	NM	0	0	0	0	0
Vermont	NM	2	NM	NM	2	0	0	0	0	0	0
Middle Atlantic	82	54	53.0%	21	2	55	47	3	1	3	3
New Jersey	3	2	108.0%	0	0	NM	1	0	0	0	0
New York	47	15	203.0%	21	2	24	12	NM	0	1	1
Pennsylvania	32	36	-13.0%	0	0	28	34	1	1	2	2
East North Central	79	84	-7.0%	44	61	32	21	1	1	2	1
Illinois	8	7	17.0%	NM	1	7	6	0	0	0	0
Indiana	18	15	18.0%	16	14	NM	0	0	0	2	1
Michigan	20	28	-26.0%	20	27	0	0	1	0	0	0
Ohio	28	26	5.7%	4	11	24	15	0	0	0	0
Wisconsin	NM	8	NM	NM	8	0	0	0	0	NM	0
West North Central	43	39	9.0%	42	35	NM	4	0	0	0	0
Iowa	12	6	99.0%	12	6	0	0	0	0	0	0
Kansas	4	13	-69.0%	4	13	0	0	0	0	0	0
Minnesota	NM	7	NM	NM	3	NM	4	0	0	0	0
Missouri	12	11	12.0%	12	11	0	0	0	0	0	0
Nebraska	NM	0	NM	NM	0	0	0	0	0	0	0
North Dakota	8	2	298.0%	8	2	0	0	0	0	0	0
South Dakota	NM	1	NM	NM	1	0	0	NM	0	0	0
South Atlantic	318	232	37.0%	255	169	40	47	13	9	10	7
Delaware	5	1	305.0%	0	0	5	1	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	184	65	183.0%	181	62	1	1	0	0	2	1
Georgia	18	21	-16.0%	12	16	NM	1	0	0	5	4
Maryland	17	35	-52.0%	1	0	16	34	NM	0	0	0
North Carolina	21	29	-28.0%	18	27	NM	1	NM	0	1	1
South Carolina	12	18	-32.0%	11	18	0	0	NM	0	1	0
Virginia	44	52	-14.0%	14	35	18	8	12	8	NM	0
West Virginia	17	11	57.0%	17	11	0	0	0	0	0	0
East South Central	50	34	45.0%	49	34	NM	0	0	0	NM	1
Alabama	NM	3	NM	3	2	NM	0	0	0	NM	1
Kentucky	18	15	23.0%	18	15	0	0	0	0	0	0
Mississippi	12	1	827.0%	11	1	0	0	0	0	0	0
Tennessee	16	15	6.9%	16	15	0	0	0	0	0	0
West South Central	13	17	-25.0%	10	12	2	4	0	0	1	0
Arkansas	4	3	45.0%	4	2	0	0	0	0	0	0
Louisiana	3	3	-11.0%	3	3	0	0	0	0	0	0
Oklahoma	1	1	-16.0%	1	1	0	0	0	0	0	0
Texas	5	10	-49.0%	NM	6	2	4	0	0	0	0
Mountain	23	27	-13.0%	21	24	2	3	0	0	0	0
Arizona	4	5	-27.0%	4	5	0	0	0	0	0	0
Colorado	NM	1	NM	NM	1	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	NM	2	NM	NM	0	1	2	0	0	0	0
Nevada	2	2	-16.0%	1	2	1	0	0	0	0	0
New Mexico	5	6	-23.0%	5	6	0	0	0	0	0	0
Utah	4	5	-12.0%	4	5	0	0	0	0	0	0
Wyoming	6	5	38.0%	6	5	0	0	0	0	0	0
Pacific Contiguous	9	19	-55.0%	NM	13	1	0	NM	0	1	6
California	6	13	-56.0%	NM	8	0	0	NM	0	0	5
Oregon	1	4	-85.0%	1	4	0	0	NM	0	0	0
Washington	2	1	61.0%	NM	0	1	0	0	0	1	1
Pacific Noncontiguous	1,124	1,069	5.1%	885	842	218	206	1	1	19	20
Alaska	104	107	-2.4%	99	102	0	0	0	0	5	4
Hawaii	1,019	962	6.0%	786	740	218	206	1	1	14	16
U.S. Total	1,775	1,623	9.4%	1,346	1,199	373	372	20	14	37	38

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

Table 2.9.B. Consumption of Petroleum Liquids for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	2,068	474	337.0%	362	73	1,653	370	33	25	19	7
Connecticut	589	98	499.0%	NM	5	578	92	NM	1	1	0
Maine	313	95	230.0%	0	0	291	84	4	5	18	6
Massachusetts	772	221	249.0%	146	20	610	192	NM	8	1	1
New Hampshire	276	43	540.0%	186	33	80	1	11	9	0	0
Rhode Island	NM	7	NM	0	5	NM	0	1	2	0	0
Vermont	NM	9	NM	NM	9	0	0	0	0	0	0
Middle Atlantic	3,713	684	443.0%	1,010	115	2,629	512	NM	14	41	43
New Jersey	383	51	655.0%	3	0	375	50	4	0	1	0
New York	2,404	274	778.0%	1,004	114	1,356	127	NM	5	26	27
Pennsylvania	926	360	157.0%	3	0	899	335	11	9	14	15
East North Central	853	711	20.0%	498	464	332	232	6	5	17	10
Illinois	112	83	35.0%	NM	15	93	68	0	0	0	0
Indiana	176	149	18.0%	161	141	NM	0	0	0	14	7
Michigan	198	157	26.0%	193	153	0	0	4	3	1	1
Ohio	321	270	19.0%	83	105	236	163	1	1	2	1
Wisconsin	45	51	-12.0%	43	50	2	1	0	0	NM	0
West North Central	493	364	35.0%	454	352	NM	9	2	1	1	1
Iowa	97	81	19.0%	95	80	2	2	0	0	0	0
Kansas	NM	78	NM	NM	78	0	0	0	0	0	0
Minnesota	72	45	59.0%	36	36	NM	8	2	1	1	1
Missouri	154	80	91.0%	154	80	0	0	0	0	0	0
Nebraska	14	10	37.0%	14	10	0	0	0	0	0	0
North Dakota	50	55	-8.3%	50	55	0	0	0	0	0	0
South Dakota	9	13	-35.0%	9	13	0	0	NM	0	0	0
South Atlantic	4,786	2,388	100.0%	3,375	1,908	1,185	348	135	76	92	56
Delaware	236	18	NM	12	0	224	17	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	851	738	15.0%	805	717	26	9	0	0	19	11
Georgia	328	164	101.0%	NM	126	NM	11	6	3	43	24
Maryland	488	185	164.0%	10	2	471	179	NM	2	3	1
North Carolina	866	303	186.0%	804	278	NM	16	NM	2	12	7
South Carolina	408	164	149.0%	356	155	43	2	NM	0	9	7
Virginia	1,388	658	111.0%	1,010	472	252	113	119	68	NM	6
West Virginia	221	159	39.0%	195	157	26	2	0	0	0	0
East South Central	457	373	22.0%	386	361	58	5	0	0	13	8
Alabama	128	46	180.0%	62	36	58	4	0	0	9	6
Kentucky	127	142	-10.0%	127	142	0	0	0	0	0	0
Mississippi	NM	18	NM	NM	17	0	0	0	0	3	1
Tennessee	160	167	-4.2%	159	166	0	0	0	0	1	1
West South Central	240	220	9.1%	NM	124	NM	91	1	1	6	4
Arkansas	NM	62	NM	NM	23	9	38	0	0	2	1
Louisiana	NM	31	NM	NM	31	0	0	0	0	0	0
Oklahoma	23	18	26.0%	22	17	0	0	0	0	1	1
Texas	91	109	-16.0%	56	54	NM	53	1	1	3	1
Mountain	267	315	-15.0%	231	280	36	34	0	0	0	0
Arizona	73	77	-6.3%	73	77	0	0	0	0	0	0
Colorado	21	16	31.0%	21	16	0	0	0	0	0	0
Idaho	0	0	18.0%	0	0	0	0	0	0	0	0
Montana	31	27	13.0%	NM	1	30	26	0	0	0	0
Nevada	16	17	-5.0%	12	12	4	6	0	0	0	0
New Mexico	27	61	-55.0%	27	61	0	0	0	0	0	0
Utah	44	52	-15.0%	43	49	1	2	0	0	0	0
Wyoming	55	64	-14.0%	55	64	0	0	0	0	0	0
Pacific Contiguous	131	116	12.0%	59	73	27	21	NM	1	44	22
California	100	74	35.0%	49	52	15	7	NM	0	36	14
Oregon	NM	14	NM	NM	14	0	0	NM	0	0	0
Washington	24	28	-14.0%	NM	7	12	14	0	0	8	7
Pacific Noncontiguous	9,159	9,373	-2.3%	7,478	7,566	1,488	1,606	10	10	183	191
Alaska	1,037	1,210	-14.0%	990	1,157	0	0	3	4	44	49
Hawaii	8,122	8,163	-0.5%	6,488	6,409	1,488	1,606	7	6	139	141
U.S. Total	22,166	15,016	48.0%	14,044	11,316	7,484	3,229	221	132	417	340

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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, September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
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	2	NM	0	0	0	0	0	0	NM	2
New Jersey	1	1	-4.9%	0	0	0	0	0	0	1	1
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	NM	1	NM	0	0	0	0	0	0	NM	1
East North Central	77	78	-1.8%	45	35	26	36	0	0	6	7
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	48	37	28.0%	42	30	0	0	0	0	6	7
Ohio	26	36	-29.0%	0	0	26	36	0	0	0	0
Wisconsin	4	5	-25.0%	4	5	0	0	0	0	0	0
West North Central	0	0	-55.0%	0	0	0	0	0	0	0	0
Iowa	0	0	-55.0%	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	74	46	62.0%	71	44	0	0	0	0	NM	2
Delaware	0	0	--	0	0	0	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	71	44	62.0%	71	44	0	0	0	0	0	0
Georgia	NM	2	NM	0	0	0	0	0	0	NM	2
Maryland	0	0	--	0	0	0	0	0	0	0	0
North Carolina	0	0	--	0	0	0	0	0	0	0	0
South Carolina	0	0	--	0	0	0	0	0	0	0	0
Virginia	0	0	--	0	0	0	0	0	0	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	0	0	--	0	0	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	0	--	0	0	0	0	0	0	0	0
Mississippi	0	0	--	0	0	0	0	0	0	0	0
Tennessee	0	0	--	0	0	0	0	0	0	0	0
West South Central	149	136	9.8%	143	131	0	0	0	0	6	5
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	145	132	9.9%	143	131	0	0	0	0	2	1
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	4	4	6.3%	0	0	0	0	0	0	4	4
Mountain	14	14	-2.3%	0	0	14	14	0	0	0	0
Arizona	0	0	--	0	0	0	0	0	0	0	0
Colorado	0	0	--	0	0	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	14	14	-2.3%	0	0	14	14	0	0	0	0
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	0	0	--	0	0	0	0	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	0	--	0	0	0	0	0	0	0	0
Pacific Noncontiguous	0	0	--	0	0	0	0	0	0	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	316	276	14.0%	259	209	39	50	0	0	18	16

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.10.B. Consumption of Petroleum Coke for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector							
				Electric Utilities		Independent Power Producers		Commercial Sector		Industrial Sector	
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 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	17	20	-16.0%	0	0	0	0	0	0	17	20
New Jersey	5	5	-6.8%	0	0	0	0	0	0	5	5
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	12	15	-19.0%	0	0	0	0	0	0	12	15
East North Central	662	716	-7.4%	437	365	184	298	0	0	42	52
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	443	390	14.0%	402	338	0	0	0	0	40	52
Ohio	185	298	-38.0%	0	0	184	298	0	0	1	0
Wisconsin	34	27	26.0%	34	27	0	0	0	0	0	0
West North Central	6	5	25.0%	0	0	0	0	1	2	5	3
Iowa	6	5	25.0%	0	0	0	0	1	2	5	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	506	276	83.0%	478	251	0	0	0	0	28	25
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	478	251	90.0%	478	251	0	0	0	0	0	0
Georgia	28	25	14.0%	0	0	0	0	0	0	28	25
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	166	-100.0%	0	166	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	166	-100.0%	0	166	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	1,283	1,374	-6.6%	1,231	1,312	0	0	0	0	52	62
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,250	1,341	-6.8%	1,231	1,312	0	0	0	0	19	29
Oklahoma	0	0	--	0	0	0	0	0	0	0	0
Texas	33	33	-1.4%	0	0	0	0	0	0	33	33
Mountain	108	119	-9.1%	0	0	108	119	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	108	119	-9.1%	0	0	108	119	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	2,583	2,677	-3.5%	2,146	2,095	292	418	1	2	144	162

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

Table 2.11.A. Consumption of Natural Gas for Electricity Generation by State, by Sector, September 2018 and September 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	34,352	33,428	2.8%	309	435	32,876	31,883	443	466	725	644
Connecticut	12,657	8,714	45.0%	36	307	12,126	7,940	182	184	313	283
Maine	1,384	830	67.0%	0	0	1,200	721	13	16	172	93
Massachusetts	12,520	14,940	-16.0%	NM	93	11,970	14,505	223	238	102	103
New Hampshire	2,269	3,343	-32.0%	47	34	2,202	3,290	3	3	16	16
Rhode Island	5,521	5,599	-1.4%	0	0	5,378	5,426	22	24	121	149
Vermont	2	2	-24.0%	1	1	0	0	0	1	0	0
Middle Atlantic	121,259	111,233	9.0%	8,413	7,599	110,914	101,719	660	716	1,272	1,198
New Jersey	27,825	23,729	17.0%	NM	194	27,380	23,279	87	91	164	164
New York	39,622	35,037	13.0%	8,214	7,396	30,458	26,860	532	566	419	216
Pennsylvania	53,811	52,466	2.6%	5	9	53,077	51,580	41	59	689	818
East North Central	91,786	69,745	32.0%	32,572	25,241	56,718	42,167	770	695	1,726	1,642
Illinois	17,212	14,593	18.0%	1,557	878	15,117	13,098	262	210	275	407
Indiana	15,111	11,785	28.0%	4,968	5,578	9,228	5,482	62	80	853	645
Michigan	20,336	16,348	24.0%	8,869	6,181	10,934	9,646	271	252	263	269
Ohio	25,367	16,591	53.0%	5,093	3,376	20,066	13,018	127	132	81	65
Wisconsin	13,760	10,429	32.0%	12,085	9,227	1,373	924	48	22	254	256
West North Central	26,041	14,397	81.0%	23,243	12,010	2,340	1,971	125	137	332	NM
Iowa	6,230	4,058	54.0%	5,967	3,797	NM	0	30	43	231	218
Kansas	3,051	NM	NM	3,022	1,579	0	0	0	0	29	NM
Minnesota	7,800	3,090	152.0%	6,509	2,208	1,200	810	38	36	54	36
Missouri	5,315	4,208	26.0%	4,109	2,979	1,140	1,162	56	58	10	10
Nebraska	NM	532	NM	NM	531	0	0	1	1	0	0
North Dakota	NM	569	NM	NM	559	0	0	0	0	8	10
South Dakota	NM	357	NM	NM	357	0	0	0	0	0	0
South Atlantic	274,988	224,012	23.0%	212,743	178,448	59,170	42,636	951	722	2,125	2,206
Delaware	4,143	4,510	-8.2%	47	43	3,706	4,024	0	0	389	443
District of Columbia	69	69	-1.2%	0	0	0	0	69	69	0	0
Florida	131,266	111,833	17.0%	123,616	104,902	6,929	6,287	9	9	713	635
Georgia	37,059	32,445	14.0%	25,884	24,484	10,870	7,645	0	0	306	316
Maryland	11,905	6,180	93.0%	2,797	124	8,278	5,458	790	556	40	41
North Carolina	31,173	23,903	30.0%	24,884	20,268	6,150	3,507	77	80	61	47
South Carolina	21,619	12,674	71.0%	14,234	10,902	7,325	1,711	0	0	60	61
Virginia	35,783	30,151	19.0%	21,032	17,398	14,284	12,263	7	6	459	485
West Virginia	1,971	2,247	-12.0%	248	327	1,627	1,741	0	0	96	179
East South Central	98,446	75,849	30.0%	66,125	50,944	31,201	23,802	82	62	1,037	1,041
Alabama	42,277	33,673	26.0%	13,709	12,147	28,017	20,981	0	0	550	545
Kentucky	11,084	6,847	62.0%	10,050	5,975	971	813	0	0	62	59
Mississippi	33,764	28,799	17.0%	31,378	26,598	2,213	1,991	0	3	173	206
Tennessee	11,322	6,531	73.0%	10,988	6,225	0	17	82	59	252	231
West South Central	244,414	194,476	26.0%	92,973	71,952	118,845	93,904	471	380	32,125	28,241
Arkansas	11,430	10,397	9.9%	10,787	9,647	486	604	NM	35	123	111
Louisiana	40,599	37,953	7.0%	25,676	23,543	2,957	2,870	68	17	11,898	11,523
Oklahoma	32,526	20,043	62.0%	19,498	10,780	12,635	9,077	0	0	393	187
Texas	159,859	126,083	27.0%	37,012	27,982	102,767	81,353	368	328	19,711	16,420
Mountain	86,746	65,412	33.0%	64,154	48,615	21,315	15,514	184	197	1,092	1,086
Arizona	35,811	24,896	44.0%	22,444	15,122	13,317	9,719	50	55	0	0
Colorado	11,102	8,877	25.0%	8,435	7,063	2,644	1,785	0	0	23	29
Idaho	3,000	2,683	12.0%	1,922	1,569	NM	1,036	13	13	41	66
Montana	NM	476	NM	NM	355	108	119	0	0	1	1
Nevada	20,316	17,520	16.0%	18,734	15,944	1,317	1,310	23	22	242	244
New Mexico	8,944	6,521	37.0%	6,039	4,971	2,860	1,502	45	48	0	0
Utah	6,515	4,005	63.0%	6,022	3,487	44	44	52	59	397	415
Wyoming	617	434	42.0%	NM	103	0	0	0	0	388	331
Pacific Contiguous	83,003	87,085	-4.7%	32,232	35,865	44,095	44,350	979	1,025	5,696	5,845
California	59,584	66,173	-10.0%	19,410	23,506	33,581	35,895	959	1,008	5,635	5,764
Oregon	13,437	11,974	12.0%	6,476	6,666	6,908	5,254	16	16	37	38
Washington	9,982	8,938	12.0%	6,346	5,693	3,606	3,202	5	0	25	43
Pacific Noncontiguous	3,268	2,171	51.0%	3,245	2,146	0	0	1	0	23	25
Alaska	3,268	2,171	51.0%	3,245	2,146	0	0	1	0	23	25
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	1,064,303	877,808	21.0%	536,010	433,254	477,474	397,947	4,666	4,400	46,154	42,206

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

Table 2.11.B. Consumption of Nautral Gas for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	289,115	280,708	3.0%	2,506	2,269	276,721	268,456	3,712	4,025	6,176	5,958
Connecticut	102,837	82,191	25.0%	279	643	98,368	77,250	1,523	1,650	2,668	2,649
Maine	14,871	13,404	11.0%	0	0	13,440	12,138	113	115	1,318	1,151
Massachusetts	114,129	125,716	-9.2%	1,828	1,288	109,449	121,409	1,866	2,043	986	977
New Hampshire	16,651	21,208	-21.0%	390	329	16,087	20,699	24	31	149	149
Rhode Island	40,615	38,176	6.4%	0	0	39,377	36,960	182	183	1,055	1,032
Vermont	12	13	-10.0%	8	10	0	0	3	3	0	0
Middle Atlantic	944,327	889,754	6.1%	80,564	69,911	846,887	804,333	5,967	6,141	10,909	9,368
New Jersey	216,151	206,260	4.8%	NM	1,653	212,189	202,332	839	860	1,512	1,416
New York	315,649	289,512	9.0%	78,899	68,210	228,951	214,838	4,590	4,771	3,210	1,692
Pennsylvania	412,527	393,982	4.7%	54	48	405,747	387,163	538	510	6,188	6,260
East North Central	792,352	580,037	37.0%	292,836	208,659	474,593	348,552	6,507	6,132	18,417	16,694
Illinois	135,719	116,461	17.0%	12,638	7,280	117,494	103,572	2,162	1,914	3,424	3,695
Indiana	145,027	97,968	48.0%	64,051	41,170	70,999	48,230	709	754	9,268	7,814
Michigan	182,628	145,130	26.0%	70,409	54,060	107,323	86,436	2,284	2,192	2,613	2,442
Ohio	224,301	145,492	54.0%	52,123	40,674	170,481	103,203	951	1,011	747	605
Wisconsin	104,677	74,986	40.0%	93,615	65,476	8,296	7,112	401	260	2,365	2,138
West North Central	196,954	123,076	60.0%	172,109	107,203	21,044	12,716	1,206	1,110	2,595	NM
Iowa	42,998	21,500	100.0%	40,955	19,915	NM	0	373	336	1,667	1,249
Kansas	27,686	NM	NM	27,404	15,288	0	0	0	0	282	NM
Minnesota	55,356	38,347	44.0%	46,755	32,668	7,811	4,824	353	396	437	458
Missouri	49,743	33,051	51.0%	35,949	24,669	13,230	7,892	451	370	113	121
Nebraska	8,792	5,162	70.0%	8,764	5,155	0	0	28	8	0	0
North Dakota	5,509	5,147	7.0%	5,413	5,083	0	0	0	0	96	64
South Dakota	6,870	4,426	55.0%	6,870	4,426	0	0	0	0	0	0
South Atlantic	2,071,676	1,836,298	13.0%	1,654,620	1,497,919	390,348	313,732	7,833	5,911	18,876	18,736
Delaware	31,209	40,655	-23.0%	207	138	28,093	36,830	0	0	2,908	3,687
District of Columbia	513	542	-5.4%	0	0	0	0	513	542	0	0
Florida	981,914	911,564	7.7%	923,751	862,284	51,936	43,510	84	102	6,142	5,669
Georgia	298,170	284,206	4.9%	218,512	213,391	76,681	67,990	0	0	2,977	2,824
Maryland	84,525	39,661	113.0%	20,406	642	57,299	34,178	6,473	4,514	346	328
North Carolina	254,737	208,279	22.0%	215,651	177,506	37,852	29,682	714	714	520	377
South Carolina	130,932	99,800	31.0%	100,180	86,160	30,170	13,062	1	3	581	575
Virginia	280,145	242,927	15.0%	174,285	156,447	101,373	82,643	48	36	4,439	3,801
West Virginia	9,533	8,664	10.0%	1,628	1,351	6,942	5,836	0	0	963	1,476
East South Central	789,865	662,876	19.0%	545,713	454,252	233,709	198,770	782	699	9,662	9,156
Alabama	324,049	280,351	16.0%	117,645	100,093	201,203	175,455	0	0	5,200	4,803
Kentucky	90,294	62,091	45.0%	83,509	58,465	6,199	2,934	0	0	586	691
Mississippi	296,493	260,141	14.0%	268,637	238,189	26,193	20,275	39	24	1,624	1,653
Tennessee	79,030	60,293	31.0%	75,921	57,504	113	106	743	674	2,252	2,008
West South Central	2,038,840	1,724,179	18.0%	773,558	627,062	978,410	811,829	3,450	3,538	283,421	281,750
Arkansas	112,318	95,544	18.0%	105,519	89,288	5,325	4,933	312	323	1,162	1,000
Louisiana	341,701	321,658	6.2%	209,099	186,275	25,173	23,353	538	455	106,891	111,575
Oklahoma	253,939	180,719	41.0%	157,771	113,980	93,744	65,316	0	0	2,423	1,424
Texas	1,330,882	1,126,257	18.0%	301,169	237,519	854,168	718,227	2,599	2,760	172,946	167,751
Mountain	615,838	515,394	19.0%	482,691	404,145	121,275	99,979	1,628	1,657	10,244	9,613
Arizona	213,975	173,956	23.0%	154,276	123,415	59,230	50,067	469	474	0	0
Colorado	95,774	73,140	31.0%	78,052	59,809	17,481	13,079	0	0	241	251
Idaho	17,181	14,396	19.0%	8,437	8,080	8,197	5,727	126	127	421	461
Montana	3,448	3,563	-3.2%	2,843	2,819	597	733	0	0	8	11
Nevada	157,319	150,049	4.8%	143,560	136,863	11,169	11,115	201	183	2,389	1,888
New Mexico	73,867	58,787	26.0%	49,883	39,500	23,415	18,829	388	444	181	14
Utah	49,428	37,492	32.0%	44,056	32,719	1,175	414	444	428	3,754	3,930
Wyoming	4,847	4,010	21.0%	1,585	939	10	13	0	0	3,251	3,058
Pacific Contiguous	635,906	589,379	7.9%	252,546	232,068	324,809	297,604	8,575	8,689	49,976	51,018
California	487,406	472,578	3.1%	168,952	167,084	260,855	246,626	8,348	8,524	49,251	50,344
Oregon	86,484	66,402	30.0%	45,181	34,390	40,753	31,536	164	121	386	354
Washington	62,016	50,399	23.0%	38,413	30,595	23,201	19,442	64	43	339	319
Pacific Noncontiguous	26,454	21,646	22.0%	26,254	21,417	0	0	3	21	198	208
Alaska	26,454	21,646	22.0%	26,254	21,417	0	0	3	21	198	208
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	8,401,327	7,223,346	16.0%	4,283,396	3,624,906	3,667,795	3,155,972	39,663	37,921	410,473	404,547

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Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.12.A. Consumption of Landfill Gas for Electricity Generation by State, by Sector, September 2018 and September 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	864	944	-8.6%	0	0	841	919	23	25	0	0
Connecticut	NM	33	NM	0	0	NM	33	0	0	0	0
Maine	NM	59	NM	0	0	NM	59	0	0	0	0
Massachusetts	284	320	-11.0%	0	0	284	320	0	0	0	0
New Hampshire	87	147	-41.0%	0	0	NM	122	23	25	0	0
Rhode Island	386	364	5.9%	0	0	386	364	0	0	0	0
Vermont	NM	22	NM	0	0	NM	22	0	0	0	0
Middle Atlantic	4,120	4,343	-5.1%	0	0	4,020	4,161	34	65	67	117
New Jersey	572	675	-15.0%	0	0	554	647	NM	28	0	0
New York	1,345	1,352	-0.6%	0	0	1,345	1,352	0	0	0	0
Pennsylvania	2,203	2,316	-4.9%	0	0	2,121	2,162	16	37	67	117
East North Central	4,794	4,945	-3.1%	696	576	4,058	4,316	20	39	20	15
Illinois	709	893	-21.0%	45	35	664	857	0	0	0	0
Indiana	750	643	17.0%	651	541	100	102	0	0	0	0
Michigan	1,652	1,626	1.6%	0	0	1,652	1,626	0	0	0	0
Ohio	843	865	-2.6%	0	0	843	865	0	0	0	0
Wisconsin	840	919	-8.6%	0	0	800	865	20	39	20	15
West North Central	906	868	4.3%	303	296	602	572	0	0	0	0
Iowa	185	212	-12.0%	0	0	185	212	0	0	0	0
Kansas	NM	101	NM	0	0	NM	101	0	0	0	0
Minnesota	279	235	19.0%	NM	58	216	178	0	0	0	0
Missouri	182	161	13.0%	NM	80	NM	82	0	0	0	0
Nebraska	149	159	-6.6%	149	159	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	3,912	4,183	-6.5%	379	294	3,332	3,545	90	209	111	136
Delaware	NM	90	NM	0	0	NM	82	0	0	NM	9
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	685	751	-8.8%	129	86	556	666	0	0	0	0
Georgia	546	518	5.4%	0	0	545	500	0	0	2	18
Maryland	196	279	-30.0%	0	0	NM	181	NM	98	0	0
North Carolina	811	961	-16.0%	0	0	797	869	NM	92	0	0
South Carolina	377	337	12.0%	244	200	NM	27	0	0	100	109
Virginia	1,196	1,247	-4.1%	5	8	1,179	1,221	NM	18	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	468	445	5.2%	190	120	278	325	0	0	0	0
Alabama	NM	99	NM	0	0	NM	99	0	0	0	0
Kentucky	214	133	62.0%	190	120	NM	13	0	0	0	0
Mississippi	NM	28	NM	0	0	NM	28	0	0	0	0
Tennessee	NM	185	NM	0	0	NM	185	0	0	0	0
West South Central	1,092	1,117	-2.3%	0	0	1,042	1,080	50	37	0	0
Arkansas	NM	21	NM	0	0	NM	21	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	NM	47	NM	0	0	NM	47	0	0	0	0
Texas	924	1,049	-12.0%	0	0	874	1,012	50	37	0	0
Mountain	544	461	18.0%	NM	22	477	404	49	34	0	0
Arizona	NM	70	NM	0	0	NM	70	0	0	0	0
Colorado	NM	96	NM	0	0	NM	96	0	0	0	0
Idaho	NM	89	NM	NM	22	NM	48	19	19	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	NM	113	NM	0	0	NM	113	0	0	0	0
New Mexico	NM	2	NM	0	0	NM	2	0	0	0	0
Utah	166	90	84.0%	0	0	NM	75	30	15	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,444	4,725	-6.0%	NM	542	3,200	2,965	1,129	1,194	0	24
California	3,898	3,892	0.2%	NM	174	2,789	2,542	1,101	1,152	0	24
Oregon	446	485	-8.2%	NM	122	311	322	NM	42	0	0
Washington	NM	348	NM	0	246	NM	101	0	0	0	0
Pacific Noncontiguous	61	70	-13.0%	0	0	0	0	61	70	0	0
Alaska	61	70	-13.0%	0	0	0	0	61	70	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	21,204	22,102	-4.1%	1,702	1,851	17,849	18,287	1,454	1,672	198	292

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

Table 2.12.B. Consumption of Landfill Gas for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	7,954	8,077	-1.5%	0	0	7,787	7,902	167	175	0	0
Connecticut	355	327	8.7%	0	0	355	327	0	0	0	0
Maine	572	540	6.0%	0	0	572	540	0	0	0	0
Massachusetts	2,868	2,793	2.7%	0	0	2,868	2,793	0	0	0	0
New Hampshire	848	1,145	-26.0%	0	0	681	970	167	175	0	0
Rhode Island	3,115	3,077	1.2%	0	0	3,115	3,077	0	0	0	0
Vermont	NM	196	NM	0	0	NM	196	0	0	0	0
Middle Atlantic	41,988	40,194	4.5%	0	0	40,525	38,442	542	593	920	1,159
New Jersey	6,117	5,685	7.6%	0	0	5,895	5,444	222	242	0	0
New York	13,259	12,500	6.1%	0	0	13,259	12,500	0	0	0	0
Pennsylvania	22,611	22,009	2.7%	0	0	21,371	20,498	320	352	920	1,159
East North Central	47,857	47,768	0.2%	6,936	5,546	40,490	41,778	241	272	189	171
Illinois	7,713	9,806	-21.0%	624	339	7,089	9,466	0	0	0	0
Indiana	7,237	6,009	20.0%	6,312	5,168	925	841	0	0	0	0
Michigan	16,298	15,529	4.9%	0	0	16,298	15,529	0	0	0	0
Ohio	8,114	8,178	-0.8%	0	0	8,114	8,178	0	0	0	0
Wisconsin	8,495	8,246	3.0%	0	38	8,064	7,764	241	272	189	171
West North Central	9,457	8,396	13.0%	3,343	2,699	6,113	5,697	0	0	0	0
Iowa	1,935	1,956	-1.1%	0	0	1,935	1,956	0	0	0	0
Kansas	1,102	987	12.0%	0	0	1,102	987	0	0	0	0
Minnesota	2,931	2,467	19.0%	787	548	2,144	1,919	0	0	0	0
Missouri	2,079	1,648	26.0%	1,146	814	932	834	0	0	0	0
Nebraska	1,409	1,337	5.4%	1,409	1,337	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	41,493	40,362	2.8%	4,061	3,342	35,049	33,797	1,078	1,765	1,304	1,458
Delaware	1,038	943	10.0%	0	0	948	854	0	0	90	89
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	6,935	7,751	-11.0%	1,312	1,190	5,622	6,561	0	0	0	0
Georgia	6,057	5,413	12.0%	0	0	5,965	5,187	0	0	92	226
Maryland	2,292	2,128	7.7%	0	0	1,548	1,381	744	746	0	0
North Carolina	8,365	8,555	-2.2%	0	0	8,174	7,717	191	838	0	0
South Carolina	4,167	3,522	18.0%	2,711	2,096	334	284	0	0	1,122	1,143
Virginia	12,640	12,051	4.9%	38	56	12,458	11,814	143	181	0	0
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	4,606	4,501	2.3%	1,903	2,013	2,703	2,488	0	0	0	0
Alabama	839	813	3.2%	0	0	839	813	0	0	0	0
Kentucky	2,095	2,226	-5.9%	1,903	2,013	192	213	0	0	0	0
Mississippi	NM	146	NM	0	0	NM	146	0	0	0	0
Tennessee	1,476	1,316	12.0%	0	0	1,476	1,316	0	0	0	0
West South Central	11,063	11,100	-0.3%	0	0	10,621	10,731	442	369	0	0
Arkansas	1,263	1,250	1.0%	0	0	1,263	1,250	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	370	312	19.0%	0	0	370	312	0	0	0	0
Texas	9,430	9,538	-1.1%	0	0	8,988	9,169	442	369	0	0
Mountain	5,381	4,953	8.7%	206	186	4,775	4,434	399	333	0	0
Arizona	761	738	3.1%	0	0	761	738	0	0	0	0
Colorado	877	1,030	-15.0%	0	0	877	1,030	0	0	0	0
Idaho	663	728	-9.0%	206	186	314	397	143	146	0	0
Montana	0	0	--	0	0	0	0	0	0	0	0
Nevada	1,443	1,188	21.0%	0	0	1,443	1,188	0	0	0	0
New Mexico	NM	15	NM	0	0	NM	15	0	0	0	0
Utah	1,555	1,252	24.0%	0	0	1,298	1,065	257	188	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	44,431	43,280	2.7%	3,440	4,999	30,177	27,129	10,814	11,047	0	105
California	37,787	35,744	5.7%	849	1,454	26,432	23,486	10,506	10,700	0	105
Oregon	4,203	4,084	2.9%	1,030	1,022	2,865	2,715	307	348	0	0
Washington	2,442	3,452	-29.0%	1,562	2,523	880	928	0	0	0	0
Pacific Noncontiguous	618	561	10.0%	0	0	0	0	618	561	0	0
Alaska	618	561	10.0%	0	0	0	0	618	561	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	214,847	209,192	2.7%	19,890	18,784	178,242	172,398	14,301	15,117	2,413	2,892

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

Table 2.13.A. Consumption of Biogenic Municipal Solid Waste for Electricity Generation by State, by Sector, September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	292	296	-1.3%	0	0	278	279	14	16	0	0
Connecticut	100	93	8.0%	0	0	100	93	0	0	0	0
Maine	23	25	-7.6%	0	0	9	9	14	16	0	0
Massachusetts	158	167	-5.4%	0	0	158	167	0	0	0	0
New Hampshire	10	11	-3.2%	0	0	10	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	434	449	-3.4%	0	0	342	354	92	96	0	0
New Jersey	113	119	-5.2%	0	0	83	92	30	27	0	0
New York	169	171	-1.2%	0	0	125	123	44	47	0	0
Pennsylvania	153	160	-4.4%	0	0	134	139	19	21	0	0
East North Central	17	18	-4.5%	2	3	0	0	15	15	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	1	1	28.0%	0	0	0	0	1	1	0	0
Michigan	13	14	-4.3%	0	0	0	0	13	14	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	2	3	-19.0%	2	3	0	0	0	0	0	0
West North Central	53	53	1.6%	34	39	19	13	0	1	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	53	53	1.6%	34	39	19	13	0	1	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	425	407	4.3%	0	0	388	364	37	43	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	302	304	-0.7%	0	0	302	304	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	53	60	-11.0%	0	0	53	60	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	70	43	60.0%	0	0	33	0	37	43	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	4.8%	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	4.8%	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	55	62	-11.0%	0	0	55	62	0	0	0	0
California	32	39	-17.0%	0	0	32	39	0	0	0	0
Oregon	9	9	-10.0%	0	0	9	9	0	0	0	0
Washington	15	14	3.4%	0	0	15	14	0	0	0	0
Pacific Noncontiguous	36	35	1.2%	0	0	0	0	36	35	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	36	35	1.2%	0	0	0	0	36	35	0	0
U.S. Total	1,313	1,321	-0.6%	36	41	1,082	1,072	194	207	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 September 2018 and September 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	2,631	2,785	-5.5%	0	0	2,498	2,631	133	153	0	0
Connecticut	880	935	-5.9%	0	0	880	935	0	0	0	0
Maine	218	239	-8.8%	0	0	85	86	133	153	0	0
Massachusetts	1,442	1,517	-4.9%	0	0	1,442	1,517	0	0	0	0
New Hampshire	91	94	-2.5%	0	0	91	94	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	4,016	4,105	-2.2%	0	0	3,194	3,229	822	876	0	0
New Jersey	1,079	1,073	0.5%	0	0	814	812	265	262	0	0
New York	1,480	1,547	-4.4%	0	0	1,106	1,123	374	425	0	0
Pennsylvania	1,458	1,484	-1.8%	0	0	1,275	1,294	183	190	0	0
East North Central	174	181	-3.4%	26	27	0	0	149	153	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	15	13	10.0%	0	0	0	0	15	13	0	0
Michigan	134	140	-4.2%	0	0	0	0	134	140	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	26	27	-6.3%	26	27	0	0	0	0	0	0
West North Central	495	483	2.6%	322	300	173	174	0	9	0	0
Iowa	0	0	--	0	0	0	0	0	0	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	495	483	2.6%	322	300	173	174	0	9	0	0
Missouri	0	0	--	0	0	0	0	0	0	0	0
Nebraska	0	0	--	0	0	0	0	0	0	0	0
North Dakota	0	0	--	0	0	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	4,243	3,905	8.7%	0	0	3,900	3,513	343	392	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	2,887	2,979	-3.1%	0	0	2,887	2,979	0	0	0	0
Georgia	0	0	--	0	0	0	0	0	0	0	0
Maryland	489	467	4.6%	0	0	489	467	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	867	458	89.0%	0	0	524	66	343	392	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	8	6	47.0%	0	0	0	0	0	0	8	6
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	8	6	47.0%	0	0	0	0	0	0	8	6
Texas	0	0	--	0	0	0	0	0	0	0	0
Mountain	0	0	-100.0%	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	-100.0%	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	529	563	-6.0%	0	0	529	563	0	0	0	0
California	324	362	-10.0%	0	0	324	362	0	0	0	0
Oregon	85	81	4.9%	0	0	85	81	0	0	0	0
Washington	120	119	0.1%	0	0	120	119	0	0	0	0
Pacific Noncontiguous	333	315	5.7%	0	0	0	0	333	315	0	0
Alaska	0	0	--	0	0	0	0	0	0	0	0
Hawaii	333	315	5.7%	0	0	0	0	333	315	0	0
U.S. Total	12,430	12,341	0.7%	348	327	10,294	10,110	1,780	1,899	8	6

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.14.A. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, September 2018 and September 2017 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	4,352	4,192	3.8%	705	406	3,198	3,407	1	1	449	378
Connecticut	NM	263	NM	0	0	NM	263	0	0	0	0
Maine	1,823	1,753	4.0%	0	0	1,375	1,375	0	0	449	378
Massachusetts	NM	177	NM	0	0	NM	177	0	0	0	0
New Hampshire	1,735	1,563	11.0%	441	157	1,294	1,406	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	431	435	-0.9%	264	249	NM	185	1	0	0	0
Middle Atlantic	819	1,120	-27.0%	0	0	540	528	0	0	280	591
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	620	601	3.1%	0	0	540	528	0	0	80	73
Pennsylvania	199	519	-62.0%	0	0	0	0	0	0	199	519
East North Central	1,898	1,894	0.2%	360	270	943	1,056	0	0	595	567
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	1,228	1,311	-6.3%	0	0	932	1,044	0	0	296	267
Ohio	92	92	-0.3%	0	0	11	12	0	0	80	80
Wisconsin	578	491	18.0%	360	270	0	0	0	0	219	221
West North Central	556	984	-44.0%	125	190	111	507	36	14	283	273
Iowa	0	6	-100.0%	0	0	0	0	0	6	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	522	979	-47.0%	125	190	111	507	3	9	283	273
Missouri	34	0	--	0	0	0	0	34	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	10,017	9,013	11.0%	2,094	726	2,662	3,308	15	0	5,246	4,979
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	2,030	1,687	20.0%	784	491	534	568	0	0	713	627
Georgia	2,671	2,824	-5.4%	0	0	614	898	0	0	2,057	1,926
Maryland	44	56	-20.0%	0	0	0	0	15	0	30	56
North Carolina	1,240	1,451	-15.0%	0	0	791	906	0	0	448	544
South Carolina	1,365	1,511	-9.6%	117	159	495	525	0	0	753	826
Virginia	2,667	1,485	80.0%	1,194	75	NM	410	0	0	1,245	999
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	2,818	2,995	-5.9%	0	0	170	197	0	0	2,648	2,798
Alabama	1,811	1,931	-6.3%	0	0	170	197	0	0	1,640	1,735
Kentucky	140	152	-7.9%	0	0	0	0	0	0	140	152
Mississippi	476	529	-10.0%	0	0	0	0	0	0	476	529
Tennessee	392	381	2.6%	0	0	0	0	0	0	392	381
West South Central	2,220	2,406	-7.8%	0	0	2	72	0	0	2,218	2,335
Arkansas	426	554	-23.0%	0	0	0	0	0	0	426	554
Louisiana	1,273	1,297	-1.9%	0	0	0	0	0	0	1,273	1,297
Oklahoma	160	151	6.0%	0	0	2	0	0	0	158	151
Texas	360	404	-11.0%	0	0	0	72	0	0	360	332
Mountain	444	529	-16.0%	0	0	336	461	0	0	107	68
Arizona	NM	320	NM	0	0	NM	320	0	0	0	0
Colorado	121	114	6.5%	0	0	121	114	0	0	0	0
Idaho	106	72	47.0%	0	0	22	27	0	0	84	45
Montana	23	23	1.1%	0	0	0	0	0	0	23	23
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	4,807	5,441	-12.0%	323	497	2,882	3,463	0	0	1,602	1,480
California	3,253	3,574	-9.0%	0	0	2,698	3,154	0	0	555	420
Oregon	531	649	-18.0%	0	0	NM	309	0	0	347	340
Washington	1,023	1,218	-16.0%	323	497	0	0	0	0	700	721
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	27,931	28,574	-2.3%	3,607	2,090	10,844	13,001	52	15	13,428	13,469

Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 2.14.B. Consumption of Wood / Wood Waste Biomass for Electricity Generation by State, by Sector, Year-to-Date through September 2018 and September 2017 (Billion Btus)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	39,682	42,725	-7.1%	5,704	6,269	30,045	32,568	16	44	3,917	3,844
Connecticut	1,908	1,820	4.8%	0	0	1,908	1,820	0	0	0	0
Maine	16,993	17,952	-5.3%	0	0	13,068	14,072	9	36	3,917	3,844
Massachusetts	1,516	1,716	-12.0%	0	0	1,516	1,716	0	0	0	0
New Hampshire	14,961	16,667	-10.0%	2,936	3,395	12,024	13,272	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	4,303	4,570	-5.8%	2,767	2,875	1,528	1,688	7	8	0	0
Middle Atlantic	8,902	9,839	-9.5%	0	0	5,190	5,037	0	0	3,712	4,802
New Jersey	0	0	--	0	0	0	0	0	0	0	0
New York	5,934	5,800	2.3%	0	0	5,188	5,036	0	0	746	764
Pennsylvania	2,968	4,039	-27.0%	0	0	2	1	0	0	2,966	4,037
East North Central	18,407	18,177	1.3%	3,809	3,472	9,049	9,301	0	0	5,549	5,404
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	11,695	11,818	-1.0%	0	0	8,939	9,187	0	0	2,756	2,631
Ohio	859	956	-10.0%	0	0	110	113	0	0	750	843
Wisconsin	5,853	5,403	8.3%	3,809	3,472	0	0	0	0	2,043	1,930
West North Central	7,161	8,082	-11.0%	1,381	1,448	3,230	4,180	303	272	2,247	2,181
Iowa	2	10	-80.0%	0	0	0	0	2	10	0	0
Kansas	0	0	--	0	0	0	0	0	0	0	0
Minnesota	6,920	7,836	-12.0%	1,381	1,448	3,230	4,180	62	26	2,247	2,181
Missouri	240	236	1.7%	0	0	0	0	240	236	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	94,394	92,622	1.9%	20,339	17,128	25,061	27,677	103	27	48,892	47,790
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	16,878	14,882	13.0%	5,467	2,743	4,859	5,637	0	0	6,552	6,502
Georgia	25,117	24,410	2.9%	0	0	6,275	6,635	0	0	18,842	17,775
Maryland	497	508	-2.1%	0	0	0	0	103	27	394	480
North Carolina	12,233	12,839	-4.7%	0	0	7,203	7,866	0	0	5,030	4,973
South Carolina	13,624	14,303	-4.7%	1,381	1,366	4,528	5,014	0	0	7,715	7,923
Virginia	26,046	25,680	1.4%	13,491	13,019	2,196	2,524	0	0	10,358	10,137
West Virginia	0	0	--	0	0	0	0	0	0	0	0
East South Central	27,681	27,619	0.2%	0	0	1,602	1,567	0	0	26,079	26,052
Alabama	17,916	17,819	0.5%	0	0	1,602	1,567	0	0	16,314	16,252
Kentucky	1,328	1,294	2.6%	0	0	0	0	0	0	1,328	1,294
Mississippi	5,106	5,200	-1.8%	0	0	0	0	0	0	5,106	5,200
Tennessee	3,330	3,306	0.7%	0	0	0	0	0	0	3,330	3,306
West South Central	23,687	22,045	7.4%	0	0	2,191	977	0	0	21,495	21,068
Arkansas	5,144	5,070	1.5%	0	0	0	0	0	0	5,144	5,070
Louisiana	11,562	11,549	0.1%	0	0	0	0	0	0	11,562	11,549
Oklahoma	1,423	1,122	27.0%	0	0	22	0	0	0	1,400	1,122
Texas	5,558	4,303	29.0%	0	0	2,169	977	0	0	3,389	3,327
Mountain	4,262	5,013	-15.0%	0	0	2,944	3,734	0	0	1,318	1,279
Arizona	1,790	2,492	-28.0%	0	0	1,790	2,492	0	0	0	0
Colorado	922	1,014	-9.0%	0	0	922	1,014	0	0	0	0
Idaho	1,363	1,321	3.2%	0	0	232	227	0	0	1,131	1,094
Montana	187	185	0.9%	0	0	0	0	0	0	187	185
Nevada	0	0	--	0	0	0	0	0	0	0	0
New Mexico	0	0	--	0	0	0	0	0	0	0	0
Utah	0	0	--	0	0	0	0	0	0	0	0
Wyoming	0	0	--	0	0	0	0	0	0	0	0
Pacific Contiguous	45,074	45,222	-0.3%	3,017	2,918	27,392	29,076	0	0	14,664	13,228
California	30,367	31,099	-2.4%	0	0	25,619	27,577	0	0	4,748	3,522
Oregon	5,114	4,691	9.0%	0	0	1,773	1,499	0	0	3,341	3,192
Washington	9,593	9,432	1.7%	3,017	2,918	0	0	0	0	6,576	6,514
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	269,250	271,343	-0.8%	34,250	31,236	106,704	114,116	422	343	127,874	125,648

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

Chapter 3

Fossil-Fuel Stocks for Electricity Generation

Table 3.1. Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, 2008 - September 2018

	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									
2008	161,589	40,804	739	127,463	26,108	468	34,126	14,696	270
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
Year 2016, End of Month Stocks									
January	187,203	32,307	1,320	146,300	20,894	1,089	40,903	11,412	231
February	187,064	31,644	1,323	145,895	20,651	1,064	41,168	10,994	259
March	191,553	31,569	1,240	148,648	20,642	974	42,905	10,927	266
April	193,185	31,788	1,181	150,859	20,926	901	42,327	10,863	280
May	192,417	32,139	1,071	150,639	21,202	826	41,778	10,936	246
June	182,086	31,992	905	144,309	21,133	689	37,777	10,859	216
July	168,119	31,606	858	134,344	20,906	678	33,775	10,700	180
August	158,908	31,565	780	128,256	20,846	589	30,652	10,719	191
Sept	156,567	31,637	768	127,532	20,924	566	29,035	10,713	201
October	160,932	31,831	813	131,510	21,017	606	29,422	10,813	207
November	170,277	32,503	833	138,091	21,583	606	32,185	10,921	227
December	162,009	31,839	845	130,885	21,013	603	31,124	10,827	241
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	123,513	26,070	967	103,912	18,126	587	19,601	7,944	380
February	120,858	26,841	934	101,745	18,582	570	19,113	8,259	364
March	126,407	26,766	953	106,644	18,678	621	19,763	8,088	332
April	128,964	26,656	947	108,127	18,659	655	20,837	7,997	292
May	128,363	26,753	948	107,433	18,722	656	20,930	8,031	292
June	121,448	26,308	817	101,778	18,316	534	19,670	7,992	283
July	110,731	25,730	884	93,357	17,791	623	17,375	7,939	261
August	104,138	24,571	809	88,189	16,950	588	15,950	7,621	221
Sept	100,717	24,402	749	84,887	16,736	564	15,829	7,666	184

Notes: See Glossary for definitions. Values for 2017 and prior years are final. Values for 2018 are preliminary.
See Technical Notes for a discussion of the sample design for the Form EIA-923 and predecessor forms. Totals may not equal sum of components because of independent rounding.
Sources: U.S. Energy Information Administration, Form EIA-906, Power Plant Report; U.S. Energy Information Administration, Form EIA-920 Combined Heat and Power Plant Report, and predecessor forms.
Beginning with 2008 data, the Form EIA-923, Power Plant Operations Report, replaced the following: Form EIA-906, Power Plant Report; Form EIA-920, Combined Heat and Power Plant Report; Form EIA-423, Monthly Cost and Quality of Fuels for Electric Plants Report; and Federal Energy Regulatory Commission, FERC Form 423, Monthly Report of Cost and Quality of Fuels for Electric Plants.

Table 3.2 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by State, September 2018 and 2017

Census Division and State	Coal (Thousand Tons)			Petroleum Liquids (Thousand Barrels)			Petroleum Coke (Thousand Tons)		
	September 2018	September 2017	Percentage Change	September 2018	September 2017	Percentage Change	September 2018	September 2017	Percentage Change
New England	686	1,064	-35.5%	2,859	3,966	-27.9%	0	0	--
Connecticut	W	W	W	999	1,474	-32.3%	0	0	--
Maine	0	0	--	191	393	-51.3%	0	0	--
Massachusetts	W	W	W	1,281	1,554	-17.6%	0	0	--
New Hampshire	W	W	W	214	338	-36.8%	0	0	--
Rhode Island	W	W	W	137	161	-14.9%	0	0	--
Vermont	0	0	--	37	45	-16.4%	0	0	--
Middle Atlantic	2,684	4,449	-39.7%	4,382	5,598	-21.7%	0	0	--
New Jersey	W	131	W	578	641	-9.8%	0	0	--
New York	W	W	W	2,892	3,713	-22.1%	0	0	--
Pennsylvania	2,504	W	W	911	1,244	-26.7%	0	0	--
East North Central	19,674	29,603	-33.5%	962	1,077	-10.7%	W	221	W
Illinois	4,785	6,692	-28.5%	73	93	-20.8%	0	0	--
Indiana	6,128	8,374	-26.8%	95	111	-14.0%	W	W	W
Michigan	3,001	5,139	-41.6%	286	322	-11.1%	W	W	W
Ohio	2,617	5,200	-49.7%	318	356	-10.5%	W	W	W
Wisconsin	3,143	4,199	-25.1%	189	196	-3.5%	W	W	W
West North Central	20,584	26,497	-22.3%	724	954	-24.1%	0	0	--
Iowa	3,830	6,151	-37.7%	84	153	-45.1%	0	0	--
Kansas	3,323	3,739	-11.1%	95	117	-18.6%	0	0	--
Minnesota	2,499	3,546	-29.5%	92	131	-29.9%	0	0	--
Missouri	7,153	7,956	-10.1%	306	351	-13.0%	0	0	--
Nebraska	2,076	3,169	-34.5%	87	119	-26.3%	0	0	--
North Dakota	W	W	W	25	34	-27.8%	0	0	--
South Dakota	W	W	W	36	50	-26.9%	0	0	--
South Atlantic	16,175	24,023	-32.7%	9,788	12,124	-19.3%	W	W	W
Delaware	W	W	W	339	409	-17.2%	0	0	--
District of Columbia	0	0	--	0	0	--	0	0	--
Florida	3,154	4,385	-28.1%	4,235	5,530	-23.4%	110	105	5.4%
Georgia	3,478	4,850	-28.3%	714	795	-10.2%	0	0	--
Maryland	1,062	1,444	-26.4%	529	778	-32.0%	0	0	--
North Carolina	3,256	4,096	-20.5%	1,110	1,215	-8.7%	0	0	--
South Carolina	2,135	4,080	-47.7%	562	666	-15.6%	0	0	--
Virginia	593	W	W	2,182	2,587	-15.7%	0	0	--
West Virginia	W	3,720	W	118	144	-18.1%	W	W	W
East South Central	9,169	13,872	-33.9%	1,480	1,879	-21.2%	W	W	W
Alabama	W	3,078	W	306	325	-5.8%	0	0	--
Kentucky	4,548	7,170	-36.6%	248	232	6.8%	W	W	W
Mississippi	W	1,029	W	242	558	-56.7%	0	0	--
Tennessee	2,020	2,595	-22.2%	685	764	-10.3%	0	0	--
West South Central	13,909	18,978	-26.7%	1,553	1,715	-9.5%	W	W	W
Arkansas	2,376	2,220	7.1%	158	186	-15.0%	0	0	--
Louisiana	1,676	2,158	-22.3%	333	381	-12.6%	W	W	W
Oklahoma	3,147	3,655	-13.9%	95	98	-3.1%	0	0	--
Texas	6,709	10,945	-38.7%	968	1,051	-8.0%	0	0	--
Mountain	17,063	19,695	-13.4%	361	403	-10.6%	W	W	W
Arizona	2,979	3,151	-5.5%	135	135	0.2%	0	0	--
Colorado	4,038	3,997	1.0%	123	140	-11.8%	0	0	--
Idaho	0	0	--	0	0	-15.2%	0	0	--
Montana	W	W	W	16	21	-20.8%	W	W	W
Nevada	W	W	W	3	5	-48.3%	0	0	--
New Mexico	W	W	W	16	34	-51.7%	0	0	--
Utah	4,160	5,266	-21.0%	35	32	10.9%	0	0	--
Wyoming	3,695	4,806	-23.1%	32	38	-15.6%	0	0	--
Pacific Contiguous	W	W	W	344	335	2.9%	0	0	--
California	0	0	--	187	168	11.2%	0	0	--
Oregon	W	W	W	63	66	-4.8%	0	0	--
Washington	W	W	W	95	101	-6.1%	0	0	--
Pacific Noncontiguous	W	W	W	1,949	2,295	-15.1%	0	0	--
Alaska	0	W	W	56	288	-80.5%	0	0	--
Hawaii	W	W	W	1,893	2,007	-5.7%	0	0	--
U.S. Total	100,717	139,571	-27.8%	24,402	30,346	-19.6%	749	798	-6.1%

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.
NM = Not meaningful due to large relative standard error or excessive percentage change.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.
Negative generation denotes that electric power consumed for plant use exceeds gross generation.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report.

Table 3.3 Stocks of Coal, Petroleum Liquids, and Petroleum Coke: Electric Power Sector, by Census Divison, September 2018 and 2017

	Electric Power Sector			Electric Utilities		Independent Power Producers	
Census Division	**September 2018**	**September 2017**	**Percentage Change**	**September 2018**	**September 2017**	**September 2018**	**September 2017**
Coal (Thousand Tons)							
New England	686	1,064	-35.5%	W	W	W	W
Middle Atlantic	2,684	4,449	-39.7%	0	W	2,684	W
East North Central	19,674	29,603	-33.5%	W	19,555	W	10,049
West North Central	20,584	26,497	-22.3%	20,584	26,497	0	0
South Atlantic	16,175	24,023	-32.7%	14,357	21,468	1,818	2,555
East South Central	9,169	13,872	-33.9%	9,169	13,872	0	0
West South Central	13,909	18,978	-26.7%	10,436	12,217	3,472	6,761
Mountain	17,063	19,695	-13.4%	W	W	W	W
Pacific Contiguous	W	W	W	W	W	W	W
Pacific Noncontiguous	W	W	W	0	W	W	W
U.S. Total	**100,717**	**139,571**	**-27.8%**	**84,887**	**113,247**	**15,829**	**26,324**
Petroleum Liquids (Thousand Barrels)							
New England	2,859	3,966	-27.9%	399	639	2,460	3,326
Middle Atlantic	4,382	5,598	-21.7%	1,749	2,336	2,633	3,261
East North Central	962	1,077	-10.7%	647	763	316	314
West North Central	724	954	-24.1%	707	927	17	26
South Atlantic	9,788	12,124	-19.3%	8,123	9,867	1,665	2,257
East South Central	1,480	1,879	-21.2%	1,409	1,806	72	73
West South Central	1,553	1,715	-9.5%	1,204	1,317	349	398
Mountain	361	403	-10.6%	331	368	30	35
Pacific Contiguous	344	335	2.9%	247	227	97	107
Pacific Noncontiguous	1,949	2,295	-15.1%	1,921	2,263	28	32
U.S. Total	**24,402**	**30,346**	**-19.6%**	**16,736**	**20,516**	**7,666**	**9,830**
Petroleum Coke (Thousand Tons)							
New England	0	0	--	0	0	0	0
Middle Atlantic	0	0	--	0	0	0	0
East North Central	W	221	W	W	W	W	W
West North Central	0	0	--	0	0	0	0
South Atlantic	W	W	W	110	105	W	W
East South Central	W	W	W	W	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	**749**	**798**	**-6.1%**	**W**	**W**	**W**	**W**

W = Withheld to avoid disclosure of individual company data.
Notes: See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form-923.
Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.
Source: U.S. Energy Information Administration, Form-923, 'Power Plant Operations Report.'

Table 3.4. Stocks of Coal by Coal Rank: Electric Power Sector, 2008 - September 2018

	Electric Power Sector			
Period	Bituminous Coal	Subbituminous Coal	Lignite Coal	Total
End of Year Stocks				
2008	65,818	91,214	4,556	161,589
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
Year 2016, End of Month Stocks				
January	76,919	105,641	4,643	187,203
February	76,373	106,153	4,537	187,064
March	79,664	107,076	4,813	191,553
April	81,390	106,720	5,075	193,185
May	82,185	105,068	5,164	192,417
June	78,216	98,822	5,048	182,086
July	71,287	92,104	4,727	168,119
August	67,462	87,040	4,406	158,908
Sept	65,962	86,411	4,194	156,567
October	67,250	89,666	4,016	160,932
November	70,537	95,428	4,313	170,277
December	67,241	90,376	4,393	162,009
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	48,427	72,013	3,074	123,513
February	48,164	69,785	2,909	120,858
March	49,560	73,633	3,213	126,407
April	51,011	74,629	3,324	128,964
May	51,844	73,306	3,212	128,363
June	48,898	69,359	3,191	121,448
July	44,958	62,926	2,847	110,731
August	42,817	58,500	2,821	104,138
Sept	40,821	57,051	2,845	100,717

Notes: See Glossary for definitions.
Values for 2017 and prior years are final. Values for 2018 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), 2008 - September 2018

	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												
2008	21,280,258	1,069,709	2.07	41.14	0.97	100.5	375,684	61,139	15.52	95.38	0.61	99.6
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
Year 2016												
January	1,035,315	54,397	2.12	40.35	1.32	85.5	9,096	1,519	7.96	47.76	0.48	56.2
February	981,062	50,919	2.11	40.62	1.40	97.9	8,023	1,323	7.00	42.51	0.47	52.0
March	896,983	45,720	2.17	42.66	1.46	110.7	6,912	1,140	6.92	41.99	0.45	68.2
April	807,001	41,015	2.16	42.44	1.45	101.8	8,592	1,414	8.37	50.85	0.42	88.7
May	871,890	44,729	2.16	42.13	1.44	96.6	9,231	1,536	9.82	59.07	0.45	82.6
June	1,022,903	53,300	2.10	40.25	1.35	82.6	7,612	1,262	10.41	62.76	0.50	67.3
July	1,155,747	60,545	2.11	40.30	1.28	80.1	9,030	1,466	11.83	72.83	0.51	59.3
August	1,254,473	65,150	2.11	40.61	1.32	86.6	9,118	1,492	9.46	57.81	0.51	62.6
Sept	1,156,705	60,441	2.12	40.58	1.30	95.0	8,154	1,342	9.40	57.14	0.51	76.1
October	1,141,983	59,814	2.07	39.59	1.28	107.2	8,387	1,390	10.01	60.48	0.54	77.1
November	1,097,110	57,377	2.08	39.83	1.29	116.3	9,715	1,599	10.09	61.31	0.50	87.0
December	1,095,100	57,362	2.08	39.64	1.32	86.4	7,939	1,323	10.78	64.72	0.48	60.9
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	W	W	0.47	59.9
June	1,042,460	54,220	2.07	39.86	1.31	90.4	7,471	1,241	W	W	0.47	65.9
July	1,095,129	57,572	2.06	39.15	1.22	81.1	6,695	1,121	W	W	0.48	65.6
August	1,187,341	62,125	2.05	39.16	1.29	92.8	7,022	1,162	W	W	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	118.5
March	940,506	48,770	2.04	39.42	1.33	106.9	7,265	1,210	W	W	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	892,553	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	6,853	1,129	14.69	89.17	0.33	60.6
August	1,075,669	56,419	2.06	39.28	1.30	87.1	5,477	902	W	W	0.36	46.5
Sept	945,615	49,944	2.05	38.87	1.25	90.8	7,457	1,240	W	W	0.38	63.7
Year to Date												
2016	9,182,079	476,216	2.13	41.00	1.36	91.2	75,768	12,495	9.08	55.10	0.48	66.2
2017	9,295,097	485,964	2.06	39.48	1.29	94.3	68,860	11,477	11.46	68.78	0.49	70.5
2018	8,397,456	439,501	2.06	39.31	1.30	89.6	90,932	15,072	14.03	84.81	0.41	62.1
Rolling 12 Months Ending in September												
2017	12,629,290	660,518	2.07	39.53	1.29	96.2	94,902	15,789	W	W	0.49	71.5
2018	11,363,388	595,901	2.05	39.13	1.29	91.2	119,049	19,722	W	W	0.43	62.2

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 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), 2008 - September 2018 (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												
2008	199,724	7,040	2.11	59.72	4.98	111.5	8,089,467	7,879,046	9.01	9.26	102.5	4.12
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	W	W	5.56	74.1	9,951,815	9,628,733	3.37	3.49	87.0	W
Year 2016												
January	9,640	341	1.38	38.93	5.68	79.8	826,179	798,251	3.02	3.13	89.9	2.52
February	11,273	408	1.30	35.80	5.53	96.1	736,278	711,506	2.70	2.79	89.6	2.36
March	10,313	363	1.41	40.14	5.33	81.1	797,607	771,918	2.23	2.30	90.4	2.21
April	10,308	369	1.35	37.75	5.56	81.0	773,337	748,523	2.42	2.50	90.9	2.31
May	8,554	307	1.32	36.76	5.35	65.8	857,644	830,896	2.39	2.47	91.1	2.31
June	6,895	240	1.41	40.48	4.67	50.1	1,020,410	988,673	2.67	2.75	91.4	2.39
July	10,032	355	1.47	41.45	5.14	70.8	1,189,145	1,151,122	2.97	3.07	91.3	2.55
August	11,033	398	1.75	48.48	5.42	76.5	1,205,876	1,163,920	2.95	3.06	91.4	2.52
Sept	10,741	381	2.07	58.30	5.17	84.6	968,648	935,630	3.07	3.18	91.1	2.55
October	8,844	317	1.98	55.43	5.69	92.5	795,915	770,111	3.13	3.23	90.3	2.51
November	9,365	333	2.26	63.59	5.69	82.0	718,522	695,273	3.02	3.12	90.4	2.47
December	9,945	355	2.07	57.94	5.43	82.3	729,545	705,358	3.96	4.10	89.9	2.82
Year 2017												
January	7,058	251	2.14	60.16	5.67	55.9	715,582	691,578	4.11	4.25	85.8	2.88
February	7,593	271	2.00	56.03	5.85	78.1	628,949	608,845	3.56	3.67	86.9	2.63
March	8,628	309	2.06	57.51	5.29	87.2	734,674	711,169	3.35	3.46	87.3	2.66
April	5,835	208	2.00	55.96	5.34	86.1	689,233	667,137	3.38	3.49	87.4	2.65
May	6,776	242	2.05	57.46	5.57	59.6	766,572	742,712	3.48	3.59	88.1	W
June	8,657	308	W	W	5.55	69.9	910,687	881,511	3.29	3.40	87.4	W
July	8,498	302	W	W	5.50	70.1	1,133,095	1,095,411	3.21	3.32	87.1	W
August	7,972	284	W	W	5.47	72.8	1,076,917	1,041,412	3.13	3.23	87.4	W
Sept	7,915	284	W	W	5.43	80.6	910,005	879,186	3.16	3.27	87.1	W
October	8,347	297	W	W	5.61	94.6	823,614	797,394	3.13	3.24	86.7	W
November	7,469	266	W	W	5.67	71.4	720,648	697,890	3.35	3.46	86.5	W
December	8,088	287	2.17	60.99	5.74	78.0	841,838	814,486	3.63	3.75	86.2	2.80
Year 2018												
January	7,009	248	2.38	67.41	5.31	58.8	779,006	754,166	5.02	5.19	79.6	3.50
February	7,769	277	2.43	68.09	5.49	81.9	688,539	667,072	3.61	3.72	78.8	2.79
March	7,841	281	2.54	70.89	5.54	91.6	749,405	725,132	3.18	3.29	80.0	W
April	6,564	232	2.56	72.38	6.09	71.7	706,952	685,216	3.13	3.23	80.1	2.58
May	4,344	152	2.41	68.58	6.09	67.7	814,786	789,317	3.04	3.14	78.8	2.56
June	7,382	260	2.73	77.61	5.97	68.7	927,153	897,864	3.11	3.21	81.3	2.61
July	8,307	293	W	W	5.73	70.2	1,156,051	1,120,081	3.29	3.40	80.4	W
August	8,443	298	W	W	5.67	74.3	1,136,864	1,101,523	3.27	3.38	80.8	W
Sept	8,158	288	W	W	5.63	74.1	1,002,649	970,676	3.11	3.21	81.0	W
Year to Date												
2016	88,788	3,162	1.50	42.25	5.34	75.8	8,375,124	8,100,438	2.74	2.83	90.9	2.43
2017	68,933	2,458	W	W	5.52	72.1	7,565,715	7,318,962	3.37	3.49	87.2	W
2018	65,816	2,329	W	W	5.70	72.8	7,961,406	7,711,048	3.39	3.50	80.2	W
Rolling 12 Months Ending in September												
2017	97,086	3,463	W	W	5.54	75.4	9,809,697	9,489,704	3.37	3.48	87.8	W
2018	89,720	3,179	W	W	5.69	74.7	10,347,506	10,020,818	3.39	3.50	81.5	W

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

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- See 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, 2008 - September 2018

	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												
2008	15,347,396	764,399	2.06	41.32	0.93	100.5	240,937	38,891	15.83	98.09	0.60	99.7
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
Year 2016												
January	750,914	39,064	2.17	41.71	1.18	85.5	6,190	1,022	7.88	47.74	0.44	58.8
February	722,024	37,129	2.16	41.95	1.23	98.2	5,814	955	6.92	42.16	0.41	64.1
March	685,422	34,609	2.19	43.49	1.34	110.9	5,223	851	6.69	41.07	0.40	77.5
April	612,742	30,953	2.19	43.39	1.31	107.4	6,897	1,126	8.35	51.19	0.37	106.4
May	655,166	33,408	2.17	42.60	1.25	98.5	6,742	1,114	9.12	55.16	0.40	91.7
June	775,536	39,900	2.15	41.79	1.24	85.9	5,511	908	10.51	63.80	0.44	70.9
July	849,005	43,981	2.17	41.99	1.15	81.1	7,117	1,142	11.54	71.91	0.52	66.7
August	925,332	47,610	2.17	42.19	1.19	88.3	6,737	1,090	9.15	56.57	0.51	66.2
Sept	851,137	43,822	2.18	42.34	1.18	97.6	5,514	896	9.00	55.39	0.49	79.2
October	842,651	43,693	2.12	40.99	1.16	110.5	5,205	851	9.80	59.94	0.52	73.4
November	805,502	41,615	2.13	41.25	1.20	117.8	6,780	1,106	9.80	60.07	0.48	88.2
December	781,447	40,423	2.13	41.17	1.21	85.4	5,565	925	10.71	64.43	0.44	65.2
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	700,041	36,379	2.10	40.33	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	658,511	34,012	2.10	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	71.5
August	806,053	42,128	2.11	40.46	1.18	87.7	4,686	769	15.08	91.87	0.34	61.0
Sept	701,123	36,855	2.12	40.31	1.14	91.0	5,414	897	15.44	93.24	0.35	66.3
Year to Date												
2016	6,827,277	350,476	2.17	42.33	1.22	93.0	55,744	9,104	8.87	54.31	0.45	73.6
2017	6,836,172	353,749	2.12	41.02	1.17	94.9	52,004	8,616	11.34	68.46	0.48	75.8
2018	6,238,590	325,612	2.10	40.32	1.17	90.4	58,108	9,566	14.01	85.16	0.36	67.7
Rolling 12 Months Ending in September												
2017	9,265,772	479,480	2.12	41.05	1.18	96.9	69,554	11,497	11.03	66.70	0.47	75.7
2018	8,414,047	439,458	2.10	40.28	1.16	92.6	76,527	12,590	13.61	82.73	0.38	68.4

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

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Table 4.2. Receipts, Average Cost, and Quality of Fossil Fuels: Electric Utilities, 2008 - September 2018 (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												
2008	80,987	2,843	2.13	60.51	5.36	123.8	2,856,354	2,784,642	9.15	9.39	102.0	3.33
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
Year 2016												
January	7,935	278	1.15	32.96	5.67	91.8	394,925	382,074	3.27	3.38	97.1	2.57
February	9,837	356	1.13	31.18	5.53	131.0	356,803	344,669	2.96	3.06	96.8	2.43
March	8,402	294	1.21	34.47	5.28	103.8	383,424	371,055	2.53	2.61	97.4	2.33
April	8,436	300	1.14	31.95	5.58	92.1	367,155	355,539	2.72	2.80	97.6	2.42
May	7,842	281	1.22	34.16	5.35	94.9	412,465	399,342	2.68	2.77	97.4	2.40
June	6,325	220	1.33	38.34	4.59	71.4	501,782	485,899	2.88	2.97	96.9	2.46
July	9,587	340	1.43	40.50	5.10	104.6	571,042	552,828	3.20	3.31	96.5	2.62
August	9,306	335	1.62	45.01	5.45	99.4	571,170	551,024	3.23	3.34	96.9	2.59
Sept	9,059	320	2.00	56.51	5.12	102.8	457,872	442,147	3.43	3.55	97.3	2.64
October	7,088	253	1.87	52.47	5.71	146.9	370,666	358,541	3.53	3.65	96.7	2.58
November	7,871	279	2.22	62.85	5.74	116.3	339,777	328,019	3.36	3.48	97.4	2.54
December	8,017	284	1.99	56.17	5.39	108.8	348,255	336,401	4.15	4.30	97.0	2.78
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	88.5	3.29
February	7,769	277	2.43	68.09	5.49	117.9	330,518	320,418	3.81	3.93	89.1	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	558,184	541,016	3.29	3.39	84.2	2.66
August	8,183	288	2.82	80.03	5.67	105.4	538,581	522,123	3.34	3.45	85.2	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
Year to Date												
2016	76,730	2,723	1.37	38.53	5.31	98.7	4,016,639	3,884,578	3.01	3.11	97.1	2.51
2017	67,855	2,420	2.08	58.41	5.52	115.1	3,660,179	3,542,114	3.61	3.73	96.9	2.68
2018	64,731	2,288	2.64	74.73	5.70	106.2	3,858,563	3,739,042	3.54	3.65	86.7	2.71
Rolling 12 Months Ending in September												
2017	90,831	3,235	2.07	58.14	5.54	116.6	4,718,878	4,565,074	3.63	3.75	97.0	2.67
2018	87,357	3,092	2.57	72.47	5.69	110.6	4,992,767	4,837,755	3.56	3.67	88.7	2.70

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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.

- Values for 2017 and prior years are final. Values for 2018 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 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2008 - September 2018

	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												
2008	5,395,142	281,258	2.03	38.98	1.04	100.4	82,124	13,657	16.30	98.03	0.41	94.4
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
Year 2016												
January	264,906	14,431	1.94	35.56	1.72	87.7	2,670	459	7.86	45.79	0.42	64.8
February	241,497	12,970	1.92	35.76	1.91	101.0	1,867	313	6.94	41.57	0.47	42.4
March	192,217	10,216	2.04	38.36	1.89	117.0	1,484	256	W	W	0.47	66.8
April	178,203	9,323	1.99	38.00	1.97	90.2	1,473	252	W	W	0.50	74.9
May	200,347	10,560	2.08	39.52	2.05	94.7	2,331	396	11.84	69.75	0.48	98.3
June	228,760	12,535	1.87	34.19	1.72	74.5	1,842	312	10.09	59.54	0.47	82.9
July	288,156	15,689	1.89	34.68	1.67	78.4	1,828	310	12.96	76.40	0.45	58.9
August	309,421	16,607	1.89	35.21	1.71	83.3	2,262	383	10.26	60.58	0.48	69.4
Sept	289,363	15,859	1.91	34.96	1.65	90.6	2,478	420	10.16	59.98	0.49	92.3
October	280,681	15,236	1.88	34.66	1.62	101.0	2,885	492	10.39	61.12	0.49	111.5
November	276,435	15,051	1.91	35.16	1.53	117.1	2,652	446	10.79	64.16	0.47	115.5
December	297,372	16,171	1.91	35.08	1.60	91.6	2,202	370	W	W	0.50	65.7
Year 2017												
January	297,849	16,042	1.92	35.75	1.59	96.7	2,862	488	13.96	82.04	0.47	103.9
February	254,381	13,690	1.88	34.92	1.59	110.9	1,514	254	11.89	70.84	0.50	70.2
March	251,712	13,439	1.88	35.27	1.75	103.1	1,436	247	11.97	69.71	0.44	91.2
April	235,324	12,633	1.85	34.48	1.66	99.2	1,436	242	W	W	0.44	83.2
May	238,355	12,976	1.86	34.11	1.67	97.1	1,790	306	W	W	0.45	79.3
June	239,687	13,070	1.86	34.15	1.67	87.3	1,559	267	W	W	0.42	64.2
July	257,789	14,218	1.85	33.64	1.55	80.5	1,775	303	W	W	0.48	79.4
August	279,845	15,249	1.83	33.52	1.64	91.5	1,702	289	W	W	0.43	72.3
Sept	258,366	13,963	1.82	33.65	1.63	92.0	1,543	267	W	W	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	W	W	0.43	111.2
April	199,704	10,574	1.88	35.52	1.61	105.1	1,236	210	W	W	0.44	58.2
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	1,587	270	15.97	93.81	0.45	60.1
August	256,223	13,648	1.87	35.05	1.68	87.0	656	111	W	W	0.31	24.1
Sept	232,368	12,512	1.82	33.92	1.56	92.7	1,887	318	W	W	0.39	82.8
Year to Date												
2016	2,192,870	118,190	1.94	35.98	1.79	88.3	18,236	3,102	9.63	56.69	0.47	69.3
2017	2,313,307	125,278	1.86	34.40	1.64	94.5	15,617	2,662	11.90	69.84	0.45	79.1
2018	2,033,333	107,856	1.88	35.53	1.69	89.6	31,159	5,238	14.10	84.23	0.45	67.9
Rolling 12 Months Ending in September												
2017	3,167,795	171,736	1.87	34.55	1.62	96.4	23,357	3,970	W	W	0.46	83.5
2018	2,776,241	148,144	1.87	34.99	1.68	89.4	40,246	6,766	W	W	0.46	67.4

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

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

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Table 4.3. Receipts, Average Cost, and Quality of Fossil Fuels: Independent Power Producers, 2008 - September 2018 (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												
2008	79,122	2,788	1.47	41.85	4.63	98.8	4,061,830	3,956,155	8.93	9.17	100.5	5.07
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	W
2015	14,550	524	2.45	68.22	5.26	67.3	4,683,291	4,530,195	2.94	3.04	93.2	W
2016	13,573	492	2.50	68.88	5.44	69.9	4,791,729	4,634,518	2.54	2.63	94.0	W
2017	0	0	--	--	--	0.0	4,346,156	4,201,573	3.08	3.19	94.0	2.54
Year 2016												
January	1,305	49	W	W	5.70	182.6	366,954	353,940	2.80	2.91	93.1	W
February	1,314	47	W	W	5.44	97.1	322,866	312,018	2.43	2.52	93.5	W
March	1,337	48	W	W	5.37	65.3	353,542	341,974	1.89	1.95	94.0	W
April	1,203	44	W	W	5.30	88.5	345,599	334,192	2.07	2.14	94.3	W
May	506	18	W	W	5.28	30.6	384,972	373,040	2.04	2.11	94.6	W
June	348	12	W	W	5.32	20.5	457,044	442,942	2.41	2.49	94.4	W
July	223	8	W	W	5.67	12.1	552,956	535,139	2.66	2.75	94.4	W
August	1,510	55	W	W	5.24	77.3	569,120	549,584	2.62	2.71	94.3	W
Sept	1,483	53	W	W	5.43	90.7	448,820	433,556	2.61	2.70	94.1	W
October	1,549	56	W	W	5.59	78.5	362,466	350,675	2.60	2.69	94.0	W
November	1,294	47	W	W	5.43	83.4	313,867	304,227	2.59	2.67	93.5	W
December	1,501	55	W	W	5.50	84.2	313,521	303,233	3.83	3.95	93.6	W
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	94.2	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	W
May	0	0	--	--	--	0.0	315,859	305,704	3.21	3.31	94.8	W
June	0	0	--	--	--	0.0	401,526	388,362	2.93	3.02	94.2	W
July	0	0	--	--	--	0.0	510,414	493,178	2.88	2.98	93.8	W
August	0	0	--	--	--	0.0	490,671	474,207	2.74	2.84	94.5	W
Sept	0	0	--	--	--	0.0	411,228	396,942	2.66	2.75	93.8	W
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	86.7	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	87.0	W
April	0	0	--	--	--	0.0	303,547	293,740	2.94	3.04	87.7	W
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	530,692	513,624	3.34	3.45	87.0	2.85
August	0	0	--	--	--	0.0	530,208	513,315	3.21	3.32	87.4	W
Sept	0	0	--	--	--	0.0	459,798	444,660	2.88	2.98	88.1	W
Year to Date												
2016	9,229	335	2.50	68.93	5.41	65.3	3,801,874	3,676,383	2.42	2.50	94.1	W
2017	0	0	--	--	--	0.0	3,297,934	3,188,027	3.08	3.18	94.1	2.53
2018	0	0	--	--	--	0.0	3,523,060	3,408,654	3.25	3.36	87.0	2.75
Rolling 12 Months Ending in September												
2017	4,344	158	W	W	5.51	22.6	4,287,788	4,146,161	3.05	3.15	94.0	W
2018	0	0	--	--	--	0.0	4,571,282	4,422,200	3.21	3.32	88.4	W

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

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Table 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commercial Sector, 2008 - September 2018

	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												
2008	43,997	2,009	2.65	58.12	1.73	99.4	3,800	633	17.84	107.10	0.37	102.0
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	W	W	2.50	17.1	0	0	--	--	--	0.0
2015	2,439	109	W	W	2.55	13.6	0	0	--	--	--	0.0
2016	1,288	57	W	W	3.03	8.3	0	0	--	--	--	0.0
2017	548	24	W	W	2.99	3.9	0	0	--	--	--	0.0
Year 2016												
January	139	6	W	W	2.87	8.1	0	0	--	--	--	0.0
February	124	5	W	W	2.84	7.2	0	0	--	--	--	0.0
March	163	7	W	W	3.03	9.7	0	0	--	--	--	0.0
April	9	0	W	W	2.98	0.9	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	92	4	W	W	3.09	8.2	0	0	--	--	--	0.0
Sept	153	7	W	W	3.14	13.5	0	0	--	--	--	0.0
October	159	7	W	W	3.15	14.1	0	0	--	--	--	0.0
November	237	10	W	W	3.04	17.6	0	0	--	--	--	0.0
December	214	9	W	W	3.05	12.5	0	0	--	--	--	0.0
Year 2017												
January	111	5	W	W	2.99	6.9	0	0	--	--	--	0.0
February	91	4	W	W	2.95	6.9	0	0	--	--	--	0.0
March	104	5	W	W	3.02	7.0	0	0	--	--	--	0.0
April	1	0	W	W	2.96	0.1	0	0	--	--	--	0.0
May	11	0	W	W	3.23	1.2	0	0	--	--	--	0.0
June	17	1	W	W	3.02	1.8	0	0	--	--	--	0.0
July	0	0	--	--	--	0.0	0	0	--	--	--	0.0
August	4	0	W	W	2.77	0.4	0	0	--	--	--	0.0
Sept	72	3	W	W	2.96	6.9	0	0	--	--	--	0.0
October	35	2	W	W	2.96	3.6	0	0	--	--	--	0.0
November	13	1	W	W	3.04	1.1	0	0	--	--	--	0.0
December	89	4	W	W	3.01	6.0	0	0	--	--	--	0.0
Year 2018												
January	95	4	W	W	3.11	6.0	0	0	--	--	--	0.0
February	31	1	W	W	3.19	2.5	0	0	--	--	--	0.0
March	5	0	W	W	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
Year to Date												
2016	678	30	W	W	2.99	6.0	0	0	--	--	--	0.0
2017	411	18	W	W	2.99	4.0	0	0	--	--	--	0.0
2018	130	6	W	W	3.13	1.3	0	0	--	--	--	0.0
Rolling 12 Months Ending in September												
2017	1,021	45	W	W	3.04	7.1	0	0	--	--	--	0.0
2018	267	12	W	W	3.06	1.9	0	0	--	--	--	0.0

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

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- See the 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 4.4. Receipts, Average Cost, and Quality of Fossil Fuels: Commerical Sector, 2008 - September 2018 (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												
2008	370	14	2.14	58.36	5.53	135.3	71,670	69,877	9.01	9.24	105.5	6.94
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	W	W	4.9	W
2015	0	0	--	--	--	0.0	6,499	6,371	W	W	5.5	W
2016	0	0	--	--	--	0.0	8,005	7,766	W	W	6.1	W
2017	0	0	--	--	--	0.0	7,841	7,593	W	W	1.4	W
Year 2016												
January	0	0	--	--	--	0.0	1,241	1,203	W	W	11.3	W
February	0	0	--	--	--	0.0	488	477	W	W	4.9	W
March	0	0	--	--	--	0.0	620	610	W	W	6.2	W
April	0	0	--	--	--	0.0	578	567	W	W	6.1	W
May	0	0	--	--	--	0.0	599	587	W	W	6.1	W
June	0	0	--	--	--	0.0	599	585	W	W	5.3	W
July	0	0	--	--	--	0.0	691	667	W	W	5.0	W
August	0	0	--	--	--	0.0	802	765	W	W	5.6	W
Sept	0	0	--	--	--	0.0	610	591	W	W	5.3	W
October	0	0	--	--	--	0.0	598	575	W	W	5.9	W
November	0	0	--	--	--	0.0	613	589	W	W	6.8	W
December	0	0	--	--	--	0.0	568	549	W	W	5.3	W
Year 2017												
January	0	0	--	--	--	0.0	662	639	W	W	1.6	W
February	0	0	--	--	--	0.0	646	624	W	W	1.8	W
March	0	0	--	--	--	0.0	680	662	W	W	1.7	W
April	0	0	--	--	--	0.0	502	490	W	W	1.3	W
May	0	0	--	--	--	0.0	497	483	W	W	1.2	W
June	0	0	--	--	--	0.0	615	595	W	W	1.1	W
July	0	0	--	--	--	0.0	636	613	W	W	1.0	W
August	0	0	--	--	--	0.0	809	778	W	W	1.3	W
Sept	0	0	--	--	--	0.0	707	685	W	W	1.5	W
October	0	0	--	--	--	0.0	605	588	W	W	1.4	W
November	0	0	--	--	--	0.0	749	725	W	W	2.0	W
December	0	0	--	--	--	0.0	734	711	W	W	1.6	W
Year 2018												
January	0	0	--	--	--	0.0	844	818	W	W	1.7	W
February	0	0	--	--	--	0.0	709	688	W	W	1.6	W
March	0	0	--	--	--	0.0	768	746	W	W	1.7	W
April	0	0	--	--	--	0.0	732	713	W	W	1.7	W
May	0	0	--	--	--	0.0	776	758	W	W	1.7	W
June	0	0	--	--	--	0.0	670	650	W	W	1.4	W
July	0	0	--	--	--	0.0	790	760	W	W	1.6	W
August	0	0	--	--	--	0.0	786	764	W	W	1.6	W
Sept	0	0	--	--	--	0.0	744	723	W	W	1.6	W
Year to Date												
2016	0	0	--	--	--	0.0	6,227	6,053	W	W	6.2	W
2017	0	0	--	--	--	0.0	5,753	5,568	W	W	1.3	W
2018	0	0	--	--	--	0.0	6,819	6,621	W	W	1.6	W
Rolling 12 Months Ending in September												
2017	0	0	--	--	--	0.0	7,531	7,281	W	W	1.6	W
2018	0	0	--	--	--	0.0	8,908	8,645	W	W	1.6	W

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

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2008 - September 2018

	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												
2008	493,724	22,044	2.72	60.96	1.28	100.7	48,822	7,958	12.50	76.69	1.01	109.0
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	W	W	1.33	68.4	2,290	373	17.91	109.99	1.43	15.6
2015	263,630	12,132	W	W	1.35	71.4	2,359	385	13.45	82.47	1.42	16.9
2016	210,749	9,859	W	W	1.30	67.0	2,541	412	10.51	64.79	1.27	18.3
2017	192,637	9,178	W	W	1.35	70.7	1,850	297	11.18	69.57	1.42	15.2
Year 2016												
January	19,357	897	W	W	1.36	64.2	237	38	11.34	71.47	1.49	18.7
February	17,418	814	W	W	1.42	63.5	342	55	8.70	53.76	1.16	19.8
March	19,181	888	W	W	1.29	69.7	205	33	W	W	1.18	18.5
April	16,048	739	W	W	1.43	68.7	222	36	W	W	1.36	20.8
May	16,376	761	2.67	57.42	1.39	64.6	158	26	11.79	72.81	1.49	11.7
June	18,607	865	2.66	57.25	1.25	69.6	259	42	10.38	64.15	1.45	21.3
July	18,586	875	2.64	56.18	1.23	66.2	85	14	11.10	68.65	1.14	7.1
August	19,629	929	W	W	1.16	71.9	119	19	11.84	73.14	1.11	12.4
Sept	16,052	753	W	W	1.20	65.1	162	27	11.67	71.25	1.12	16.5
October	18,491	879	W	W	1.25	78.1	297	48	10.34	63.78	1.20	25.7
November	14,936	701	W	W	1.27	64.1	283	47	10.57	63.80	1.30	30.7
December	16,067	759	W	W	1.33	59.3	172	28	W	W	1.12	18.0
Year 2017												
January	15,758	742	W	W	1.38	58.7	128	21	11.64	72.27	1.06	12.8
February	15,865	744	W	W	1.18	69.1	121	19	11.56	72.24	1.36	15.1
March	17,861	858	W	W	1.34	75.2	178	29	10.66	66.36	1.22	18.7
April	16,089	759	W	W	1.23	75.3	160	26	W	W	1.27	16.7
May	16,329	796	W	W	1.16	76.3	155	25	W	W	1.21	17.7
June	15,911	757	W	W	1.37	72.5	142	23	W	W	1.11	17.9
July	15,852	763	2.46	51.07	1.30	73.3	95	15	W	W	1.30	12.4
August	16,644	784	W	W	1.36	74.7	110	18	W	W	1.55	14.1
Sept	14,897	715	W	W	1.17	72.2	151	24	W	W	1.51	17.3
October	15,687	741	W	W	1.36	67.5	149	24	11.43	71.09	1.58	16.1
November	15,335	734	W	W	1.43	68.2	199	32	11.67	72.03	1.71	13.2
December	16,408	785	W	W	1.89	68.9	263	42	11.14	69.14	1.79	13.5
Year 2018												
January	15,278	735	W	W	1.12	59.1	408	65	12.64	79.32	1.32	12.3
February	13,828	662	W	W	1.26	59.6	187	30	11.38	71.32	1.20	19.7
March	15,083	722	W	W	1.24	63.4	234	38	W	W	1.32	22.4
April	13,037	622	2.53	53.03	1.29	61.3	153	24	W	W	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	72.1	138	22	14.64	89.87	1.42	12.1
August	13,393	643	2.50	52.09	1.23	68.2	135	22	W	W	1.39	13.1
Sept	12,124	578	2.55	53.48	1.28	59.1	155	25	W	W	1.12	14.4
Year to Date												
2016	161,254	7,520	W	W	1.30	67.0	1,789	290	10.25	63.32	1.29	16.4
2017	145,207	6,919	W	W	1.28	71.6	1,239	199	11.07	69.08	1.28	15.9
2018	125,403	6,027	W	W	1.23	63.9	1,665	267	13.23	82.49	1.30	13.9
Rolling 12 Months Ending in September												
2017	194,702	9,257	W	W	1.28	70.3	1,991	321	W	W	1.26	18.4
2018	172,833	8,287	W	W	1.32	65.0	2,276	366	W	W	1.42	13.9

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

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Table 4.5. Receipts, Average Cost, and Quality of Fossil Fuels: Industrial Sector, 2008 - September 2018 (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												
2008	39,246	1,396	3.34	93.84	4.92	117.9	1,099,613	1,068,372	8.95	9.22	111.9	7.10
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	W	W	5.83	23.2	742,347	718,360	W	W	62.7	W
2015	8,189	304	W	W	5.50	24.1	765,964	740,975	W	W	60.6	W
2016	3,664	135	W	W	5.84	11.2	744,034	721,358	W	W	59.6	W
2017	2,356	85	W	W	5.84	8.1	803,435	778,741	W	W	61.9	W
Year 2016												
January	400	15	W	W	5.94	15.3	63,059	61,034	W	W	59.0	W
February	122	4	W	W	6.10	4.3	56,120	54,342	W	W	57.2	W
March	574	21	W	W	5.88	23.8	60,020	58,279	W	W	58.9	W
April	669	25	W	W	5.81	31.0	60,005	58,224	W	W	61.3	W
May	206	8	W	W	5.64	7.0	59,608	57,927	W	W	59.3	W
June	222	8	W	W	5.94	7.0	60,985	59,247	W	W	58.7	W
July	222	8	W	W	5.94	7.0	64,456	62,488	W	W	58.3	W
August	217	8	W	W	5.81	7.2	64,784	62,548	W	W	57.7	W
Sept	200	8	W	W	5.64	9.6	61,346	59,335	W	W	58.7	W
October	207	8	W	W	5.66	7.9	62,185	60,320	W	W	60.7	W
November	200	8	W	W	5.47	7.0	64,265	62,438	W	W	63.4	W
December	427	16	W	W	5.99	15.4	67,201	65,176	W	W	62.7	W
Year 2017												
January	0	0	--	--	--	0.0	69,093	66,857	W	W	62.4	W
February	0	0	--	--	--	0.0	66,939	64,865	W	W	67.1	W
March	0	0	--	--	--	0.0	69,909	67,773	W	W	65.7	W
April	0	0	--	--	--	0.0	66,465	64,429	W	W	65.2	W
May	0	0	--	--	--	0.0	66,784	64,714	W	W	63.7	W
June	271	9	W	W	5.75	9.5	66,331	64,299	W	W	61.6	W
July	253	9	W	W	5.85	9.4	67,662	65,619	W	W	58.6	W
August	296	11	W	W	5.85	10.9	65,688	63,679	W	W	58.7	W
Sept	257	9	W	W	5.85	11.7	62,978	61,019	W	W	59.4	W
October	893	32	W	W	5.85	35.3	63,058	61,209	W	W	58.8	W
November	386	14	W	W	5.85	16.1	66,895	64,843	W	W	62.6	W
December	0	0	--	--	--	0.0	71,633	69,435	W	W	60.6	W
Year 2018												
January	0	0	--	--	--	0.0	67,916	65,839	W	W	57.3	W
February	0	0	--	--	--	0.0	59,419	57,646	W	W	56.6	W
March	0	0	--	--	--	0.0	59,663	57,973	W	W	54.4	W
April	0	0	--	--	--	0.0	60,223	58,528	W	W	56.1	W
May	0	0	--	--	--	0.0	61,846	60,048	W	W	57.7	W
June	0	0	--	--	--	0.0	64,149	62,365	W	W	58.4	W
July	160	6	W	W	5.83	7.3	66,384	64,680	W	W	57.7	W
August	260	10	W	W	5.55	12.5	67,289	65,321	W	W	57.5	W
Sept	664	25	W	W	6.02	30.8	66,074	64,330	W	W	59.4	W
Year to Date												
2016	2,830	104	W	W	5.85	11.7	550,383	533,425	W	W	58.8	W
2017	1,078	39	W	W	5.82	4.9	601,849	583,254	W	W	62.4	W
2018	1,084	41	W	W	5.88	6.0	572,964	556,730	W	W	57.2	W
Rolling 12 Months Ending in September												
2017	1,912	70	W	W	5.80	6.3	795,500	771,187	W	W	62.3	W
2018	2,363	87	W	W	5.86	9.3	774,549	752,217	W	W	58.1	W

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Table 4.6.A. Receipts of Coal Delivered for Electricity Generation by State, September 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	4	5	-9.7%	0	0	4	5	0	0	0	0
Connecticut	0	0	--	0	0	0	0	0	0	0	0
Maine	4	5	-9.7%	0	0	4	5	0	0	0	0
Massachusetts	0	0	--	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	--	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	1,462	1,890	-23.0%	0	31	1,462	1,859	0	0	0	0
New Jersey	45	57	-21.0%	0	0	45	57	0	0	0	0
New York	0	0	--	0	0	0	0	0	0	0	0
Pennsylvania	1,416	1,833	-23.0%	0	31	1,416	1,802	0	0	0	0
East North Central	10,735	11,882	-9.7%	6,356	7,267	4,218	4,423	0	0	161	193
Illinois	3,526	3,231	9.1%	657	499	2,708	2,566	0	0	161	167
Indiana	2,527	2,249	12.0%	2,359	2,114	167	135	0	0	0	0
Michigan	1,674	2,558	-35.0%	1,641	2,511	32	47	0	0	0	1
Ohio	1,485	2,174	-32.0%	175	499	1,310	1,675	0	0	0	0
Wisconsin	1,523	1,670	-8.8%	1,523	1,645	0	0	0	0	0	25
West North Central	9,835	10,101	-2.6%	9,621	9,833	0	0	0	3	214	264
Iowa	1,307	1,249	4.6%	1,155	1,107	0	0	0	0	151	142
Kansas	1,247	1,238	0.7%	1,247	1,238	0	0	0	0	0	0
Minnesota	1,181	1,065	11.0%	1,181	1,006	0	0	0	0	0	59
Missouri	2,887	3,351	-14.0%	2,887	3,348	0	0	0	3	0	0
Nebraska	1,018	1,071	-5.0%	955	1,008	0	0	0	0	63	63
North Dakota	2,112	2,028	4.1%	2,112	2,028	0	0	0	0	0	0
South Dakota	85	99	-14.0%	85	99	0	0	0	0	0	0
South Atlantic	6,549	6,853	-4.4%	5,636	5,948	836	834	0	0	77	71
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	1,029	1,008	2.1%	1,029	997	0	0	0	0	0	11
Georgia	1,471	1,536	-4.2%	1,447	1,526	0	0	0	0	24	10
Maryland	415	297	40.0%	0	0	406	283	0	0	8	14
North Carolina	1,070	1,167	-8.4%	1,049	1,131	2	15	0	0	19	21
South Carolina	442	472	-6.3%	442	472	0	0	0	0	0	0
Virginia	274	307	-11.0%	203	249	44	43	0	0	26	15
West Virginia	1,849	2,066	-11.0%	1,465	1,573	384	494	0	0	0	0
East South Central	4,384	4,024	8.9%	4,239	3,901	79	46	0	0	66	78
Alabama	1,114	1,283	-13.0%	1,114	1,283	0	0	0	0	0	0
Kentucky	2,637	2,127	24.0%	2,637	2,127	0	0	0	0	0	0
Mississippi	229	200	14.0%	150	155	79	46	0	0	0	0
Tennessee	404	415	-2.6%	338	337	0	0	0	0	66	78
West South Central	9,842	10,738	-8.3%	5,187	5,226	4,649	5,477	0	0	5	35
Arkansas	1,546	1,359	14.0%	1,294	1,138	246	216	0	0	5	5
Louisiana	799	537	49.0%	480	307	319	230	0	0	0	0
Oklahoma	852	1,517	-44.0%	737	1,390	116	96	0	0	0	30
Texas	6,644	7,325	-9.3%	2,676	2,391	3,968	4,934	0	0	0	0
Mountain	6,468	7,394	-13.0%	5,637	6,485	832	890	0	0	0	20
Arizona	1,462	1,586	-7.8%	1,462	1,586	0	0	0	0	0	0
Colorado	1,110	1,282	-13.0%	1,110	1,282	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	729	778	-6.4%	21	16	707	762	0	0	0	0
Nevada	144	45	218.0%	98	0	46	45	0	0	0	0
New Mexico	632	728	-13.0%	632	728	0	0	0	0	0	0
Utah	738	919	-20.0%	705	861	33	38	0	0	0	20
Wyoming	1,654	2,057	-20.0%	1,609	2,013	45	44	0	0	0	0
Pacific Contiguous	563	635	-11.0%	137	150	371	430	0	0	55	55
California	55	55	-0.3%	0	0	0	0	0	0	55	55
Oregon	137	150	-8.5%	137	150	0	0	0	0	0	0
Washington	371	430	-14.0%	0	0	371	430	0	0	0	0
Pacific Noncontiguous	102	16	526.0%	41	16	61	0	0	0	0	0
Alaska	41	16	153.0%	41	16	0	0	0	0	0	0
Hawaii	61	0	--	0	0	61	0	0	0	0	0
U.S. Total	49,944	53,538	-6.7%	36,855	38,857	12,512	13,963	0	3	578	715

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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) September 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	212	177	19.0%	45	45	167	133	0	0	0	0
Connecticut	105	0	--	0	0	105	0	0	0	0	0
Maine	46	46	1.1%	0	0	46	46	0	0	0	0
Massachusetts	0	87	-100.0%	0	0	0	87	0	0	0	0
New Hampshire	45	45	0.7%	45	45	0	0	0	0	0	0
Rhode Island	15	0	--	0	0	15	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	14,349	18,162	-21.0%	0	94	14,274	17,834	0	0	74	235
New Jersey	426	481	-11.0%	0	0	426	481	0	0	0	0
New York	271	244	11.0%	0	0	262	97	0	0	9	147
Pennsylvania	13,652	17,438	-22.0%	0	94	13,586	17,256	0	0	66	88
East North Central	99,251	104,326	-4.9%	58,696	63,646	39,108	38,858	0	0	1,446	1,823
Illinois	31,287	30,512	2.5%	5,826	5,922	24,072	22,944	0	0	1,389	1,646
Indiana	22,255	21,386	4.1%	20,740	20,288	1,515	1,098	0	0	0	0
Michigan	15,358	18,131	-15.0%	15,163	17,933	192	190	0	0	4	8
Ohio	16,482	19,623	-16.0%	3,152	4,998	13,330	14,625	0	0	0	0
Wisconsin	13,869	14,674	-5.5%	13,816	14,505	0	0	0	0	53	169
West North Central	84,516	86,370	-2.1%	82,088	83,871	0	0	6	18	2,422	2,481
Iowa	10,859	11,060	-1.8%	9,158	9,457	0	0	0	0	1,702	1,603
Kansas	8,991	8,843	1.7%	8,991	8,843	0	0	0	0	0	0
Minnesota	8,786	9,425	-6.8%	8,667	9,115	0	0	0	0	119	310
Missouri	26,920	28,092	-4.2%	26,915	28,074	0	0	6	18	0	0
Nebraska	9,416	10,414	-9.6%	8,814	9,846	0	0	0	0	601	568
North Dakota	18,317	17,521	4.5%	18,317	17,521	0	0	0	0	0	0
South Dakota	1,226	1,015	21.0%	1,226	1,015	0	0	0	0	0	0
South Atlantic	58,185	68,303	-15.0%	49,704	59,641	7,797	7,901	0	0	684	760
Delaware	0	200	-100.0%	0	0	0	200	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	8,610	11,700	-26.0%	8,551	11,549	0	26	0	0	59	126
Georgia	10,780	13,072	-18.0%	10,672	12,994	0	0	0	0	107	78
Maryland	3,323	2,826	18.0%	0	0	3,185	2,681	0	0	138	145
North Carolina	8,759	10,548	-17.0%	8,517	10,248	54	72	0	0	188	228
South Carolina	4,278	5,044	-15.0%	4,267	5,025	0	0	0	0	11	19
Virginia	3,548	4,564	-22.0%	2,982	3,956	386	443	0	0	180	165
West Virginia	18,887	20,349	-7.2%	14,714	15,868	4,172	4,480	0	0	0	0
East South Central	42,678	46,681	-8.6%	39,818	44,086	2,181	1,868	0	0	679	727
Alabama	11,480	12,055	-4.8%	11,480	12,055	0	0	0	0	0	0
Kentucky	23,485	24,950	-5.9%	23,485	24,950	0	0	0	0	0	0
Mississippi	3,368	3,001	12.0%	1,187	1,133	2,181	1,868	0	0	0	0
Tennessee	4,344	6,675	-35.0%	3,666	5,949	0	0	0	0	679	727
West South Central	77,435	90,482	-14.0%	41,946	41,487	35,247	48,654	0	0	242	341
Arkansas	12,118	9,931	22.0%	10,064	8,925	1,992	953	0	0	62	53
Louisiana	5,351	6,192	-14.0%	3,375	3,733	1,976	2,459	0	0	0	0
Oklahoma	7,029	7,916	-11.0%	6,059	6,848	790	780	0	0	180	288
Texas	52,937	66,443	-20.0%	22,448	21,981	30,489	44,463	0	0	0	0
Mountain	59,532	67,632	-12.0%	52,885	60,319	6,647	7,222	0	0	0	91
Arizona	12,448	12,254	1.6%	12,448	12,254	0	0	0	0	0	0
Colorado	10,737	12,043	-11.0%	10,737	12,043	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	5,697	6,278	-9.3%	163	201	5,534	6,077	0	0	0	0
Nevada	796	622	28.0%	378	182	418	440	0	0	0	0
New Mexico	5,207	8,304	-37.0%	5,207	8,304	0	0	0	0	0	0
Utah	8,379	9,080	-7.7%	8,071	8,680	308	309	0	0	0	91
Wyoming	16,268	19,050	-15.0%	15,881	18,655	387	396	0	0	0	0
Pacific Contiguous	2,627	3,225	-19.0%	261	439	1,886	2,325	0	0	480	461
California	480	461	4.1%	0	0	0	0	0	0	480	461
Oregon	261	439	-41.0%	261	439	0	0	0	0	0	0
Washington	1,886	2,325	-19.0%	0	0	1,886	2,325	0	0	0	0
Pacific Noncontiguous	718	606	18.0%	170	122	548	484	0	0	0	0
Alaska	170	122	39.0%	170	122	0	0	0	0	0	0
Hawaii	548	484	13.0%	0	0	548	484	0	0	0	0
U.S. Total	439,501	485,964	-9.6%	325,612	353,749	107,856	125,278	6	18	6,027	6,919

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

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

Table 4.7.A. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, September 2018 and 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	3	3	9.9%	0	0	3	3	0	0	0	0
Connecticut	1	0	NM	0	0	1	0	0	0	0	0
Maine	2	2	-30.0%	0	0	2	2	0	0	0	0
Massachusetts	0	0	-44.0%	0	0	0	0	0	0	0	0
New Hampshire	0	0	--	0	0	0	0	0	0	0	0
Rhode Island	0	0	-100.0%	0	0	0	0	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	100	43	135.0%	0	0	93	36	0	0	7	6
New Jersey	0	1	-79.0%	0	0	0	1	0	0	0	0
New York	43	1	NM	0	0	42	1	0	0	1	0
Pennsylvania	57	41	41.0%	0	0	51	35	0	0	6	6
East North Central	88	73	21.0%	36	54	49	15	0	0	3	3
Illinois	7	9	-26.0%	0	0	7	9	0	0	0	0
Indiana	23	22	3.8%	23	22	0	0	0	0	0	0
Michigan	12	23	-48.0%	11	22	0	0	0	0	1	1
Ohio	46	16	179.0%	1	9	43	6	0	0	2	2
Wisconsin	0	2	-84.0%	0	2	0	0	0	0	0	0
West North Central	35	28	22.0%	35	28	0	0	0	0	0	0
Iowa	7	6	12.0%	7	6	0	0	0	0	0	0
Kansas	5	9	-46.0%	5	9	0	0	0	0	0	0
Minnesota	2	5	-49.0%	2	5	0	0	0	0	0	0
Missouri	11	5	115.0%	11	5	0	0	0	0	0	0
Nebraska	1	0	474.0%	1	0	0	0	0	0	0	0
North Dakota	9	3	199.0%	9	3	0	0	0	0	0	0
South Dakota	0	0	--	0	0	0	0	0	0	0	0
South Atlantic	89	101	-13.0%	61	74	13	13	0	0	15	15
Delaware	4	0	NM	0	0	4	0	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	31	16	96.0%	30	11	0	0	0	0	1	5
Georgia	12	16	-27.0%	8	9	0	1	0	0	4	6
Maryland	9	8	10.0%	0	0	9	8	0	0	0	0
North Carolina	17	18	-3.0%	14	14	0	1	0	0	4	3
South Carolina	10	9	14.0%	5	7	0	0	0	0	4	1
Virginia	5	14	-62.0%	3	11	1	3	0	0	2	0
West Virginia	2	21	-93.0%	2	21	0	0	0	0	0	0
East South Central	138	11	NM	138	11	0	0	0	0	0	0
Alabama	4	1	162.0%	4	1	0	0	0	0	0	0
Kentucky	18	3	455.0%	18	3	0	0	0	0	0	0
Mississippi	12	1	NM	12	1	0	0	0	0	0	0
Tennessee	105	6	NM	105	6	0	0	0	0	0	0
West South Central	11	15	-31.0%	9	14	1	2	0	0	0	0
Arkansas	8	5	48.0%	8	4	0	1	0	0	0	0
Louisiana	0	0	--	0	0	0	0	0	0	0	0
Oklahoma	0	1	-100.0%	0	1	0	0	0	0	0	0
Texas	3	10	-70.0%	1	9	1	1	0	0	0	0
Mountain	24	33	-27.0%	24	30	1	3	0	0	0	0
Arizona	10	8	29.0%	10	8	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	3	-100.0%	0	0	0	3	0	0	0	0
Nevada	3	3	-6.6%	2	2	0	0	0	0	0	0
New Mexico	7	6	31.0%	7	6	0	0	0	0	0	0
Utah	1	5	-72.0%	1	5	0	0	0	0	0	0
Wyoming	3	9	-68.0%	3	9	0	0	0	0	0	0
Pacific Contiguous	0	2	-100.0%	0	0	0	2	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	0	--	0	0	0	0	0	0	0	0
Washington	0	2	-100.0%	0	0	0	2	0	0	0	0
Pacific Noncontiguous	752	773	-2.7%	594	580	158	193	0	0	0	0
Alaska	1	0	NM	1	0	0	0	0	0	0	0
Hawaii	751	773	-2.8%	593	580	158	193	0	0	0	0
U.S. Total	1,240	1,083	15.0%	897	792	318	267	0	0	25	24

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

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

Table 4.7.B. Receipts of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Thousand Barrels)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	1,147	216	430.0%	116	13	1,030	203	0	0	0	0
Connecticut	187	23	727.0%	0	0	187	23	0	0	0	0
Maine	256	89	186.0%	0	0	256	89	0	0	0	0
Massachusetts	421	84	401.0%	12	4	409	80	0	0	0	0
New Hampshire	184	9	NM	104	9	80	0	0	0	0	0
Rhode Island	100	11	788.0%	0	0	100	11	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	2,888	629	359.0%	839	185	1,976	378	0	0	72	66
New Jersey	217	11	NM	0	0	217	11	0	0	0	0
New York	1,976	306	547.0%	839	185	1,120	103	0	0	17	18
Pennsylvania	694	312	122.0%	0	0	639	264	0	0	55	48
East North Central	605	623	-2.9%	331	369	252	235	0	0	22	20
Illinois	64	93	-31.0%	3	3	61	90	0	0	0	0
Indiana	153	149	3.0%	152	149	1	0	0	0	0	0
Michigan	114	107	6.8%	108	98	0	0	0	0	6	9
Ohio	231	234	-1.3%	36	79	179	145	0	0	16	11
Wisconsin	42	40	4.5%	32	40	11	0	0	0	0	0
West North Central	359	301	19.0%	359	301	0	0	0	0	0	0
Iowa	91	72	27.0%	91	72	0	0	0	0	0	0
Kansas	69	71	-2.6%	69	71	0	0	0	0	0	0
Minnesota	21	33	-36.0%	21	33	0	0	0	0	0	0
Missouri	118	60	97.0%	118	60	0	0	0	0	0	0
Nebraska	5	3	43.0%	5	3	0	0	0	0	0	0
North Dakota	52	58	-11.0%	52	58	0	0	0	0	0	0
South Dakota	4	5	-12.0%	4	5	0	0	0	0	0	0
South Atlantic	3,015	2,465	22.0%	2,134	2,114	711	244	0	0	171	108
Delaware	85	13	540.0%	0	0	85	13	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	357	1,344	-73.0%	322	1,317	0	0	0	0	35	27
Georgia	202	161	25.0%	140	120	25	13	0	0	37	29
Maryland	411	143	187.0%	0	0	411	143	0	0	0	0
North Carolina	707	229	209.0%	668	192	0	12	0	0	39	25
South Carolina	283	117	143.0%	203	101	43	0	0	0	37	16
Virginia	763	313	144.0%	613	238	127	62	0	0	23	12
West Virginia	208	145	43.0%	187	145	20	0	0	0	0	0
East South Central	391	271	44.0%	330	262	58	4	0	0	3	5
Alabama	118	35	232.0%	59	31	58	4	0	0	0	0
Kentucky	98	120	-18.0%	98	120	0	0	0	0	0	0
Mississippi	24	12	96.0%	24	12	0	0	0	0	0	0
Tennessee	151	104	45.0%	149	99	0	0	0	0	3	5
West South Central	133	174	-23.0%	102	84	31	90	0	0	0	0
Arkansas	41	65	-38.0%	29	24	11	42	0	0	0	0
Louisiana	7	0	--	7	0	0	0	0	0	0	0
Oklahoma	22	5	380.0%	22	5	0	0	0	0	0	0
Texas	64	104	-39.0%	43	55	20	49	0	0	0	0
Mountain	221	261	-15.0%	195	237	27	24	0	0	0	0
Arizona	71	56	26.0%	71	56	0	0	0	0	0	0
Colorado	5	3	65.0%	5	3	0	0	0	0	0	0
Idaho	0	0	--	0	0	0	0	0	0	0	0
Montana	21	16	35.0%	0	0	21	16	0	0	0	0
Nevada	16	16	-0.1%	12	11	4	5	0	0	0	0
New Mexico	22	53	-57.0%	22	53	0	0	0	0	0	0
Utah	47	50	-7.0%	45	48	1	3	0	0	0	0
Wyoming	38	67	-42.0%	38	67	0	0	0	0	0	0
Pacific Contiguous	10	28	-65.0%	0	14	10	14	0	0	0	0
California	0	0	--	0	0	0	0	0	0	0	0
Oregon	0	14	-100.0%	0	14	0	0	0	0	0	0
Washington	10	14	-32.0%	0	0	10	14	0	0	0	0
Pacific Noncontiguous	6,303	6,508	-3.2%	5,159	5,038	1,143	1,470	0	0	0	0
Alaska	9	1	744.0%	9	1	0	0	0	0	0	0
Hawaii	6,293	6,507	-3.3%	5,150	5,037	1,143	1,470	0	0	0	0
U.S. Total	15,072	11,477	31.0%	9,566	8,616	5,238	2,662	0	0	267	199

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

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

Table 4.8.A. Receipts of Petroleum Coke Delivered for Electricity Generation by State, September 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
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	17	60	-72.0%	17	60	0	0	0	0	0	0
Illinois	0	0	--	0	0	0	0	0	0	0	0
Indiana	0	0	--	0	0	0	0	0	0	0	0
Michigan	11	54	-79.0%	11	54	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	5	6	-8.7%	5	6	0	0	0	0	0	0
West North Central	25	9	167.0%	0	0	0	0	0	0	25	9
Iowa	25	9	167.0%	0	0	0	0	0	0	25	9
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	75	38	100.0%	75	38	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	75	38	100.0%	75	38	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	171	177	-3.3%	171	177	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	171	177	-3.3%	171	177	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	288	284	1.6%	263	274	0	0	0	0	25	9

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

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

Table 4.8.B. Receipts of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Thousand Tons)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 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	438	407	7.5%	438	407	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	392	374	4.8%	392	374	0	0	0	0	0	0
Ohio	0	0	--	0	0	0	0	0	0	0	0
Wisconsin	46	34	37.0%	46	34	0	0	0	0	0	0
West North Central	41	39	5.4%	0	0	0	0	0	0	41	39
Iowa	41	39	5.4%	0	0	0	0	0	0	41	39
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	695	484	44.0%	695	484	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	695	484	44.0%	695	484	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	117	-100.0%	0	117	0	0	0	0	0	0
Alabama	0	0	--	0	0	0	0	0	0	0	0
Kentucky	0	117	-100.0%	0	117	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	1,155	1,411	-18.0%	1,155	1,411	0	0	0	0	0	0
Arkansas	0	0	--	0	0	0	0	0	0	0	0
Louisiana	1,155	1,411	-18.0%	1,155	1,411	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	2,329	2,458	-5.3%	2,288	2,420	0	0	0	0	41	39

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

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

Table 4.9.A. Receipts of Natural Gas Delivered for Electricity Generation by State, September 2018 and 2017
(Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	28,208	31,404	-10.0%	113	76	28,095	31,328	0	0	0	0
Connecticut	11,250	7,636	47.0%	0	0	11,250	7,636	0	0	0	0
Maine	753	738	2.0%	0	0	753	738	0	0	0	0
Massachusetts	10,173	14,298	-29.0%	65	42	10,107	14,256	0	0	0	0
New Hampshire	2,250	3,326	-32.0%	47	34	2,203	3,292	0	0	0	0
Rhode Island	3,783	5,406	-30.0%	0	0	3,783	5,406	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	110,579	106,858	3.5%	7,198	6,993	102,521	99,481	0	0	859	383
New Jersey	25,806	24,006	7.5%	0	0	25,806	24,006	0	0	0	0
New York	33,950	32,810	3.5%	7,198	6,993	26,116	25,596	0	0	636	220
Pennsylvania	50,823	50,042	1.6%	0	0	50,600	49,879	0	0	224	163
East North Central	72,066	63,571	13.0%	22,597	23,258	47,989	38,578	558	474	923	1,261
Illinois	8,472	9,421	-10.0%	711	807	7,759	8,605	0	0	3	9
Indiana	12,290	11,035	11.0%	3,511	5,391	8,779	5,644	0	0	0	0
Michigan	18,699	16,544	13.0%	6,088	4,931	11,715	10,621	558	474	338	517
Ohio	22,693	16,459	38.0%	4,021	3,348	18,255	12,740	0	0	417	371
Wisconsin	9,912	10,113	-2.0%	8,266	8,780	1,481	969	0	0	164	364
West North Central	14,923	16,303	-8.5%	13,096	13,630	1,143	1,939	165	211	519	523
Iowa	6,375	6,425	-0.8%	5,886	5,909	0	0	0	0	489	516
Kansas	1,220	1,395	-13.0%	1,220	1,395	0	0	0	0	0	0
Minnesota	3,402	2,888	18.0%	3,197	1,999	174	882	2	0	30	7
Missouri	3,716	4,148	-10.0%	2,584	2,880	969	1,057	163	211	0	0
Nebraska	117	521	-78.0%	117	521	0	0	0	0	0	0
North Dakota	93	624	-85.0%	93	624	0	0	0	0	0	0
South Dakota	0	302	-100.0%	0	302	0	0	0	0	0	0
South Atlantic	252,844	220,012	15.0%	198,467	176,018	51,485	40,891	0	0	2,892	3,103
Delaware	3,249	3,786	-14.0%	0	0	3,249	3,786	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	123,810	108,078	15.0%	118,516	102,817	4,919	5,071	0	0	374	190
Georgia	30,627	32,822	-6.7%	21,985	24,485	7,877	7,651	0	0	765	687
Maryland	10,706	5,597	91.0%	2,824	0	7,593	5,341	0	0	289	256
North Carolina	28,807	23,695	22.0%	23,620	19,915	4,986	3,524	0	0	201	256
South Carolina	20,899	12,628	65.0%	13,292	10,844	7,515	1,651	0	0	92	133
Virginia	32,617	30,618	6.5%	17,997	17,607	13,889	12,119	0	0	732	892
West Virginia	2,129	2,787	-24.0%	234	350	1,457	1,748	0	0	438	688
East South Central	93,069	77,205	21.0%	60,222	51,536	31,274	24,047	0	0	1,573	1,623
Alabama	39,556	33,367	19.0%	11,467	12,125	28,089	21,242	0	0	0	0
Kentucky	10,227	6,811	50.0%	9,256	5,998	971	813	0	0	0	0
Mississippi	31,513	29,208	7.9%	29,299	27,216	2,214	1,992	0	0	0	0
Tennessee	11,774	7,820	51.0%	10,200	6,197	0	0	0	0	1,573	1,623
West South Central	252,095	226,459	11.0%	73,819	69,381	123,293	105,413	0	0	54,983	51,665
Arkansas	9,692	10,394	-6.8%	8,571	9,135	898	1,124	0	0	222	136
Louisiana	41,476	45,815	-9.5%	21,931	22,804	3,118	3,335	0	0	16,426	19,677
Oklahoma	29,079	19,650	48.0%	16,195	10,466	12,331	8,988	0	0	553	196
Texas	171,848	150,599	14.0%	27,121	26,977	106,945	91,966	0	0	37,781	31,656
Mountain	78,594	61,002	29.0%	60,629	47,334	17,923	13,608	0	0	42	60
Arizona	34,881	24,723	41.0%	21,568	15,014	13,313	9,709	0	0	0	0
Colorado	10,061	8,451	19.0%	8,137	6,996	1,924	1,455	0	0	0	0
Idaho	1,276	2,388	-47.0%	1,276	1,352	0	1,036	0	0	0	0
Montana	162	302	-46.0%	162	302	0	0	0	0	0	0
Nevada	18,644	15,924	17.0%	18,644	15,924	0	0	0	0	0	0
New Mexico	7,930	5,854	35.0%	5,245	4,446	2,686	1,408	0	0	0	0
Utah	5,534	3,260	70.0%	5,492	3,199	0	0	0	0	42	60
Wyoming	105	100	4.4%	105	100	0	0	0	0	0	0
Pacific Contiguous	68,270	75,250	-9.3%	24,794	31,192	40,938	41,656	0	0	2,538	2,401
California	49,859	56,630	-12.0%	16,035	20,673	31,285	33,556	0	0	2,538	2,401
Oregon	11,133	10,796	3.1%	4,365	5,622	6,767	5,174	0	0	0	0
Washington	7,279	7,824	-7.0%	4,394	4,897	2,885	2,927	0	0	0	0
Pacific Noncontiguous	27	1,123	-98.0%	27	1,123	0	0	0	0	0	0
Alaska	27	1,123	-98.0%	27	1,123	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	970,676	879,186	10.0%	460,962	420,539	444,660	396,942	723	685	64,330	61,019

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

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

Table 4.9.B. Receipts of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Million Cubic Feet)

Census Division and State	All Sectors			Electric Power Sector				Commercial Sector		Industrial Sector	
				Electric Utilities		Independent Power Producers					
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	236,012	268,735	-12.0%	921	1,136	235,091	267,599	0	0	0	0
Connecticut	92,147	75,003	23.0%	0	0	92,147	75,003	0	0	0	0
Maine	8,028	12,154	-34.0%	0	0	8,028	12,154	0	0	0	0
Massachusetts	94,330	123,632	-24.0%	531	807	93,799	122,825	0	0	0	0
New Hampshire	16,504	21,058	-22.0%	390	329	16,114	20,729	0	0	0	0
Rhode Island	25,004	36,887	-32.0%	0	0	25,004	36,887	0	0	0	0
Vermont	0	0	--	0	0	0	0	0	0	0	0
Middle Atlantic	847,679	861,642	-1.6%	71,274	65,583	768,482	793,099	0	0	7,923	2,960
New Jersey	195,981	209,852	-6.6%	0	0	195,981	209,852	0	0	0	0
New York	269,593	275,071	-2.0%	71,274	65,583	192,612	208,121	0	0	5,708	1,367
Pennsylvania	382,105	376,719	1.4%	0	0	379,889	375,127	0	0	2,216	1,592
East North Central	646,462	539,415	20.0%	229,759	192,187	400,943	332,250	5,047	4,401	10,713	10,576
Illinois	59,428	84,566	-30.0%	6,185	6,813	53,216	77,714	0	0	27	39
Indiana	120,961	88,967	36.0%	51,821	39,586	69,140	49,381	0	0	0	0
Michigan	182,433	147,919	23.0%	55,320	43,757	117,447	95,407	5,047	4,401	4,619	4,354
Ohio	199,805	146,014	37.0%	43,508	40,393	152,224	101,995	0	0	4,072	3,626
Wisconsin	83,835	71,950	17.0%	72,926	61,639	8,915	7,754	0	0	1,994	2,558
West North Central	131,686	129,214	1.9%	113,688	112,032	12,580	13,078	1,574	1,167	3,844	2,937
Iowa	50,434	33,048	53.0%	46,660	30,222	0	0	0	0	3,773	2,826
Kansas	16,646	13,292	25.0%	16,646	13,292	0	0	0	0	0	0
Minnesota	28,700	36,701	-22.0%	27,722	30,674	900	5,911	7	5	70	111
Missouri	33,529	31,715	5.7%	20,283	23,386	11,679	7,167	1,567	1,162	0	0
Nebraska	1,836	5,036	-64.0%	1,836	5,036	0	0	0	0	0	0
North Dakota	540	5,742	-91.0%	540	5,742	0	0	0	0	0	0
South Dakota	0	3,680	-100.0%	0	3,680	0	0	0	0	0	0
South Atlantic	1,907,156	1,806,480	5.6%	1,550,688	1,485,596	329,953	295,377	0	0	26,515	25,506
Delaware	24,624	35,001	-30.0%	0	0	24,624	35,001	0	0	0	0
District of Columbia	0	0	--	0	0	0	0	0	0	0	0
Florida	924,488	885,048	4.5%	884,720	851,809	36,711	31,625	0	0	3,057	1,613
Georgia	255,021	288,014	-11.0%	192,093	213,599	56,284	67,604	0	0	6,644	6,811
Maryland	67,453	33,893	99.0%	16,234	0	49,132	32,175	0	0	2,088	1,718
North Carolina	236,599	207,555	14.0%	207,426	176,456	27,142	29,824	0	0	2,031	1,275
South Carolina	126,589	98,173	29.0%	94,398	85,697	31,527	11,684	0	0	665	792
Virginia	260,604	245,481	6.2%	154,267	156,683	98,941	81,610	0	0	7,396	7,189
West Virginia	11,778	13,316	-12.0%	1,550	1,353	5,593	5,854	0	0	4,635	6,109
East South Central	748,338	673,048	11.0%	498,852	458,724	235,033	200,558	0	0	14,453	13,767
Alabama	298,968	277,428	7.8%	96,368	100,246	202,600	177,182	0	0	0	0
Kentucky	82,945	61,450	35.0%	76,746	58,416	6,199	3,034	0	0	0	0
Mississippi	283,251	262,804	7.8%	257,017	242,462	26,234	20,342	0	0	0	0
Tennessee	83,173	71,366	17.0%	68,721	57,600	0	0	0	0	14,453	13,767
West South Central	2,139,013	2,031,660	5.3%	633,669	610,151	1,033,933	918,059	0	0	471,411	503,450
Arkansas	101,506	97,301	4.3%	89,845	86,764	9,838	9,114	0	0	1,824	1,424
Louisiana	355,553	407,628	-13.0%	179,063	180,327	27,139	27,059	0	0	149,351	200,242
Oklahoma	232,476	179,605	29.0%	136,909	112,859	92,357	65,228	0	0	3,210	1,518
Texas	1,449,478	1,347,126	7.6%	227,853	230,201	904,599	816,658	0	0	317,026	300,267
Mountain	546,741	479,989	14.0%	451,961	394,873	94,310	84,551	0	0	470	565
Arizona	203,494	173,894	17.0%	144,527	123,862	58,967	50,032	0	0	0	0
Colorado	89,335	70,062	28.0%	75,970	59,279	13,365	10,782	0	0	0	0
Idaho	4,825	12,639	-62.0%	4,825	6,911	0	5,727	0	0	0	0
Montana	2,007	2,412	-17.0%	2,007	2,399	0	12	0	0	0	0
Nevada	143,024	137,442	4.1%	143,024	137,442	0	0	0	0	0	0
New Mexico	62,797	52,856	19.0%	40,828	34,874	21,968	17,983	0	0	0	0
Utah	40,191	29,761	35.0%	39,721	29,197	0	0	0	0	470	565
Wyoming	1,068	922	16.0%	1,058	909	10	13	0	0	0	0
Pacific Contiguous	507,105	517,626	-2.0%	187,374	210,678	298,329	283,455	0	0	21,402	23,493
California	401,943	412,824	-2.6%	138,269	154,355	242,271	234,976	0	0	21,402	23,493
Oregon	67,486	61,266	10.0%	27,352	29,740	40,134	31,526	0	0	0	0
Washington	37,677	43,536	-13.0%	21,754	26,583	15,923	16,953	0	0	0	0
Pacific Noncontiguous	856	11,153	-92.0%	856	11,153	0	0	0	0	0	0
Alaska	856	11,153	-92.0%	856	11,153	0	0	0	0	0	0
Hawaii	0	0	--	0	0	0	0	0	0	0	0
U.S. Total	7,711,048	7,318,962	5.4%	3,739,042	3,542,114	3,408,654	3,188,027	6,621	5,568	556,730	583,254

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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, September 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017
New England	W	W	W	--	--	W	W
Connecticut	--	--	--	--	--	--	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.03	1.87	8.6%	--	1.67	2.03	1.87
New Jersey	W	W	W	--	--	W	W
New York	--	--	--	--	--	--	--
Pennsylvania	W	W	W	--	1.67	W	W
East North Central	1.99	2.00	-0.5%	2.13	2.07	1.77	1.88
Illinois	1.68	W	W	1.90	1.84	1.62	W
Indiana	W	W	W	2.11	2.11	W	W
Michigan	W	W	W	2.14	2.11	W	W
Ohio	W	1.90	W	1.71	1.72	W	1.96
Wisconsin	2.35	2.15	9.3%	2.35	2.15	--	--
West North Central	1.70	1.73	-1.7%	1.70	1.73	--	--
Iowa	1.63	1.57	3.8%	1.63	1.57	--	--
Kansas	1.70	1.65	3.0%	1.70	1.65	--	--
Minnesota	2.21	2.08	6.3%	2.21	2.08	--	--
Missouri	1.74	1.85	-5.9%	1.74	1.85	--	--
Nebraska	1.27	1.36	-6.6%	1.27	1.36	--	--
North Dakota	1.55	1.61	-3.7%	1.55	1.61	--	--
South Dakota	1.59	2.24	-29.0%	1.59	2.24	--	--
South Atlantic	2.67	2.69	-0.7%	2.72	2.72	2.36	2.49
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	2.79	2.85	-2.1%	2.79	2.85	--	--
Georgia	2.68	2.80	-4.3%	2.68	2.80	--	--
Maryland	2.56	2.55	0.4%	--	--	2.56	2.55
North Carolina	W	2.96	W	3.21	2.95	W	4.19
South Carolina	3.31	3.34	-0.9%	3.31	3.34	--	--
Virginia	W	3.04	W	2.81	2.94	W	3.61
West Virginia	W	2.21	W	2.16	2.19	W	2.28
East South Central	W	W	W	2.05	2.15	W	W
Alabama	2.27	2.20	3.2%	2.27	2.20	--	--
Kentucky	1.95	2.03	-3.9%	1.95	2.03	--	--
Mississippi	W	W	W	2.72	2.32	W	W
Tennessee	2.00	2.64	-24.0%	2.00	2.64	--	--
West South Central	1.89	1.76	7.4%	2.09	1.91	1.64	1.61
Arkansas	W	W	W	1.98	1.92	W	W
Louisiana	W	W	W	3.12	2.06	W	W
Oklahoma	W	W	W	1.78	1.75	W	W
Texas	1.76	1.70	3.5%	2.05	1.99	1.56	1.56
Mountain	W	W	W	2.05	1.89	W	W
Arizona	2.36	2.22	6.3%	2.36	2.22	--	--
Colorado	1.71	1.65	3.6%	1.71	1.65	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	2.27	1.77	W	W
Nevada	W	W	W	3.00	--	W	W
New Mexico	2.63	1.92	37.0%	2.63	1.92	--	--
Utah	1.94	1.96	-1.0%	1.94	1.96	--	--
Wyoming	W	W	W	1.73	1.73	W	W
Pacific Contiguous	W	W	W	2.29	2.24	W	W
California	--	--	--	--	--	--	--
Oregon	2.29	2.24	2.2%	2.29	2.24	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	3.06	W	3.25	3.06	W	--
Alaska	3.25	3.06	6.2%	3.25	3.06	--	--
Hawaii	W	--	W	--	--	W	--
U.S. Total	2.05	2.01	2.0%	2.12	2.08	1.82	1.82

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

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

Table 4.10.B. Average Cost of Coal Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	4.29	W	W	3.61	4.34	4.49	W
Connecticut	W	--	W	--	--	W	--
Maine	W	W	W	--	--	W	W
Massachusetts	--	W	W	--	--	--	W
New Hampshire	3.61	4.34	-17.0%	3.61	4.34	--	--
Rhode Island	W	--	W	--	--	W	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.24	1.92	17.0%	--	1.66	2.24	1.93
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	--	W	W
Pennsylvania	2.17	1.86	17.0%	--	1.66	2.17	1.87
East North Central	1.98	2.03	-2.5%	2.10	2.11	1.80	1.89
Illinois	1.74	W	W	1.87	1.85	1.71	W
Indiana	W	W	W	2.11	2.16	W	W
Michigan	W	W	W	2.12	2.16	W	W
Ohio	W	1.93	W	1.77	1.73	W	1.99
Wisconsin	2.27	2.25	0.9%	2.27	2.25	--	--
West North Central	1.71	1.76	-2.8%	1.71	1.76	--	--
Iowa	1.67	1.68	-0.6%	1.67	1.68	--	--
Kansas	1.70	1.71	-0.6%	1.70	1.71	--	--
Minnesota	2.17	2.10	3.3%	2.17	2.10	--	--
Missouri	1.81	1.86	-2.7%	1.81	1.86	--	--
Nebraska	1.25	1.37	-8.8%	1.25	1.37	--	--
North Dakota	1.53	1.62	-5.6%	1.53	1.62	--	--
South Dakota	1.91	2.26	-15.0%	1.91	2.26	--	--
South Atlantic	2.63	2.69	-2.2%	2.69	2.72	2.28	2.48
Delaware	--	W	W	--	--	--	W
District of Columbia	--	--	--	--	--	--	--
Florida	2.86	W	W	2.86	2.94	--	W
Georgia	2.76	2.77	-0.4%	2.76	2.77	--	--
Maryland	2.54	2.72	-6.6%	--	--	2.54	2.72
North Carolina	W	2.97	W	3.11	2.96	W	3.73
South Carolina	3.32	3.28	1.2%	3.32	3.28	--	--
Virginia	W	W	W	2.67	2.75	W	W
West Virginia	W	2.20	W	2.14	2.21	W	2.16
East South Central	W	W	W	2.08	2.09	W	W
Alabama	2.28	2.18	4.6%	2.28	2.18	--	--
Kentucky	1.96	1.98	-1.0%	1.96	1.98	--	--
Mississippi	W	W	W	2.64	2.72	W	W
Tennessee	2.15	2.28	-5.7%	2.15	2.28	--	--
West South Central	1.86	1.84	1.1%	2.02	2.07	1.65	1.63
Arkansas	W	W	W	1.96	2.07	W	W
Louisiana	W	W	W	2.65	2.33	W	W
Oklahoma	W	W	W	1.77	1.85	W	W
Texas	1.77	1.76	0.6%	2.02	2.10	1.58	1.58
Mountain	W	W	W	2.03	1.90	W	W
Arizona	2.44	2.24	8.9%	2.44	2.24	--	--
Colorado	1.67	1.78	-6.2%	1.67	1.78	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	2.04	1.75	W	W
Nevada	W	W	W	2.96	3.08	W	W
New Mexico	2.45	1.98	24.0%	2.45	1.98	--	--
Utah	2.04	1.96	4.1%	2.04	1.96	--	--
Wyoming	W	W	W	1.75	1.64	W	W
Pacific Contiguous	W	W	W	2.28	2.31	W	W
California	--	--	--	--	--	--	--
Oregon	2.28	2.31	-1.3%	2.28	2.31	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	3.32	3.06	W	W
Alaska	3.32	3.06	8.5%	3.32	3.06	--	--
Hawaii	W	W	W	--	--	W	W
U.S. Total	2.05	2.06	-0.5%	2.10	2.12	1.88	1.86

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

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

Table 4.11.A. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, September 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017
New England	14.91	10.21	46.0%	10.00	12.52	15.00	10.17
Connecticut	W	W	W	--	--	W	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	--	12.52	W	W
New Hampshire	10.00	--	--	10.00	--	--	--
Rhode Island	--	W	W	--	--	--	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	14.37	14.47	-0.7%	--	13.17	14.37	14.47
New Jersey	W	W	W	--	--	W	W
New York	W	W	W	--	13.17	W	W
Pennsylvania	W	W	W	--	--	W	W
East North Central	17.34	14.51	20.0%	16.91	14.19	17.66	15.77
Illinois	17.76	W	W	--	--	17.76	W
Indiana	16.92	14.10	20.0%	16.92	14.10	--	--
Michigan	16.89	13.77	23.0%	16.89	13.77	--	--
Ohio	17.64	W	W	17.58	15.25	17.64	W
Wisconsin	14.80	15.16	-2.4%	14.80	15.16	--	--
West North Central	17.29	14.09	23.0%	17.29	14.09	--	--
Iowa	17.46	14.00	25.0%	17.46	14.00	--	--
Kansas	16.50	14.04	18.0%	16.50	14.04	--	--
Minnesota	16.64	13.89	20.0%	16.64	13.89	--	--
Missouri	17.35	14.21	22.0%	17.35	14.21	--	--
Nebraska	17.50	13.51	30.0%	17.50	13.51	--	--
North Dakota	17.67	14.67	20.0%	17.67	14.67	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	16.97	14.32	19.0%	16.92	14.47	17.21	13.40
Delaware	W	--	W	--	--	W	--
District of Columbia	--	--	--	--	--	--	--
Florida	17.07	15.38	11.0%	17.07	15.38	--	--
Georgia	16.62	W	W	16.62	14.05	--	W
Maryland	W	W	W	--	--	W	W
North Carolina	16.89	W	W	16.89	14.29	--	W
South Carolina	17.18	14.47	19.0%	17.18	14.47	--	--
Virginia	W	W	W	15.00	13.50	W	W
West Virginia	18.38	14.81	24.0%	18.38	14.81	--	--
East South Central	16.56	14.02	18.0%	16.56	14.02	--	--
Alabama	16.96	14.82	14.0%	16.96	14.82	--	--
Kentucky	16.41	14.34	14.0%	16.41	14.34	--	--
Mississippi	16.33	13.53	21.0%	16.33	13.53	--	--
Tennessee	16.59	13.72	21.0%	16.59	13.72	--	--
West South Central	W	W	W	17.25	12.83	W	W
Arkansas	17.31	W	W	17.31	13.66	--	W
Louisiana	--	--	--	--	--	--	--
Oklahoma	--	14.73	--	--	14.73	--	--
Texas	W	W	W	16.92	12.32	W	W
Mountain	W	W	W	19.40	15.17	W	W
Arizona	18.68	14.58	28.0%	18.68	14.58	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	W	W	--	--	--	W
Nevada	W	W	W	19.85	13.03	W	W
New Mexico	20.17	16.11	25.0%	20.17	16.11	--	--
Utah	W	16.31	W	16.97	16.31	W	--
Wyoming	20.45	15.09	36.0%	20.45	15.09	--	--
Pacific Contiguous	--	W	W	--	--	--	W
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	W	W	--	--	--	W
Pacific Noncontiguous	W	W	W	14.70	10.94	W	W
Alaska	18.21	12.10	50.0%	18.21	12.10	--	--
Hawaii	W	W	W	14.70	10.94	W	W
U.S. Total	W	W	W	15.44	11.80	W	W

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

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

Table 4.11.B. Average Cost of Petroleum Liquids Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	W	12.26	W	11.44	14.18	W	12.13
Connecticut	16.96	W	W	--	--	16.96	W
Maine	W	W	W	--	--	W	W
Massachusetts	W	W	W	15.00	14.65	W	W
New Hampshire	W	13.97	W	11.06	13.97	W	--
Rhode Island	W	W	W	--	--	W	W
Vermont	--	--	--	--	--	--	--
Middle Atlantic	13.63	W	W	12.28	9.39	14.36	W
New Jersey	15.08	W	W	--	--	15.08	W
New York	13.10	12.79	2.4%	12.28	9.39	13.76	19.03
Pennsylvania	15.72	W	W	--	--	15.72	W
East North Central	16.32	12.64	29.0%	16.37	12.51	16.26	12.85
Illinois	W	13.82	W	16.11	12.12	W	13.88
Indiana	W	12.34	W	16.36	12.34	W	--
Michigan	15.94	12.23	30.0%	15.94	12.23	--	--
Ohio	16.24	12.72	28.0%	16.44	13.43	16.19	12.33
Wisconsin	17.87	12.07	48.0%	17.87	12.07	--	--
West North Central	16.25	12.35	32.0%	16.25	12.35	--	--
Iowa	16.22	12.54	29.0%	16.22	12.54	--	--
Kansas	16.30	12.38	32.0%	16.30	12.38	--	--
Minnesota	16.61	12.39	34.0%	16.61	12.39	--	--
Missouri	16.16	12.35	31.0%	16.16	12.35	--	--
Nebraska	16.38	11.91	38.0%	16.38	11.91	--	--
North Dakota	16.19	12.15	33.0%	16.19	12.15	--	--
South Dakota	17.15	11.98	43.0%	17.15	11.98	--	--
South Atlantic	14.41	12.26	18.0%	14.49	12.30	14.12	11.85
Delaware	W	W	W	--	--	W	W
District of Columbia	--	--	--	--	--	--	--
Florida	16.18	12.37	31.0%	16.18	12.37	--	--
Georgia	W	11.66	W	15.56	11.84	W	9.60
Maryland	14.37	10.97	31.0%	--	--	14.37	10.97
North Carolina	17.01	W	W	17.01	12.18	--	W
South Carolina	16.82	12.50	35.0%	16.82	12.50	--	--
Virginia	10.15	W	W	9.83	11.95	11.82	W
West Virginia	W	12.73	W	16.62	12.73	W	--
East South Central	W	W	W	16.17	12.01	W	W
Alabama	W	W	W	16.33	12.79	W	W
Kentucky	15.94	12.03	33.0%	15.94	12.03	--	--
Mississippi	15.76	11.78	34.0%	15.76	11.78	--	--
Tennessee	16.33	11.78	39.0%	16.33	11.78	--	--
West South Central	16.11	12.24	32.0%	16.10	12.01	16.13	12.46
Arkansas	W	W	W	16.34	12.06	W	W
Louisiana	15.04	--	--	15.04	--	--	--
Oklahoma	16.01	13.22	21.0%	16.01	13.22	--	--
Texas	W	W	W	16.16	11.89	W	W
Mountain	W	13.58	W	18.07	13.58	W	13.50
Arizona	16.60	13.24	25.0%	16.60	13.24	--	--
Colorado	17.43	13.60	28.0%	17.43	13.60	--	--
Idaho	--	--	--	--	--	--	--
Montana	W	W	W	--	--	W	W
Nevada	W	W	W	18.58	12.34	W	W
New Mexico	18.87	13.27	42.0%	18.87	13.27	--	--
Utah	W	W	W	19.19	14.15	W	W
Wyoming	18.87	13.91	36.0%	18.87	13.91	--	--
Pacific Contiguous	W	W	W	--	12.71	W	W
California	--	--	--	--	--	--	--
Oregon	--	12.71	--	--	12.71	--	--
Washington	W	W	W	--	--	W	W
Pacific Noncontiguous	W	W	W	13.58	10.75	W	W
Alaska	17.58	15.52	13.0%	17.58	15.52	--	--
Hawaii	W	W	W	13.57	10.75	W	W
U.S. Total	14.04	11.47	22.0%	14.01	11.34	14.10	11.90

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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 4.12.A. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, September 2018 and 2017
(Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.65	1.50	10.0%	1.65	1.50	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.57	1.47	6.8%	1.57	1.47	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.84	1.79	2.8%	1.84	1.79	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.69	2.81	31.0%	3.69	2.81	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	3.69	2.81	31.0%	3.69	2.81	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	--	--	--	--	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	--	--	--	--	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.89	2.16	34.0%	2.89	2.16	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.89	2.16	34.0%	2.89	2.16	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.05	2.12	44.0%	3.05	2.12	--	--

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

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

Table 4.12.B. Average Cost of Petroleum Coke Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	--	--	--	--	--	--	--
Connecticut	--	--	--	--	--	--	--
Maine	--	--	--	--	--	--	--
Massachusetts	--	--	--	--	--	--	--
New Hampshire	--	--	--	--	--	--	--
Rhode Island	--	--	--	--	--	--	--
Vermont	--	--	--	--	--	--	--
Middle Atlantic	--	--	--	--	--	--	--
New Jersey	--	--	--	--	--	--	--
New York	--	--	--	--	--	--	--
Pennsylvania	--	--	--	--	--	--	--
East North Central	1.53	1.49	2.7%	1.53	1.49	--	--
Illinois	--	--	--	--	--	--	--
Indiana	--	--	--	--	--	--	--
Michigan	1.50	1.46	2.7%	1.50	1.46	--	--
Ohio	--	--	--	--	--	--	--
Wisconsin	1.78	1.79	-0.6%	1.78	1.79	--	--
West North Central	--	--	--	--	--	--	--
Iowa	--	--	--	--	--	--	--
Kansas	--	--	--	--	--	--	--
Minnesota	--	--	--	--	--	--	--
Missouri	--	--	--	--	--	--	--
Nebraska	--	--	--	--	--	--	--
North Dakota	--	--	--	--	--	--	--
South Dakota	--	--	--	--	--	--	--
South Atlantic	3.20	2.55	25.0%	3.20	2.55	--	--
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	3.20	2.55	25.0%	3.20	2.55	--	--
Georgia	--	--	--	--	--	--	--
Maryland	--	--	--	--	--	--	--
North Carolina	--	--	--	--	--	--	--
South Carolina	--	--	--	--	--	--	--
Virginia	--	--	--	--	--	--	--
West Virginia	--	--	--	--	--	--	--
East South Central	--	1.50	--	--	1.50	--	--
Alabama	--	--	--	--	--	--	--
Kentucky	--	1.50	--	--	1.50	--	--
Mississippi	--	--	--	--	--	--	--
Tennessee	--	--	--	--	--	--	--
West South Central	2.71	2.14	27.0%	2.71	2.14	--	--
Arkansas	--	--	--	--	--	--	--
Louisiana	2.71	2.14	27.0%	2.71	2.14	--	--
Oklahoma	--	--	--	--	--	--	--
Texas	--	--	--	--	--	--	--
Mountain	--	--	--	--	--	--	--
Arizona	--	--	--	--	--	--	--
Colorado	--	--	--	--	--	--	--
Idaho	--	--	--	--	--	--	--
Montana	--	--	--	--	--	--	--
Nevada	--	--	--	--	--	--	--
New Mexico	--	--	--	--	--	--	--
Utah	--	--	--	--	--	--	--
Wyoming	--	--	--	--	--	--	--
Pacific Contiguous	--	--	--	--	--	--	--
California	--	--	--	--	--	--	--
Oregon	--	--	--	--	--	--	--
Washington	--	--	--	--	--	--	--
Pacific Noncontiguous	--	--	--	--	--	--	--
Alaska	--	--	--	--	--	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	2.64	2.08	27.0%	2.64	2.08	--	--

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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 4.13.A. Average Cost of Natural Gas Delivered for Electricity Generation by State, September 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018	September 2017	Percentage Change	September 2018	September 2017	September 2018	September 2017
New England	W	W	W	4.69	2.98	W	W
Connecticut	3.13	2.75	14.0%	--	--	3.13	2.75
Maine	W	4.09	W	--	--	W	4.09
Massachusetts	2.96	2.34	26.0%	3.38	2.63	2.96	2.34
New Hampshire	W	W	W	6.50	3.42	W	W
Rhode Island	W	2.25	W	--	--	W	2.25
Vermont	--	--	--	--	--	--	--
Middle Atlantic	2.63	1.94	36.0%	3.12	2.40	2.59	1.90
New Jersey	2.55	1.85	38.0%	--	--	2.55	1.85
New York	2.93	2.34	25.0%	3.12	2.40	2.87	2.32
Pennsylvania	2.47	1.70	45.0%	--	--	2.47	1.70
East North Central	3.03	3.06	-1.0%	3.15	3.16	2.97	2.99
Illinois	3.07	W	W	3.13	3.72	3.06	W
Indiana	3.08	W	W	3.42	3.34	2.95	W
Michigan	3.21	3.20	0.3%	3.49	3.46	3.07	3.08
Ohio	2.87	2.67	7.5%	2.81	2.44	2.89	2.73
Wisconsin	2.96	3.10	-4.5%	2.96	3.10	--	--
West North Central	W	W	W	2.87	3.16	W	W
Iowa	2.65	2.73	-2.9%	2.65	2.73	--	--
Kansas	2.98	3.74	-20.0%	2.98	3.74	--	--
Minnesota	W	W	W	3.39	3.61	W	W
Missouri	W	W	W	2.53	3.29	W	W
Nebraska	3.68	3.89	-5.4%	3.68	3.89	--	--
North Dakota	5.13	3.54	45.0%	5.13	3.54	--	--
South Dakota	--	2.82	--	--	2.82	--	--
South Atlantic	3.66	3.76	-2.7%	3.77	3.94	3.04	2.68
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	W	W	3.98	4.29	W	W
Georgia	3.43	3.37	1.8%	3.51	3.44	3.21	3.13
Maryland	3.26	2.88	13.0%	3.34	--	3.23	2.88
North Carolina	W	W	W	3.54	3.80	W	W
South Carolina	W	W	W	3.47	3.53	W	W
Virginia	3.09	2.57	20.0%	3.32	3.02	2.68	1.64
West Virginia	W	2.08	W	2.94	3.04	W	1.89
East South Central	3.09	3.21	-3.7%	3.07	3.19	3.13	3.28
Alabama	W	W	W	3.22	3.27	W	W
Kentucky	W	W	W	3.18	3.55	W	W
Mississippi	W	W	W	3.02	3.12	W	W
Tennessee	2.92	3.00	-2.7%	2.92	3.00	--	--
West South Central	2.86	3.09	-7.4%	2.79	3.19	2.91	3.01
Arkansas	W	W	W	3.05	3.38	W	W
Louisiana	W	W	W	3.15	3.19	W	W
Oklahoma	W	W	W	2.26	3.16	W	W
Texas	2.89	3.05	-5.2%	2.72	3.13	2.95	3.02
Mountain	2.69	3.37	-20.0%	2.68	3.37	2.74	3.31
Arizona	W	W	W	2.59	3.56	W	W
Colorado	W	W	W	3.23	3.59	W	W
Idaho	2.86	3.22	-11.0%	2.86	3.22	--	--
Montana	1.35	1.43	-5.6%	1.35	1.43	--	--
Nevada	2.72	3.22	-16.0%	2.72	3.22	--	--
New Mexico	2.09	3.26	-36.0%	2.09	3.26	--	--
Utah	2.63	3.10	-15.0%	2.63	3.10	--	--
Wyoming	2.82	W	W	2.82	3.31	--	W
Pacific Contiguous	3.13	3.31	-5.4%	3.27	3.42	3.02	3.19
California	3.48	3.58	-2.8%	3.87	3.89	3.20	3.30
Oregon	W	W	W	1.77	2.33	W	W
Washington	W	W	W	2.82	3.11	W	W
Pacific Noncontiguous	7.72	7.11	8.6%	7.72	7.11	--	--
Alaska	7.72	7.11	8.6%	7.72	7.11	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.11	3.16	-1.6%	3.28	3.54	2.88	2.66

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Totals may not equal sum of components because of independent rounding. Percentage change is calculated before rounding.

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

Table 4.13.B. Average Cost of Natural Gas Delivered for Electricity Generation by State, (Year-to-Date) September 2018 and 2017 (Dollars per MMBtu)

Census Division and State	Electric Power Sector			Electric Utilities		Independent Power Producers	
	September 2018 YTD	September 2017 YTD	Percentage Change	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	W	W	W	4.47	3.45	W	W
Connecticut	4.31	4.22	2.1%	--	--	4.31	4.22
Maine	W	W	W	--	--	W	W
Massachusetts	4.64	3.27	42.0%	3.45	3.31	4.65	3.27
New Hampshire	W	W	W	5.83	3.79	W	W
Rhode Island	W	3.32	W	--	--	W	3.32
Vermont	--	--	--	--	--	--	--
Middle Atlantic	3.16	2.85	11.0%	3.92	3.43	3.08	2.79
New Jersey	3.07	2.68	15.0%	--	--	3.07	2.68
New York	3.61	3.30	9.4%	3.92	3.43	3.47	3.25
Pennsylvania	2.90	2.61	11.0%	--	--	2.90	2.61
East North Central	3.02	3.14	-3.8%	3.16	3.22	2.94	3.09
Illinois	3.15	3.27	-3.7%	3.20	3.63	3.14	3.24
Indiana	3.09	W	W	3.26	3.23	2.96	W
Michigan	3.09	3.22	-4.0%	3.35	3.41	2.97	3.13
Ohio	2.85	2.94	-3.1%	2.91	2.87	2.83	2.97
Wisconsin	3.09	W	W	3.09	3.27	--	W
West North Central	W	W	W	2.90	3.39	W	W
Iowa	2.66	2.80	-5.0%	2.66	2.80	--	--
Kansas	2.98	3.78	-21.0%	2.98	3.78	--	--
Minnesota	W	W	W	3.29	3.83	W	W
Missouri	W	W	W	2.72	3.31	W	W
Nebraska	3.55	3.81	-6.8%	3.55	3.81	--	--
North Dakota	5.33	3.55	50.0%	5.33	3.55	--	--
South Dakota	--	2.98	--	--	2.98	--	--
South Atlantic	4.08	3.85	6.0%	4.17	3.94	3.50	3.14
Delaware	--	--	--	--	--	--	--
District of Columbia	--	--	--	--	--	--	--
Florida	W	4.15	W	4.21	4.15	W	3.77
Georgia	W	3.47	W	3.61	3.55	W	3.20
Maryland	3.77	3.40	11.0%	3.30	--	3.92	3.40
North Carolina	W	W	W	4.44	4.00	W	W
South Carolina	W	W	W	3.69	3.52	W	W
Virginia	4.15	3.28	27.0%	4.69	3.53	2.92	2.50
West Virginia	W	W	W	3.13	3.01	W	W
East South Central	3.13	3.27	-4.3%	3.12	3.27	3.15	3.29
Alabama	W	W	W	3.20	3.38	W	W
Kentucky	W	W	W	3.39	3.63	W	W
Mississippi	W	W	W	3.06	3.18	W	W
Tennessee	2.94	3.06	-3.9%	2.94	3.06	--	--
West South Central	2.95	3.16	-6.6%	2.91	3.25	2.97	3.07
Arkansas	W	W	W	3.03	3.34	W	W
Louisiana	W	W	W	3.16	3.29	W	W
Oklahoma	W	W	W	2.54	3.21	W	W
Texas	2.97	3.11	-4.5%	2.90	3.21	2.99	3.08
Mountain	2.95	3.48	-15.0%	2.92	3.48	3.31	3.41
Arizona	W	W	W	2.87	3.67	W	W
Colorado	W	W	W	3.49	3.44	W	W
Idaho	2.70	3.37	-20.0%	2.70	3.37	--	--
Montana	1.33	W	W	1.33	1.87	--	W
Nevada	2.87	3.42	-16.0%	2.87	3.42	--	--
New Mexico	2.44	3.42	-29.0%	2.44	3.42	--	--
Utah	2.71	3.31	-18.0%	2.71	3.31	--	--
Wyoming	W	W	W	2.85	3.98	W	W
Pacific Contiguous	4.02	3.47	16.0%	3.68	3.68	4.33	3.26
California	4.53	3.66	24.0%	4.19	4.03	4.81	3.32
Oregon	W	W	W	2.01	2.48	W	W
Washington	W	W	W	2.96	3.41	W	W
Pacific Noncontiguous	8.06	7.02	15.0%	8.06	7.02	--	--
Alaska	8.06	7.02	15.0%	8.06	7.02	--	--
Hawaii	--	--	--	--	--	--	--
U.S. Total	3.42	3.39	0.9%	3.54	3.61	3.25	3.08

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

Notes:
See Glossary for definitions. Values for 2017 are final. Values for 2018 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, September 2018

	Bituminous			Subbituminous			Lignite		
Census Division and State	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	4	0.73	7.4	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	4	0.73	7.4	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,127	2.86	9.0	0	--	--	0	--	--
New Jersey	45	1.57	7.4	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,081	2.91	9.0	0	--	--	0	--	--
East North Central	4,675	3.24	10.4	6,060	0.25	4.7	0	--	--
Illinois	757	3.57	19.4	2,769	0.25	4.6	0	--	--
Indiana	2,229	2.93	8.9	298	0.22	4.4	0	--	--
Michigan	172	2.04	7.4	1,501	0.27	4.5	0	--	--
Ohio	1,485	3.69	9.5	0	--	--	0	--	--
Wisconsin	31	2.43	7.6	1,491	0.24	4.8	0	--	--
West North Central	87	2.98	9.7	7,636	0.27	5.0	2,112	0.71	10.5
Iowa	17	2.88	8.8	1,290	0.25	4.7	0	--	--
Kansas	17	3.23	12.2	1,229	0.32	4.8	0	--	--
Minnesota	0	--	--	1,181	0.32	5.9	0	--	--
Missouri	54	2.93	9.2	2,833	0.23	4.7	0	--	--
Nebraska	0	--	--	1,018	0.30	5.2	0	--	--
North Dakota	0	--	--	0	--	--	2,112	0.71	10.5
South Dakota	0	--	--	85	0.29	5.2	0	--	--
South Atlantic	5,711	2.39	9.6	806	0.31	4.6	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,029	2.62	8.3	0	--	--	0	--	--
Georgia	665	2.60	7.8	806	0.31	4.6	0	--	--
Maryland	415	2.44	9.4	0	--	--	0	--	--
North Carolina	1,070	1.81	9.6	0	--	--	0	--	--
South Carolina	442	1.80	8.9	0	--	--	0	--	--
Virginia	274	1.14	11.6	0	--	--	0	--	--
West Virginia	1,817	2.85	10.8	0	--	--	0	--	--
East South Central	2,673	2.64	9.8	1,632	0.32	5.2	79	0.45	12.1
Alabama	377	0.83	14.9	737	0.30	5.3	0	--	--
Kentucky	1,913	3.07	9.3	724	0.27	5.0	0	--	--
Mississippi	23	0.43	6.9	127	0.31	5.2	79	0.45	12.1
Tennessee	360	2.19	8.4	44	1.50	7.7	0	--	--
West South Central	75	2.39	15.6	7,314	0.27	5.1	2,453	1.06	16.1
Arkansas	5	0.41	8.6	1,541	0.23	4.9	0	--	--
Louisiana	38	2.90	9.1	588	0.27	5.0	174	0.53	16.6
Oklahoma	32	2.10	25.3	821	0.24	4.7	0	--	--
Texas	0	--	--	4,365	0.29	5.2	2,279	1.10	16.0
Mountain	1,588	0.56	13.3	4,825	0.53	8.6	21	0.59	9.5
Arizona	556	0.62	11.4	906	0.68	8.1	0	--	--
Colorado	154	0.50	13.7	956	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	707	0.74	9.6	21	0.59	9.5
Nevada	0	--	--	144	0.43	8.6	0	--	--
New Mexico	205	0.61	22.7	427	0.74	21.1	0	--	--
Utah	673	0.51	12.3	32	0.90	9.1	0	--	--
Wyoming	0	--	--	1,654	0.44	6.9	0	--	--
Pacific Contiguous	55	0.38	8.6	503	0.31	8.0	0	--	--
California	55	0.38	8.6	0	--	--	0	--	--
Oregon	0	--	--	137	0.24	4.8	0	--	--
Washington	0	--	--	366	0.34	9.2	0	--	--
Pacific Noncontiguous	0	--	--	61	0.26	5.0	24	0.13	7.8
Alaska	0	--	--	0	--	--	24	0.13	7.8
Hawaii	0	--	--	61	0.26	5.0	0	--	--
U.S. Total	15,995	2.54	10.2	28,837	0.32	5.6	4,690	0.89	13.5

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.15. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Electric Utilties by State, September 2018

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	0	--	--	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	0	--	--	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	0	--	--	0	--	--	0	--	--
New Jersey	0	--	--	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	0	--	--	0	--	--	0	--	--
East North Central	2,589	2.97	8.9	3,767	0.25	4.7	0	--	--
Illinois	181	3.16	10.4	476	0.23	4.9	0	--	--
Indiana	2,061	2.89	8.9	298	0.22	4.4	0	--	--
Michigan	140	2.26	7.5	1,501	0.27	4.5	0	--	--
Ohio	175	4.34	9.3	0	--	--	0	--	--
Wisconsin	31	2.43	7.6	1,491	0.24	4.8	0	--	--
West North Central	71	3.00	9.9	7,438	0.27	5.0	2,112	0.71	10.5
Iowa	0	--	--	1,155	0.25	4.8	0	--	--
Kansas	17	3.23	12.2	1,229	0.32	4.8	0	--	--
Minnesota	0	--	--	1,181	0.32	5.9	0	--	--
Missouri	54	2.93	9.2	2,833	0.23	4.7	0	--	--
Nebraska	0	--	--	955	0.30	5.2	0	--	--
North Dakota	0	--	--	0	--	--	2,112	0.71	10.5
South Dakota	0	--	--	85	0.29	5.2	0	--	--
South Atlantic	4,830	2.39	9.7	806	0.31	4.6	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	1,029	2.62	8.3	0	--	--	0	--	--
Georgia	642	2.66	7.8	806	0.31	4.6	0	--	--
Maryland	0	--	--	0	--	--	0	--	--
North Carolina	1,049	1.83	9.7	0	--	--	0	--	--
South Carolina	442	1.80	8.9	0	--	--	0	--	--
Virginia	203	1.27	12.9	0	--	--	0	--	--
West Virginia	1,465	2.83	11.3	0	--	--	0	--	--
East South Central	2,607	2.69	9.9	1,632	0.32	5.2	0	--	--
Alabama	377	0.83	14.9	737	0.30	5.3	0	--	--
Kentucky	1,913	3.07	9.3	724	0.27	5.0	0	--	--
Mississippi	23	0.43	6.9	127	0.31	5.2	0	--	--
Tennessee	294	2.49	8.5	44	1.50	7.7	0	--	--
West South Central	38	2.90	9.1	4,389	0.24	4.9	761	1.41	18.2
Arkansas	0	--	--	1,294	0.23	4.8	0	--	--
Louisiana	38	2.90	9.1	269	0.23	5.0	174	0.53	16.6
Oklahoma	0	--	--	737	0.24	4.7	0	--	--
Texas	0	--	--	2,089	0.26	4.9	587	1.69	18.8
Mountain	1,588	0.56	13.3	4,027	0.50	8.5	21	0.59	9.5
Arizona	556	0.62	11.4	906	0.68	8.1	0	--	--
Colorado	154	0.50	13.7	956	0.31	5.6	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	21	0.59	9.5
Nevada	0	--	--	98	0.49	9.9	0	--	--
New Mexico	205	0.61	22.7	427	0.74	21.1	0	--	--
Utah	673	0.51	12.3	32	0.90	9.1	0	--	--
Wyoming	0	--	--	1,609	0.45	7.0	0	--	--
Pacific Contiguous	0	--	--	137	0.24	4.8	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	137	0.24	4.8	0	--	--
Washington	0	--	--	0	--	--	0	--	--
Pacific Noncontiguous	0	--	--	0	--	--	24	0.13	7.8
Alaska	0	--	--	0	--	--	24	0.13	7.8
Hawaii	0	--	--	0	--	--	0	--	--
U.S. Total	11,724	2.35	10.0	22,196	0.31	5.6	2,918	0.88	12.4

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 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.16. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Independent Power Producers by State, September 2018

Census Division and State	Bituminous			Subbituminous			Lignite		
	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight	Receipts (Thousand Tons)	Average Sulfur Percent by Weight	Average Ash Percent by Weight
New England	4	0.73	7.4	0	--	--	0	--	--
Connecticut	0	--	--	0	--	--	0	--	--
Maine	4	0.73	7.4	0	--	--	0	--	--
Massachusetts	0	--	--	0	--	--	0	--	--
New Hampshire	0	--	--	0	--	--	0	--	--
Rhode Island	0	--	--	0	--	--	0	--	--
Vermont	0	--	--	0	--	--	0	--	--
Middle Atlantic	1,127	2.86	9.0	0	--	--	0	--	--
New Jersey	45	1.57	7.4	0	--	--	0	--	--
New York	0	--	--	0	--	--	0	--	--
Pennsylvania	1,081	2.91	9.0	0	--	--	0	--	--
East North Central	1,974	3.57	12.5	2,244	0.24	4.5	0	--	--
Illinois	465	3.72	27.0	2,244	0.24	4.5	0	--	--
Indiana	167	3.47	9.1	0	--	--	0	--	--
Michigan	32	0.85	6.6	0	--	--	0	--	--
Ohio	1,310	3.61	9.5	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	804	2.57	9.0	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	0	--	--	0	--	--	0	--	--
Maryland	406	2.45	9.2	0	--	--	0	--	--
North Carolina	2	0.71	6.0	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	44	0.81	8.9	0	--	--	0	--	--
West Virginia	352	2.94	8.8	0	--	--	0	--	--
East South Central	0	--	--	0	--	--	79	0.45	12.1
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	79	0.45	12.1
Tennessee	0	--	--	0	--	--	0	--	--
West South Central	32	2.10	25.3	2,925	0.31	5.5	1,692	0.91	15.2
Arkansas	0	--	--	246	0.24	5.3	0	--	--
Louisiana	0	--	--	319	0.31	5.1	0	--	--
Oklahoma	32	2.10	25.3	84	0.25	4.7	0	--	--
Texas	0	--	--	2,276	0.32	5.5	1,692	0.91	15.2
Mountain	0	--	--	798	0.69	9.2	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	707	0.74	9.6	0	--	--
Nevada	0	--	--	46	0.30	5.4	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	45	0.36	5.4	0	--	--
Pacific Contiguous	0	--	--	366	0.34	9.2	0	--	--
California	0	--	--	0	--	--	0	--	--
Oregon	0	--	--	0	--	--	0	--	--
Washington	0	--	--	366	0.34	9.2	0	--	--
Pacific Noncontiguous	0	--	--	61	0.26	5.0	0	--	--
Alaska	0	--	--	0	--	--	0	--	--
Hawaii	0	--	--	61	0.26	5.0	0	--	--
U.S. Total	3,941	3.13	10.8	6,394	0.33	5.8	1,771	0.90	15.1

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.17. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Commercial Sector by State, September 2018

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

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

Notes:
Bituminous coal includes anthracite coal and coal-derived synthesis gas.
See Glossary for definitions. Values for 2018 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Table 4.18. Receipts and Quality of Coal by Rank Delivered for Electricity Generation: Industrial Sector by State, September 2018

Census Division and State	Bituminous			Subbituminous			Lignite		
	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	111	3.70	8.5	50	0.87	6.5	0	--	--
Illinois	111	3.70	8.5	50	0.87	6.5	0	--	--
Indiana	0	--	--	0	--	--	0	--	--
Michigan	0	--	--	0	--	--	0	--	--
Ohio	0	--	--	0	--	--	0	--	--
Wisconsin	0	--	--	0	--	--	0	--	--
West North Central	17	2.88	8.8	198	0.20	4.4	0	--	--
Iowa	17	2.88	8.8	135	0.20	4.4	0	--	--
Kansas	0	--	--	0	--	--	0	--	--
Minnesota	0	--	--	0	--	--	0	--	--
Missouri	0	--	--	0	--	--	0	--	--
Nebraska	0	--	--	63	0.21	4.4	0	--	--
North Dakota	0	--	--	0	--	--	0	--	--
South Dakota	0	--	--	0	--	--	0	--	--
South Atlantic	77	0.97	9.2	0	--	--	0	--	--
Delaware	0	--	--	0	--	--	0	--	--
District of Columbia	0	--	--	0	--	--	0	--	--
Florida	0	--	--	0	--	--	0	--	--
Georgia	24	1.10	10.0	0	--	--	0	--	--
Maryland	8	1.71	20.9	0	--	--	0	--	--
North Carolina	19	0.82	6.9	0	--	--	0	--	--
South Carolina	0	--	--	0	--	--	0	--	--
Virginia	26	0.77	7.2	0	--	--	0	--	--
West Virginia	0	--	--	0	--	--	0	--	--
East South Central	66	0.97	8.0	0	--	--	0	--	--
Alabama	0	--	--	0	--	--	0	--	--
Kentucky	0	--	--	0	--	--	0	--	--
Mississippi	0	--	--	0	--	--	0	--	--
Tennessee	66	0.97	8.0	0	--	--	0	--	--
West South Central	5	0.41	8.6	0	--	--	0	--	--
Arkansas	5	0.41	8.6	0	--	--	0	--	--
Louisiana	0	--	--	0	--	--	0	--	--
Oklahoma	0	--	--	0	--	--	0	--	--
Texas	0	--	--	0	--	--	0	--	--
Mountain	0	--	--	0	--	--	0	--	--
Arizona	0	--	--	0	--	--	0	--	--
Colorado	0	--	--	0	--	--	0	--	--
Idaho	0	--	--	0	--	--	0	--	--
Montana	0	--	--	0	--	--	0	--	--
Nevada	0	--	--	0	--	--	0	--	--
New Mexico	0	--	--	0	--	--	0	--	--
Utah	0	--	--	0	--	--	0	--	--
Wyoming	0	--	--	0	--	--	0	--	--
Pacific Contiguous	55	0.38	8.6	0	--	--	0	--	--
California	55	0.38	8.6	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	331	1.80	8.6	247	0.34	4.8	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 are preliminary. Values for 2017 are final. See Technical Notes for a discussion of the sample design for the Form EIA-923.

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

Chapter 5

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

Table 5.1. Sales of Electricity to Ultimate Customers:

Total by End-Use Sector, 2008 - September 2018 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	1,380,662	1,336,133	1,009,516	7,653	3,733,965
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	1,353,358	984,298	7,523	3,723,826
Year 2016					
January	130,972	110,410	78,848	660	320,890
February	115,959	103,452	76,748	646	296,806
March	100,227	105,739	79,237	609	285,812
April	88,244	102,045	78,647	595	269,531
May	94,198	108,437	81,491	581	284,708
June	125,211	120,363	83,672	631	329,878
July	154,409	130,038	87,076	648	372,172
August	156,442	135,019	89,101	631	381,192
Sept	129,363	123,493	83,259	637	336,752
October	101,508	112,963	81,597	613	296,681
November	93,244	105,060	78,421	592	277,317
December	121,281	110,172	78,616	653	310,722
Year 2017					
January	129,212	109,527	78,809	667	318,215
February	100,968	99,675	74,534	635	275,813
March	103,096	107,209	80,530	645	291,479
April	90,725	102,625	78,899	589	272,837
May	98,281	109,910	83,134	583	291,908
June	122,543	120,054	85,399	628	328,624
July	149,900	129,323	87,806	630	367,659
August	142,007	128,527	89,134	640	360,309
Sept	118,779	118,831	83,540	618	321,768
October	102,811	113,326	82,815	626	299,578
November	98,321	105,009	79,456	598	283,383
December	122,005	109,342	80,242	664	312,252
Year 2018					
January	148,978	114,634	76,059	751	340,422
February	113,383	102,018	71,946	643	287,990
March	106,939	107,902	76,810	625	292,276
April	95,128	102,940	75,241	608	273,917
May	103,453	112,622	81,461	591	298,126
June	129,478	121,597	81,528	628	333,231
July	153,071	130,955	85,094	640	369,759
August	152,636	134,333	88,761	686	376,416
Sept	128,458	121,600	81,216	648	331,923
Year to Date					
2016	1,095,025	1,038,997	738,080	5,640	2,877,742
2017	1,055,512	1,025,681	741,785	5,635	2,828,613
2018	1,131,523	1,048,601	718,115	5,821	2,904,060
Rolling 12 Months Ending in September					
2017	1,371,544	1,353,876	980,420	7,492	3,713,333
2018	1,454,659	1,376,278	960,628	7,708	3,799,273

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 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, 2008 - September 2018 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	155,496	137,036	70,231	820	363,583
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	144,260	67,691	728	390,340
Year 2016					
January	15,704	11,133	5,080	63	31,980
February	14,076	10,605	4,927	62	29,670
March	12,593	10,815	5,122	58	28,587
April	10,967	10,398	5,065	57	26,486
May	12,048	11,184	5,357	54	28,643
June	15,942	12,828	5,879	62	34,710
July	19,575	13,891	6,294	64	39,823
August	20,157	14,530	6,440	63	41,191
Sept	16,652	13,298	5,947	64	35,961
October	12,648	11,914	5,491	59	30,111
November	11,886	10,840	5,225	55	28,007
December	14,830	11,206	5,242	62	31,339
Year 2017					
January	15,781	11,184	5,190	63	32,218
February	12,911	10,444	4,941	60	28,355
March	13,289	11,209	5,407	61	29,966
April	11,536	10,670	5,209	56	27,471
May	12,843	11,639	5,639	56	30,178
June	16,171	13,211	6,141	64	35,587
July	19,606	14,185	6,416	64	40,271
August	18,679	14,143	6,435	64	39,322
Sept	15,772	13,106	5,992	62	34,931
October	13,164	12,210	5,725	60	31,159
November	12,721	11,018	5,345	57	29,141
December	15,189	11,241	5,249	62	31,741
Year 2018					
January	18,254	12,020	5,288	71	35,633
February	14,354	10,857	4,896	63	30,170
March	13,892	11,315	5,114	59	30,380
April	12,256	10,744	4,951	57	28,009
May	13,604	11,819	5,553	56	31,033
June	16,891	13,155	5,854	64	35,964
July	20,096	14,370	6,247	65	40,778
August	20,306	14,792	6,430	66	41,594
Sept	16,709	12,985	5,756	67	35,516
Year to Date					
2016	137,712	108,683	50,110	546	297,051
2017	136,587	109,792	51,371	550	298,300
2018	146,363	112,057	50,089	567	309,077
Rolling 12 Months Ending in September					
2017	175,952	143,752	67,329	725	387,758
2018	187,437	146,525	66,409	746	401,117

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 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, 2008 - September 2018 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	11.26	10.26	6.96	10.71	9.74
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
Year 2016					
January	11.99	10.08	6.44	9.52	9.97
February	12.14	10.25	6.42	9.61	10.00
March	12.56	10.23	6.46	9.56	10.00
April	12.43	10.19	6.44	9.53	9.83
May	12.79	10.31	6.57	9.28	10.06
June	12.73	10.66	7.03	9.75	10.52
July	12.68	10.68	7.23	9.84	10.70
August	12.88	10.76	7.23	10.04	10.81
Sept	12.87	10.77	7.14	10.00	10.68
October	12.46	10.55	6.73	9.62	10.15
November	12.75	10.32	6.66	9.22	10.10
December	12.23	10.17	6.67	9.49	10.09
Year 2017					
January	12.21	10.21	6.59	9.39	10.12
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	11.00	7.19	10.18	10.83
July	13.08	10.97	7.31	10.12	10.95
August	13.15	11.00	7.22	10.06	10.91
Sept	13.28	11.03	7.17	9.99	10.86
October	12.80	10.77	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	6.95	9.40	10.47
February	12.66	10.64	6.81	9.80	10.48
March	12.99	10.49	6.66	9.40	10.39
April	12.88	10.44	6.58	9.45	10.23
May	13.15	10.49	6.82	9.46	10.41
June	13.05	10.82	7.18	10.15	10.79
July	13.13	10.97	7.34	10.14	11.03
August	13.30	11.01	7.24	9.68	11.05
Sept	13.01	10.68	7.09	10.28	10.70
Year to Date					
2016	12.58	10.46	6.79	9.69	10.32
2017	12.94	10.70	6.93	9.76	10.55
2018	12.94	10.69	6.98	9.75	10.64
Rolling 12 Months Ending in September					
2017	12.83	10.62	6.87	9.68	10.44
2018	12.89	10.65	6.91	9.68	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 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.
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Table 5.4.A. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, September 2018 and 2017 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	4,094	3,586	4,512	4,500	1,352	1,476	45	43	10,003	9,605
Connecticut	1,049	932	1,017	1,061	264	284	17	14	2,345	2,291
Maine	386	372	366	359	251	246	0	0	1,003	976
Massachusetts	1,828	1,543	2,271	2,190	498	579	26	26	4,624	4,338
New Hampshire	387	327	382	374	167	187	0	0	936	887
Rhode Island	280	260	303	308	57	63	2	2	643	633
Vermont	166	153	172	208	114	118	0	0	453	479
Middle Atlantic	12,733	10,537	14,114	13,530	6,497	6,169	339	320	33,683	30,557
New Jersey	2,741	2,420	3,260	3,267	582	595	26	25	6,609	6,307
New York	5,137	4,214	7,030	6,638	1,532	1,582	247	238	13,946	12,671
Pennsylvania	4,855	3,903	3,823	3,625	4,384	3,992	65	58	13,128	11,578
East North Central	15,711	14,304	15,851	15,626	15,428	16,358	52	50	47,042	46,337
Illinois	3,941	3,803	4,347	4,329	3,473	3,710	48	45	11,808	11,887
Indiana	2,788	2,498	2,132	2,057	3,452	3,670	2	2	8,374	8,227
Michigan	2,774	2,534	3,339	3,313	2,481	2,675	1	1	8,595	8,522
Ohio	4,542	3,779	4,036	3,933	3,927	4,227	2	2	12,507	11,942
Wisconsin	1,666	1,690	1,997	1,994	2,096	2,076	0	0	5,758	5,759
West North Central	8,242	7,936	8,686	8,777	7,490	7,948	4	4	24,421	24,664
Iowa	1,044	985	981	981	1,963	1,990	0	0	3,988	3,956
Kansas	1,205	1,242	1,393	1,406	935	963	0	0	3,534	3,611
Minnesota	1,624	1,639	1,900	2,033	1,775	1,891	2	2	5,301	5,566
Missouri	3,006	2,737	2,700	2,653	981	1,114	2	2	6,689	6,506
Nebraska	747	723	802	805	891	1,017	0	0	2,440	2,545
North Dakota	287	290	496	503	704	714	0	0	1,487	1,507
South Dakota	329	319	414	396	240	258	0	0	983	974
South Atlantic	34,051	30,109	29,370	26,929	11,896	11,584	109	104	75,426	68,726
Delaware	456	407	371	379	179	214	0	0	1,006	1,000
District of Columbia	241	202	709	672	11	15	27	29	987	918
Florida	12,490	11,798	9,063	8,364	1,455	1,372	7	6	23,015	21,540
Georgia	5,847	4,882	4,515	4,076	2,765	2,657	14	14	13,142	11,629
Maryland	2,248	1,951	2,519	2,438	344	306	43	43	5,153	4,737
North Carolina	5,307	4,584	4,773	4,232	2,100	2,258	2	0	12,182	11,074
South Carolina	2,894	2,494	2,037	1,894	2,454	2,220	0	0	7,385	6,608
Virginia	3,761	3,136	4,744	4,267	1,457	1,396	15	12	9,977	8,811
West Virginia	808	655	639	608	1,132	1,145	0	0	2,579	2,408
East South Central	11,410	9,648	8,805	8,036	8,145	8,508	0	0	28,360	26,192
Alabama	3,171	2,640	2,171	2,021	2,803	2,719	0	0	8,145	7,379
Kentucky	2,243	1,920	1,747	1,651	2,286	2,393	0	0	6,276	5,965
Mississippi	1,932	1,687	1,388	1,335	1,444	1,353	0	0	4,764	4,375
Tennessee	4,065	3,401	3,499	3,029	1,612	2,043	0	0	9,176	8,472
West South Central	22,166	20,852	18,590	18,004	15,478	16,179	18	17	56,252	55,053
Arkansas	1,766	1,578	1,173	1,120	1,578	1,449	0	0	4,516	4,148
Louisiana	3,237	2,940	2,414	2,283	3,030	3,206	1	1	8,681	8,430
Oklahoma	2,041	1,956	1,783	1,816	1,635	1,542	0	0	5,459	5,313
Texas	15,122	14,379	13,221	12,784	9,235	9,982	17	16	37,595	37,161
Mountain	9,328	8,700	8,831	8,580	7,221	7,190	13	12	25,393	24,482
Arizona	3,845	3,457	2,841	2,741	1,174	1,198	1	1	7,861	7,398
Colorado	1,669	1,585	1,795	1,815	1,397	1,381	7	5	4,869	4,787
Idaho	520	565	511	511	820	771	0	0	1,852	1,847
Montana	328	344	400	415	416	406	0	0	1,144	1,166
Nevada	1,385	1,212	1,076	1,012	1,060	1,142	1	1	3,522	3,367
New Mexico	592	570	832	786	705	673	0	0	2,130	2,029
Utah	827	797	1,071	1,003	802	771	4	4	2,705	2,575
Wyoming	162	169	303	297	847	846	0	0	1,312	1,312
Pacific Contiguous	10,337	12,732	12,374	14,366	7,290	7,691	69	69	30,069	34,858
California	7,015	9,072	8,748	10,571	4,256	4,492	66	67	20,084	24,201
Oregon	1,203	1,347	1,325	1,351	1,012	1,105	2	2	3,542	3,805
Washington	2,118	2,313	2,302	2,445	2,022	2,094	1	1	6,443	6,852
Pacific Noncontiguous	384	374	469	484	421	438	0	0	1,274	1,296
Alaska	140	143	212	213	114	117	0	0	466	474
Hawaii	244	231	257	271	307	320	0	0	808	822
U.S. Total	128,458	118,779	121,600	118,831	81,216	83,540	648	618	331,923	321,768

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
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Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 2018 are preliminary estimates based on a cutoff model sample.
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Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.4.B. Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through September 2018 and 2017 (Thousand Megawatthours)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	36,777	34,799	39,799	39,869	12,042	12,681	432	413	89,052	87,762
Connecticut	10,045	9,386	9,405	9,329	2,317	2,444	151	132	21,918	21,291
Maine	3,515	3,506	3,032	3,022	2,067	1,972	0	0	8,614	8,501
Massachusetts	15,673	14,740	19,664	19,621	4,584	5,168	261	261	40,182	39,790
New Hampshire	3,528	3,347	3,360	3,312	1,477	1,483	0	0	8,365	8,143
Rhode Island	2,421	2,306	2,812	2,734	563	556	20	21	5,816	5,617
Vermont	1,594	1,514	1,527	1,850	1,034	1,057	0	0	4,156	4,420
Middle Atlantic	106,465	98,415	120,367	117,884	55,051	54,814	3,005	2,885	284,887	273,998
New Jersey	23,420	21,642	29,419	28,814	5,276	5,561	237	230	58,352	56,248
New York	40,107	37,551	58,042	56,798	12,886	13,258	2,243	2,074	113,277	109,681
Pennsylvania	42,938	39,222	32,906	32,272	36,890	35,994	525	581	113,259	108,069
East North Central	148,921	135,523	141,644	137,509	140,736	145,092	463	430	431,765	418,553
Illinois	36,909	33,442	38,801	37,643	32,186	32,367	414	381	108,309	103,832
Indiana	26,187	23,802	18,652	17,981	31,302	33,223	16	15	76,158	75,021
Michigan	26,992	24,889	29,836	29,105	22,568	23,020	5	4	79,401	77,019
Ohio	41,785	37,460	36,061	34,943	36,088	38,212	28	30	113,962	110,646
Wisconsin	17,048	15,930	18,294	17,837	18,593	18,269	0	0	53,935	52,035
West North Central	83,585	76,458	79,395	77,007	66,585	70,087	37	35	229,602	223,588
Iowa	11,247	10,413	9,367	9,045	17,460	17,231	0	0	38,074	36,690
Kansas	11,159	10,165	12,191	11,947	8,257	8,730	0	0	31,606	30,842
Minnesota	17,063	16,210	17,702	17,629	15,730	16,687	19	18	50,515	50,544
Missouri	28,710	25,302	24,138	23,000	8,766	9,964	18	17	61,631	58,283
Nebraska	7,990	7,379	7,328	7,016	8,035	8,718	0	0	23,353	23,113
North Dakota	3,692	3,499	4,872	4,807	6,238	6,533	0	0	14,802	14,839
South Dakota	3,723	3,489	3,798	3,563	2,099	2,223	0	0	9,620	9,276
South Atlantic	286,264	266,690	241,077	235,136	105,423	105,468	986	973	633,749	608,267
Delaware	3,966	3,606	3,310	3,162	1,629	1,729	0	0	8,904	8,498
District of Columbia	1,997	1,862	6,247	6,061	133	132	245	250	8,623	8,306
Florida	94,843	93,366	72,355	72,090	12,488	12,550	62	68	179,748	178,073
Georgia	46,431	42,067	36,498	35,253	24,082	24,235	129	127	107,140	101,682
Maryland	21,651	19,804	22,483	21,909	2,848	2,859	391	395	47,372	44,967
North Carolina	47,297	42,696	37,963	36,411	20,108	20,622	9	3	105,377	99,732
South Carolina	24,782	22,355	16,910	16,644	20,776	20,421	0	0	62,468	59,419
Virginia	36,528	33,196	39,408	37,943	12,807	12,916	151	132	88,893	84,186
West Virginia	8,768	7,738	5,904	5,663	10,551	10,004	0	0	25,223	23,405
East South Central	96,944	85,602	71,963	68,579	73,257	77,304	0	0	242,163	231,485
Alabama	25,759	23,067	17,695	17,374	25,502	25,058	0	0	68,956	65,499
Kentucky	21,415	18,901	15,019	14,635	19,890	21,458	0	0	56,324	54,993
Mississippi	15,205	13,383	10,821	10,831	12,720	12,132	0	0	38,746	36,346
Tennessee	34,565	30,251	28,427	25,739	15,146	18,656	0	0	78,137	74,647
West South Central	181,659	164,913	153,664	147,445	134,480	144,081	150	145	469,953	456,583
Arkansas	14,958	13,130	9,378	9,040	13,438	12,856	0	0	37,775	35,026
Louisiana	25,138	22,579	19,120	18,462	25,931	27,809	10	10	70,199	68,860
Oklahoma	19,086	17,015	15,964	15,487	13,792	13,712	0	0	48,843	46,213
Texas	122,477	112,188	109,201	104,457	81,319	89,705	140	135	313,136	306,485
Mountain	78,583	77,264	75,445	74,116	62,688	62,670	120	106	216,835	214,155
Arizona	28,195	27,594	23,158	22,865	10,292	10,380	6	6	61,651	60,845
Colorado	14,791	14,276	15,649	15,688	12,055	11,666	69	50	42,564	41,681
Idaho	6,138	6,466	4,792	4,824	7,224	7,052	0	0	18,154	18,342
Montana	3,834	3,902	3,746	3,742	3,333	3,431	0	0	10,912	11,075
Nevada	10,929	10,541	9,321	8,576	9,021	9,633	6	7	29,278	28,757
New Mexico	5,333	5,065	7,029	6,699	5,996	5,783	0	0	18,357	17,547
Utah	7,351	7,391	8,954	8,907	7,022	7,042	38	43	23,365	23,384
Wyoming	2,012	2,029	2,795	2,814	7,745	7,682	0	0	12,552	12,525
Pacific Contiguous	108,841	112,380	120,983	123,800	64,192	65,800	628	647	294,643	302,627
California	68,555	70,262	86,430	89,031	36,770	36,808	602	623	192,358	196,725
Oregon	14,096	14,815	12,374	12,408	8,957	10,181	19	19	35,446	37,423
Washington	26,189	27,304	22,179	22,361	18,465	18,811	6	5	66,839	68,480
Pacific Noncontiguous	3,484	3,467	4,265	4,337	3,661	3,790	0	0	11,411	11,594
Alaska	1,461	1,505	2,013	2,016	1,000	1,061	0	0	4,474	4,582
Hawaii	2,023	1,962	2,252	2,321	2,661	2,729	0	0	6,937	7,012
U.S. Total	1,131,523	1,055,512	1,048,601	1,025,681	718,115	741,785	5,821	5,635	2,904,060	2,828,613

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Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.5.A. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, September 2018 and 2017 (Million Dollars)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	867	717	752	715	174	187	4	3	1,797	1,623
Connecticut	231	198	180	173	37	38	2	2	450	411
Maine	62	60	43	43	22	22	0	0	126	125
Massachusetts	405	321	392	370	73	82	1	1	871	775
New Hampshire	77	64	61	56	22	23	0	0	160	143
Rhode Island	62	47	51	47	9	9	0	0	122	103
Vermont	30	27	26	26	12	12	0	0	68	66
Middle Atlantic	2,084	1,727	1,867	1,795	442	426	41	38	4,434	3,986
New Jersey	426	370	404	404	60	61	3	2	893	837
New York	990	792	1,130	1,071	93	98	32	32	2,246	1,993
Pennsylvania	668	564	332	321	289	267	5	4	1,295	1,156
East North Central	2,017	1,943	1,597	1,587	1,070	1,155	4	3	4,687	4,688
Illinois	480	498	389	390	223	235	3	3	1,096	1,125
Indiana	344	316	225	219	249	275	0	0	818	809
Michigan	427	390	363	359	179	192	0	0	969	942
Ohio	517	489	398	398	257	293	0	0	1,173	1,181
Wisconsin	248	250	221	221	162	160	0	0	631	631
West North Central	1,029	1,010	865	888	584	607	0	0	2,478	2,505
Iowa	138	131	101	101	149	150	0	0	388	382
Kansas	155	168	143	152	73	74	0	0	371	394
Minnesota	237	223	215	224	147	144	0	0	599	591
Missouri	330	321	241	247	68	83	0	0	639	652
Nebraska	92	91	76	75	68	80	0	0	235	246
North Dakota	35	35	48	49	60	56	0	0	143	139
South Dakota	42	41	41	40	19	20	0	0	102	101
South Atlantic	4,023	3,683	2,690	2,563	790	785	9	8	7,511	7,038
Delaware	56	54	35	36	14	16	0	0	106	106
District of Columbia	30	26	83	79	1	1	3	2	117	109
Florida	1,412	1,398	809	794	111	109	1	1	2,333	2,302
Georgia	707	613	439	418	171	168	1	1	1,318	1,200
Maryland	299	271	258	250	27	25	3	3	587	549
North Carolina	616	529	409	371	143	152	0	0	1,168	1,052
South Carolina	358	335	201	208	152	146	0	0	711	690
Virginia	454	377	398	348	99	94	1	1	953	821
West Virginia	91	78	58	58	71	74	0	0	220	210
East South Central	1,275	1,103	913	862	485	518	0	0	2,673	2,483
Alabama	395	342	244	238	177	177	0	0	816	757
Kentucky	240	215	169	168	126	138	0	0	535	521
Mississippi	210	185	139	136	88	83	0	0	437	404
Tennessee	430	361	361	320	94	120	0	0	886	801
West South Central	2,451	2,282	1,482	1,502	823	906	1	1	4,758	4,692
Arkansas	177	170	87	98	86	95	0	0	350	364
Louisiana	300	296	200	206	155	183	0	0	656	685
Oklahoma	221	216	147	154	84	86	0	0	453	456
Texas	1,752	1,599	1,048	1,044	498	542	1	1	3,299	3,186
Mountain	1,146	1,074	872	844	483	507	1	1	2,502	2,426
Arizona	496	449	313	290	81	80	0	0	891	819
Colorado	210	201	187	188	103	107	1	1	500	497
Idaho	54	56	40	41	50	54	0	0	143	151
Montana	39	40	41	42	21	21	0	0	101	104
Nevada	162	146	82	81	81	92	0	0	326	319
New Mexico	78	75	86	82	41	43	0	0	204	199
Utah	88	86	94	91	47	52	0	0	230	229
Wyoming	20	21	30	29	58	58	0	0	107	108
Pacific Contiguous	1,706	2,136	1,829	2,240	807	810	7	7	4,349	5,192
California	1,360	1,754	1,539	1,911	622	643	6	6	3,527	4,315
Oregon	136	147	92	118	90	68	0	0	318	332
Washington	210	235	199	211	96	99	0	0	504	545
Pacific Noncontiguous	111	97	118	111	98	90	0	0	327	298
Alaska	32	30	41	39	18	18	0	0	90	88
Hawaii	79	67	77	71	80	72	0	0	236	211
U.S. Total	16,709	15,772	12,985	13,106	5,756	5,992	67	62	35,516	34,931

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Table 5.5.B. Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through September 2018 and 2017 (Million Dollars)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	7,539	6,730	6,461	6,112	1,561	1,588	38	34	15,599	14,464
Connecticut	2,129	1,901	1,570	1,492	323	320	18	14	4,040	3,727
Maine	564	562	368	363	186	182	0	0	1,119	1,107
Massachusetts	3,383	2,946	3,306	3,126	666	715	17	16	7,372	6,803
New Hampshire	689	637	529	488	192	182	0	0	1,410	1,307
Rhode Island	488	416	457	413	85	81	3	4	1,033	913
Vermont	285	267	231	231	109	109	0	0	626	607
Middle Atlantic	17,102	15,782	15,062	15,009	3,824	3,800	336	328	36,324	34,919
New Jersey	3,643	3,414	3,620	3,609	537	575	22	21	7,821	7,619
New York	7,465	6,796	8,515	8,491	789	786	276	265	17,045	16,338
Pennsylvania	5,994	5,572	2,928	2,909	2,498	2,439	39	42	11,458	10,962
East North Central	19,589	18,135	14,317	14,009	9,872	10,303	32	29	43,810	42,475
Illinois	4,595	4,317	3,469	3,437	2,130	2,107	28	24	10,222	9,886
Indiana	3,133	2,929	1,928	1,895	2,237	2,507	2	2	7,299	7,333
Michigan	4,226	3,855	3,337	3,209	1,650	1,665	1	1	9,214	8,730
Ohio	5,171	4,740	3,579	3,514	2,424	2,645	2	2	11,176	10,902
Wisconsin	2,465	2,293	2,004	1,954	1,431	1,378	0	0	5,900	5,625
West North Central	10,187	9,416	7,846	7,693	4,989	5,142	3	3	23,026	22,254
Iowa	1,451	1,311	941	882	1,206	1,118	0	0	3,597	3,312
Kansas	1,477	1,359	1,282	1,275	619	664	0	0	3,378	3,298
Minnesota	2,293	2,130	1,865	1,878	1,226	1,256	2	2	5,386	5,266
Missouri	3,274	3,018	2,292	2,234	626	744	2	2	6,194	5,997
Nebraska	871	820	661	629	617	685	0	0	2,149	2,134
North Dakota	387	367	446	448	530	502	0	0	1,363	1,316
South Dakota	434	411	360	347	164	174	0	0	958	932
South Atlantic	33,751	31,812	22,536	22,068	6,867	6,907	77	78	63,230	60,865
Delaware	496	479	316	314	125	135	0	0	938	928
District of Columbia	252	238	738	701	11	11	23	23	1,024	972
Florida	10,935	10,801	6,711	6,705	966	983	5	6	18,617	18,494
Georgia	5,435	5,109	3,550	3,566	1,424	1,466	7	7	10,416	10,148
Maryland	2,876	2,789	2,336	2,359	236	239	29	32	5,477	5,418
North Carolina	5,329	4,700	3,298	3,086	1,270	1,296	1	0	9,897	9,082
South Carolina	3,089	2,931	1,729	1,769	1,268	1,271	0	0	6,086	5,970
Virginia	4,341	3,864	3,304	3,026	876	839	12	11	8,534	7,740
West Virginia	998	901	553	542	690	667	0	0	2,241	2,111
East South Central	10,786	9,687	7,511	7,276	4,285	4,610	0	0	22,581	21,573
Alabama	3,175	2,914	1,997	2,016	1,556	1,555	0	0	6,727	6,486
Kentucky	2,229	2,046	1,429	1,441	1,095	1,233	0	0	4,753	4,720
Mississippi	1,709	1,484	1,132	1,098	774	732	0	0	3,614	3,315
Tennessee	3,673	3,243	2,952	2,720	861	1,090	0	0	7,487	7,053
West South Central	19,708	17,723	12,610	12,349	7,401	7,914	13	12	39,732	37,997
Arkansas	1,484	1,358	732	773	746	790	0	0	2,962	2,921
Louisiana	2,360	2,211	1,680	1,655	1,378	1,526	1	1	5,419	5,393
Oklahoma	1,968	1,813	1,274	1,268	714	749	0	0	3,956	3,830
Texas	13,896	12,340	8,924	8,653	4,563	4,849	12	11	27,395	25,854
Mountain	9,483	9,210	7,345	7,163	4,095	4,180	11	11	20,934	20,564
Arizona	3,627	3,433	2,516	2,419	692	681	1	1	6,836	6,533
Colorado	1,798	1,745	1,579	1,557	876	881	6	5	4,258	4,188
Idaho	634	648	385	386	483	483	0	0	1,502	1,518
Montana	429	428	381	379	171	180	0	0	981	986
Nevada	1,294	1,247	735	674	582	616	1	1	2,612	2,537
New Mexico	686	656	716	691	345	362	0	0	1,747	1,710
Utah	785	821	762	784	421	444	4	4	1,972	2,053
Wyoming	231	232	271	273	524	532	0	0	1,027	1,037
Pacific Contiguous	17,245	17,200	17,325	17,117	6,335	6,137	57	56	40,962	40,510
California	13,169	12,989	14,302	14,113	4,915	4,664	55	53	32,441	31,819
Oregon	1,540	1,580	1,098	1,097	554	609	2	2	3,195	3,288
Washington	2,535	2,631	1,925	1,907	866	864	1	0	5,327	5,403
Pacific Noncontiguous	972	893	1,046	996	861	790	0	0	2,879	2,678
Alaska	322	318	379	383	177	174	0	0	878	875
Hawaii	650	574	666	613	684	616	0	0	2,000	1,803
U.S. Total	146,363	136,587	112,057	109,792	50,089	51,371	567	550	309,077	298,300

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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, September 2018 and 2017 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	21.17	20.00	16.67	15.90	12.89	12.66	8.29	8.07	17.97	16.90
Connecticut	22.05	21.26	17.67	16.32	14.16	13.29	11.79	12.03	19.19	17.93
Maine	16.01	16.01	11.80	11.86	8.58	9.14	--	--	12.61	12.76
Massachusetts	22.15	20.83	17.25	16.91	14.57	14.22	5.35	5.17	18.83	17.88
New Hampshire	19.87	19.64	15.90	14.98	13.12	12.32	--	--	17.04	16.13
Rhode Island	22.32	17.92	16.76	15.30	15.17	14.76	17.16	17.11	19.04	16.33
Vermont	17.95	17.92	15.11	12.54	10.59	10.33	--	--	15.01	13.72
Middle Atlantic	16.37	16.39	13.23	13.27	6.80	6.90	11.98	11.88	13.16	13.04
New Jersey	15.53	15.30	12.40	12.35	10.26	10.28	13.22	8.60	13.51	13.28
New York	19.28	18.80	16.07	16.13	6.07	6.19	13.06	13.36	16.10	15.73
Pennsylvania	13.76	14.45	8.69	8.85	6.60	6.68	7.40	7.19	9.86	9.98
East North Central	12.84	13.58	10.07	10.16	6.94	7.06	7.34	6.52	9.96	10.12
Illinois	12.19	13.09	8.94	9.00	6.42	6.34	7.17	6.24	9.28	9.47
Indiana	12.33	12.63	10.57	10.63	7.20	7.49	10.38	10.61	9.77	9.84
Michigan	15.40	15.38	10.88	10.85	7.20	7.20	10.03	11.67	11.28	11.05
Ohio	11.39	12.95	9.87	10.11	6.56	6.94	8.00	7.92	9.38	9.89
Wisconsin	14.88	14.82	11.08	11.11	7.74	7.69	13.38	14.12	10.96	10.96
West North Central	12.48	12.73	9.95	10.11	7.79	7.64	10.96	10.71	10.15	10.16
Iowa	13.23	13.32	10.32	10.30	7.59	7.53	--	--	9.74	9.66
Kansas	12.86	13.55	10.26	10.84	7.78	7.65	--	--	10.49	10.92
Minnesota	14.57	13.59	11.33	11.00	8.26	7.63	10.73	10.15	11.29	10.62
Missouri	10.98	11.73	8.92	9.31	6.90	7.49	11.19	11.31	9.55	10.02
Nebraska	12.28	12.55	9.42	9.35	7.65	7.83	--	--	9.65	9.65
North Dakota	12.23	12.02	9.71	9.70	8.55	7.80	--	--	9.64	9.25
South Dakota	12.83	12.87	9.82	10.01	7.99	7.88	--	--	10.38	10.38
South Atlantic	11.82	12.23	9.16	9.52	6.64	6.78	8.04	7.26	9.96	10.24
Delaware	12.38	13.36	9.45	9.49	7.86	7.42	--	--	10.50	10.62
District of Columbia	12.56	13.08	11.76	11.77	8.34	8.13	9.98	7.65	11.87	11.87
Florida	11.31	11.85	8.93	9.50	7.61	7.93	7.61	9.23	10.14	10.68
Georgia	12.09	12.56	9.72	10.27	6.20	6.30	6.04	6.20	10.03	10.32
Maryland	13.29	13.90	10.23	10.25	7.95	8.25	7.54	6.81	11.39	11.59
North Carolina	11.60	11.54	8.58	8.76	6.79	6.73	7.79	8.24	9.59	9.50
South Carolina	12.37	13.45	9.85	11.00	6.20	6.57	--	--	9.63	10.44
Virginia	12.08	12.03	8.39	8.17	6.83	6.74	8.14	8.10	9.55	9.32
West Virginia	11.24	11.92	9.02	9.51	6.29	6.48	--	--	8.52	8.72
East South Central	11.18	11.43	10.36	10.73	5.96	6.09	--	--	9.43	9.48
Alabama	12.47	12.97	11.23	11.77	6.31	6.52	--	--	10.02	10.26
Kentucky	10.70	11.19	9.67	10.17	5.50	5.75	--	--	8.52	8.73
Mississippi	10.86	10.97	10.00	10.18	6.09	6.12	--	--	9.16	9.23
Tennessee	10.59	10.61	10.32	10.58	5.85	5.89	--	--	9.65	9.46
West South Central	11.06	10.94	7.97	8.34	5.32	5.60	8.04	8.09	8.46	8.52
Arkansas	10.05	10.79	7.42	8.74	5.43	6.58	11.40	12.75	7.75	8.77
Louisiana	9.28	10.09	8.29	9.01	5.12	5.72	8.25	9.55	7.55	8.13
Oklahoma	10.85	11.06	8.27	8.50	5.12	5.55	--	--	8.29	8.59
Texas	11.59	11.12	7.93	8.16	5.40	5.43	8.02	7.98	8.78	8.57
Mountain	12.28	12.34	9.88	9.84	6.69	7.05	9.84	10.43	9.85	9.91
Arizona	12.91	12.98	11.02	10.57	6.94	6.69	10.58	10.62	11.34	11.07
Colorado	12.55	12.71	10.41	10.38	7.37	7.75	9.40	10.56	10.27	10.39
Idaho	10.32	9.99	7.74	7.94	6.12	6.97	--	--	7.75	8.16
Montana	11.78	11.55	10.27	10.23	5.03	5.25	--	--	8.80	8.88
Nevada	11.72	12.02	7.61	8.02	7.67	8.07	9.67	9.47	9.25	9.47
New Mexico	13.10	13.13	10.31	10.41	5.82	6.33	--	--	9.60	9.82
Utah	10.62	10.83	8.79	9.03	5.90	6.76	10.49	10.49	8.50	8.91
Wyoming	12.23	12.20	9.74	9.83	6.80	6.83	--	--	8.15	8.20
Pacific Contiguous	16.50	16.77	14.78	15.59	11.08	10.53	9.66	9.42	14.46	14.89
California	19.39	19.33	17.59	18.08	14.61	14.32	9.68	9.43	17.56	17.83
Oregon	11.29	10.90	6.95	8.72	8.89	6.13	9.13	9.40	8.98	8.74
Washington	9.90	10.15	8.63	8.63	4.74	4.72	9.22	8.53	7.83	7.95
Pacific Noncontiguous	28.81	26.06	25.18	22.85	23.33	20.66	--	--	25.67	23.04
Alaska	22.76	21.28	19.18	18.47	15.74	15.42	--	--	19.42	18.57
Hawaii	32.29	29.03	30.12	26.30	26.16	22.58	--	--	29.27	25.62
U.S. Total	13.01	13.28	10.68	11.03	7.09	7.17	10.28	9.99	10.70	10.86

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 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.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Table 5.6.B. Average Price of Electricity to Ultimate Customers by End-Use Sector, by State, Year-to-Date through September 2018 and 2017 (Cents per Kilowatthour)

	Residential		Commercial		Industrial		Transportation		All Sectors	
Census Division and State	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD	September 2018 YTD	September 2017 YTD
New England	20.50	19.34	16.23	15.33	12.96	12.52	8.81	8.19	17.52	16.48
Connecticut	21.19	20.26	16.69	15.99	13.94	13.08	11.81	10.84	18.43	17.51
Maine	16.05	16.02	12.15	12.01	9.00	9.24	--	--	12.99	13.02
Massachusetts	21.59	19.99	16.81	15.93	14.52	13.83	6.43	6.14	18.35	17.10
New Hampshire	19.53	19.05	15.74	14.72	12.98	12.26	--	--	16.85	16.05
Rhode Island	20.15	18.04	16.24	15.09	15.13	14.48	17.06	17.08	17.76	16.25
Vermont	17.90	17.67	15.14	12.50	10.55	10.27	--	--	15.06	13.74
Middle Atlantic	16.06	16.04	12.51	12.73	6.95	6.93	11.19	11.36	12.75	12.74
New Jersey	15.55	15.77	12.30	12.53	10.18	10.34	9.18	9.00	13.40	13.55
New York	18.61	18.10	14.67	14.95	6.12	5.93	12.29	12.78	15.05	14.90
Pennsylvania	13.96	14.21	8.90	9.01	6.77	6.78	7.37	7.20	10.12	10.14
East North Central	13.15	13.38	10.11	10.19	7.01	7.10	6.91	6.64	10.15	10.15
Illinois	12.45	12.91	8.94	9.13	6.62	6.51	6.69	6.32	9.44	9.52
Indiana	11.96	12.30	10.34	10.54	7.15	7.55	10.39	11.29	9.58	9.77
Michigan	15.66	15.49	11.19	11.03	7.31	7.23	10.84	11.97	11.60	11.33
Ohio	12.37	12.65	9.93	10.06	6.72	6.92	7.32	7.58	9.81	9.85
Wisconsin	14.46	14.40	10.95	10.95	7.70	7.54	13.86	14.26	10.94	10.81
West North Central	12.19	12.31	9.88	9.99	7.49	7.34	9.37	9.27	10.03	9.95
Iowa	12.90	12.59	10.04	9.76	6.91	6.49	--	--	9.45	9.03
Kansas	13.24	13.37	10.51	10.67	7.50	7.60	--	--	10.69	10.69
Minnesota	13.44	13.14	10.53	10.65	7.80	7.53	9.71	9.64	10.66	10.42
Missouri	11.40	11.93	9.50	9.71	7.14	7.47	9.01	8.88	10.05	10.29
Nebraska	10.90	11.11	9.01	8.97	7.68	7.85	--	--	9.20	9.23
North Dakota	10.48	10.48	9.14	9.32	8.50	7.68	--	--	9.21	8.87
South Dakota	11.66	11.78	9.48	9.73	7.82	7.83	--	--	9.96	10.04
South Atlantic	11.79	11.93	9.35	9.39	6.51	6.55	7.79	8.03	9.98	10.01
Delaware	12.51	13.29	9.56	9.92	7.70	7.82	--	--	10.54	10.92
District of Columbia	12.64	12.76	11.81	11.56	8.24	8.27	9.28	9.25	11.88	11.71
Florida	11.53	11.57	9.28	9.30	7.74	7.83	7.81	8.55	10.36	10.39
Georgia	11.70	12.14	9.73	10.12	5.92	6.05	5.68	5.50	9.72	9.98
Maryland	13.28	14.08	10.39	10.77	8.28	8.35	7.37	8.00	11.56	12.05
North Carolina	11.27	11.01	8.69	8.48	6.31	6.29	7.99	8.61	9.39	9.11
South Carolina	12.47	13.11	10.23	10.63	6.10	6.22	--	--	9.74	10.05
Virginia	11.88	11.64	8.38	7.98	6.84	6.50	8.24	7.98	9.60	9.19
West Virginia	11.38	11.65	9.37	9.58	6.54	6.67	--	--	8.89	9.02
East South Central	11.13	11.32	10.44	10.61	5.85	5.96	--	--	9.32	9.32
Alabama	12.32	12.63	11.28	11.60	6.10	6.21	--	--	9.75	9.90
Kentucky	10.41	10.82	9.52	9.85	5.50	5.74	--	--	8.44	8.58
Mississippi	11.24	11.09	10.46	10.14	6.08	6.04	--	--	9.33	9.12
Tennessee	10.63	10.72	10.39	10.57	5.68	5.84	--	--	9.58	9.45
West South Central	10.85	10.75	8.21	8.38	5.50	5.49	8.36	8.31	8.45	8.32
Arkansas	9.92	10.34	7.80	8.55	5.55	6.14	11.41	12.23	7.84	8.34
Louisiana	9.39	9.79	8.79	8.96	5.31	5.49	9.64	9.96	7.72	7.83
Oklahoma	10.31	10.66	7.98	8.18	5.18	5.46	--	--	8.10	8.29
Texas	11.35	11.00	8.17	8.28	5.61	5.41	8.26	8.18	8.75	8.44
Mountain	12.07	11.92	9.74	9.66	6.53	6.67	9.52	10.02	9.65	9.60
Arizona	12.86	12.44	10.86	10.58	6.73	6.56	10.25	9.76	11.09	10.74
Colorado	12.15	12.22	10.09	9.93	7.26	7.55	8.95	10.12	10.00	10.05
Idaho	10.32	10.03	8.03	8.00	6.69	6.85	--	--	8.27	8.27
Montana	11.20	10.96	10.17	10.12	5.14	5.24	--	--	8.99	8.91
Nevada	11.84	11.83	7.89	7.86	6.45	6.39	8.49	8.60	8.92	8.82
New Mexico	12.86	12.96	10.18	10.32	5.76	6.26	--	--	9.51	9.74
Utah	10.68	11.11	8.51	8.80	5.99	6.31	10.61	10.17	8.44	8.78
Wyoming	11.50	11.42	9.71	9.71	6.77	6.93	--	--	8.18	8.28
Pacific Contiguous	15.84	15.31	14.32	13.83	9.87	9.33	9.10	8.58	13.90	13.39
California	19.21	18.49	16.55	15.85	13.37	12.67	9.09	8.56	16.86	16.17
Oregon	10.93	10.66	8.88	8.84	6.19	5.98	9.18	9.32	9.01	8.79
Washington	9.68	9.64	8.68	8.53	4.69	4.60	9.28	9.05	7.97	7.89
Pacific Noncontiguous	27.90	25.75	24.51	22.96	23.52	20.83	--	--	25.23	23.10
Alaska	22.06	21.16	18.84	19.00	17.68	16.40	--	--	19.63	19.10
Hawaii	32.12	29.27	29.58	26.41	25.71	22.56	--	--	28.84	25.71
U.S. Total	12.94	12.94	10.69	10.70	6.98	6.93	9.75	9.76	10.64	10.55

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 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.
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: 2008 - September 2018

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	125,037,837	17,582,382	774,808	726	143,395,753
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
Year 2016					
January	130,327,243	18,001,806	829,287	78	149,158,414
February	130,114,828	18,022,657	825,209	81	148,962,775
March	131,333,340	18,185,531	835,990	86	150,354,947
April	130,452,160	18,064,005	823,879	82	149,340,126
May	131,002,108	18,133,949	840,080	85	149,976,222
June	131,282,771	18,174,804	853,646	86	150,311,307
July	131,086,905	18,130,289	847,849	83	150,065,126
August	131,346,501	18,227,261	859,607	83	150,433,452
Sept	131,374,997	18,207,555	846,336	83	150,428,971
October	131,318,899	18,203,386	838,393	84	150,360,762
November	131,325,418	18,183,746	824,510	84	150,333,758
December	131,859,453	18,244,491	832,403	84	150,936,431
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	133,342,216	18,484,700	794,303	84	152,621,303
February	132,948,450	18,361,911	771,363	84	152,081,808
March	133,911,047	18,498,366	782,306	84	153,191,803
April	133,452,691	18,455,876	782,458	84	152,691,109
May	134,218,437	18,535,301	805,945	84	153,559,767
June	134,051,924	18,569,074	816,626	84	153,437,708
July	133,973,114	18,549,619	819,029	87	153,341,849
August	134,540,638	18,617,835	825,157	95	153,983,725
Sept	133,920,754	18,593,944	802,443	89	153,317,230
Rolling 12 Months Ending in September					
2017	132,159,840	18,304,492	839,074	85	151,303,491
2018	133,658,407	18,496,358	809,147	86	152,963,998

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 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: September 2018 and 2017

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	6,389,412	6,337,797	899,157	885,350	20,177	23,115	6	6	7,308,752	7,246,268
Connecticut	1,503,427	1,495,983	154,101	153,300	4,251	4,387	3	3	1,661,782	1,653,673
Maine	710,882	713,907	99,867	100,515	3,072	3,137	0	0	813,821	817,559
Massachusetts	2,787,340	2,752,160	419,257	407,679	7,784	10,395	2	2	3,214,383	3,170,236
New Hampshire	622,923	619,917	107,987	107,588	3,146	3,246	0	0	734,056	730,751
Rhode Island	448,438	441,084	60,826	59,745	1,787	1,764	1	1	511,052	502,594
Vermont	316,402	314,746	57,119	56,523	137	186	0	0	373,658	371,455
Middle Atlantic	16,178,837	16,058,948	2,349,290	2,309,006	29,641	41,305	20	20	18,557,788	18,409,279
New Jersey	3,578,841	3,551,187	524,912	517,352	11,811	11,699	6	6	4,115,570	4,080,244
New York	7,201,325	7,150,851	1,110,842	1,093,289	6,645	6,974	8	8	8,318,820	8,251,122
Pennsylvania	5,398,671	5,356,910	713,536	698,365	11,185	22,632	6	6	6,123,398	6,077,913
East North Central	20,258,538	20,046,556	2,507,352	2,485,110	46,806	54,082	9	9	22,812,705	22,585,757
Illinois	5,302,401	5,265,838	615,520	611,826	4,021	5,681	3	3	5,921,945	5,883,348
Indiana	2,862,824	2,838,042	354,279	353,087	15,209	17,969	1	1	3,232,313	3,209,099
Michigan	4,387,795	4,344,569	549,483	542,156	NM	6,164	2	2	4,942,886	4,892,891
Ohio	4,981,200	4,910,587	629,819	625,234	16,942	18,495	2	2	5,627,963	5,554,318
Wisconsin	2,724,318	2,687,520	358,251	352,807	NM	5,773	1	1	3,087,598	3,046,101
West North Central	9,551,740	9,439,418	1,468,111	1,445,967	114,293	125,923	3	3	11,134,147	11,011,311
Iowa	1,396,335	1,375,981	245,658	238,331	NM	7,824	0	0	1,648,891	1,622,136
Kansas	1,276,397	1,261,041	236,685	232,405	25,459	24,365	0	0	1,538,541	1,517,811
Minnesota	2,414,393	2,404,959	291,775	293,312	NM	9,110	1	1	2,714,439	2,707,382
Missouri	2,818,912	2,775,988	383,817	382,997	6,707	8,150	2	2	3,209,438	3,167,137
Nebraska	860,479	843,576	162,324	152,564	55,767	63,727	0	0	1,078,570	1,059,867
North Dakota	380,819	380,512	74,087	74,674	8,120	8,802	0	0	463,026	463,988
South Dakota	404,405	397,361	73,765	71,684	NM	3,945	0	0	481,242	472,990
South Atlantic	28,048,964	27,644,199	3,819,820	3,749,239	78,525	83,702	13	13	31,947,322	31,477,153
Delaware	430,882	427,267	54,983	54,452	589	851	0	0	486,454	482,570
District of Columbia	275,959	268,685	26,426	26,165	1	1	3	3	302,389	294,854
Florida	9,418,062	9,302,649	1,241,002	1,218,059	20,373	21,280	2	2	10,679,439	10,541,990
Georgia	4,402,730	4,310,944	587,084	574,192	19,595	23,217	1	1	5,009,410	4,908,354
Maryland	2,337,297	2,317,034	254,109	253,181	8,763	8,761	5	5	2,600,174	2,578,981
North Carolina	4,579,199	4,500,701	711,040	682,879	9,853	10,042	1	1	5,300,093	5,193,623
South Carolina	2,302,329	2,257,333	368,853	374,232	4,252	4,387	0	0	2,675,434	2,635,952
Virginia	3,445,516	3,402,134	431,644	421,869	3,742	3,678	1	1	3,880,903	3,827,682
West Virginia	856,990	857,452	144,679	144,210	11,357	11,485	0	0	1,013,026	1,013,147
East South Central	8,483,733	8,330,945	1,405,371	1,396,614	22,211	26,728	0	0	9,911,315	9,754,287
Alabama	2,262,159	2,210,177	371,359	369,226	8,247	8,044	0	0	2,641,765	2,587,447
Kentucky	2,002,164	1,975,425	303,986	305,302	6,068	6,986	0	0	2,312,218	2,287,713
Mississippi	1,319,391	1,285,692	240,039	235,668	7,054	10,523	0	0	1,566,484	1,531,883
Tennessee	2,900,019	2,859,651	489,987	486,418	842	1,175	0	0	3,390,848	3,347,244
West South Central	16,240,458	16,037,090	2,360,002	2,277,588	202,026	191,737	6	6	18,802,492	18,506,421
Arkansas	1,398,829	1,383,000	193,183	192,367	39,793	37,879	2	2	1,631,807	1,613,248
Louisiana	2,102,713	2,078,941	294,043	291,979	18,548	19,628	1	1	2,415,305	2,390,549
Oklahoma	1,790,028	1,754,148	286,519	281,429	17,905	18,755	0	0	2,094,452	2,054,332
Texas	10,948,888	10,821,001	1,586,257	1,511,813	125,780	115,475	3	3	12,660,928	12,448,292
Mountain	9,833,722	9,753,588	1,396,513	1,397,238	90,945	98,446	5	5	11,321,185	11,249,277
Arizona	2,798,995	2,743,984	322,277	316,441	6,332	7,965	2	2	3,127,606	3,068,392
Colorado	2,332,552	2,292,418	364,272	371,229	14,645	16,586	1	1	2,711,470	2,680,234
Idaho	745,611	730,406	110,840	109,296	28,756	28,361	0	0	885,207	868,063
Montana	513,084	504,057	110,701	107,470	9,642	11,782	0	0	633,427	623,309
Nevada	1,187,428	1,267,985	165,011	163,881	NM	3,634	1	1	1,355,933	1,435,501
New Mexico	902,865	881,277	139,361	143,472	8,545	9,434	0	0	1,050,771	1,034,183
Utah	1,078,690	1,063,408	125,220	127,532	9,691	9,678	1	1	1,213,602	1,200,619
Wyoming	274,497	270,053	58,831	57,917	9,841	11,006	0	0	343,169	338,976
Pacific Contiguous	18,209,741	18,092,861	2,274,404	2,293,211	195,590	198,548	27	23	20,679,762	20,584,643
California	13,398,422	13,331,986	1,637,915	1,677,412	140,737	144,707	19	15	15,177,093	15,154,120
Oregon	1,756,023	1,728,135	240,958	234,249	26,309	25,872	2	2	2,023,292	1,988,258
Washington	3,055,296	3,032,740	395,531	381,550	28,544	27,969	6	6	3,479,377	3,442,265
Pacific Noncontiguous	725,609	719,996	113,924	114,972	NM	NM	0	0	841,762	837,158
Alaska	289,770	286,811	54,171	53,605	NM	NM	0	0	345,366	341,820
Hawaii	435,839	433,185	59,753	61,367	804	786	0	0	496,396	495,338
U.S. Total	133,920,754	132,461,398	18,593,944	18,354,295	802,443	845,776	89	85	153,317,230	151,661,554

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.
Displayed values of zero may represent small values that round to zero. The Excel version of this table provides additional precision which may be accessed by selecting individual cells.
Notes: - See Glossary for definitions. - Values for 2017 are final. Values for 2018 are preliminary estimates based on a cutoff model sample.
NM = Not Meaningful due to large relative standard error or excessive percentage change.
See Technical Notes for a discussion of the sample design for the Form EIA-826.
Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.
Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.
Totals may not equal sum of components because of independent rounding.
Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.

Chapter 6

Capacity

Table 6.1. Electric Generating Summer Capacity Changes (MW), August 2018 to September 2018

		As of End of August 2018	Activity During September 2018 as Reported to EIA		As of End of September 2018	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*	*88,974.6*	*668.0*	*0.0*	*89,642.6*	*668.0*	*2,074.4*	*5,442.1*	*696.0*	*10,146.8*	*0.0*	*0.0*	*696.0*	*10,146.8*	*90,338.6*	*99,789.4*
..... *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	89,003.9	668.0	0.0	89,671.9	668.0	2,074.4	5,442.1	696.0	10,146.8	0.0	0.0	696.0	10,146.8	90,367.9	99,818.7
..... *Solar Photovoltaic*	*Utility Scale Facilities*	*27,569.7*	*322.1*	*0.1*	*27,891.7*	*322.0*	*2,682.7*	*5,128.9*	*414.6*	*4,465.4*	*0.5*	*1.2*	*414.1*	*4,464.2*	*28,305.8*	*32,355.9*
..... *Solar Thermal without Energy Storage*	*Utility Scale Facilities*	*1,352.5*	*0.0*	*0.0*	*1,352.5*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*1,352.5*	*1,352.5*
..... *Solar Thermal with Energy Storage*	*Utility Scale Facilities*	*405.4*	*0.0*	*0.0*	*405.4*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*405.4*	*405.4*
..... Solar Subtotal	Utility Scale Facilities	29,327.6	322.1	0.1	29,649.6	322.0	2,682.7	5,128.9	414.6	4,465.4	0.5	1.2	414.1	4,464.2	30,063.7	34,113.8
..... Conventional Hydroelectric	Utility Scale Facilities	79,748.4	52.7	32.1	79,769.0	20.6	-25.5	7.4	0.0	262.7	0.0	109.9	0.0	152.8	79,769.0	79,921.8
..... *Wood/Wood Waste Biomass*	*Utility Scale Facilities*	*8,789.6*	*0.0*	*0.0*	*8,789.6*	*0.0*	*-41.3*	*-66.8*	*8.5*	*167.9*	*0.0*	*79.8*	*8.5*	*88.1*	*8,798.1*	*8,877.7*
..... *Landfill Gas*	*Utility Scale Facilities*	*2,068.3*	*0.0*	*0.0*	*2,068.3*	*0.0*	*-31.1*	*-37.8*	*0.0*	*6.2*	*0.0*	*6.6*	*0.0*	*-0.4*	*2,068.3*	*2,067.9*
..... *Municipal Solid Waste*	*Utility Scale Facilities*	*2,235.0*	*0.0*	*0.0*	*2,235.0*	*0.0*	*-10.0*	*-10.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*2,235.0*	*2,235.0*
..... *Other Waste Biomass*	*Utility Scale Facilities*	*773.5*	*0.0*	*0.0*	*773.5*	*0.0*	*-11.6*	*-22.6*	*0.0*	*34.0*	*0.0*	*0.4*	*0.0*	*33.6*	*773.5*	*807.1*
..... Biomass Sources Subtotal	Utility Scale Facilities	13,866.4	0.0	0.0	13,866.4	0.0	-94.0	-137.2	8.5	208.1	0.0	86.8	8.5	121.3	13,874.9	13,987.7
..... Geothermal	Utility Scale Facilities	2,499.3	0.0	0.0	2,499.3	0.0	16.0	48.2	0.0	76.9	0.0	0.0	0.0	76.9	2,499.3	2,576.2
... Renewable Sources Subtotal	***Utility Scale Facilities***	***214,445.6***	***1,042.8***	***32.2***	***215,456.2***	***1,010.6***	***4,653.6***	***10,489.4***	***1,119.1***	***15,159.9***	***0.5***	***197.9***	***1,118.6***	***14,962.0***	***216,574.8***	***230,418.2***
..... *Natural Gas Fired Combined Cycle*	*Utility Scale Facilities*	*257,352.6*	*641.5*	*85.0*	*257,909.1*	*556.5*	*11,237.1*	*12,426.2*	*2,135.1*	*11,587.3*	*0.0*	*50.0*	*2,135.1*	*11,537.3*	*260,044.2*	*269,446.4*
..... *Natural Gas Fired Combustion Turbine*	*Utility Scale Facilities*	*127,151.8*	*0.0*	*121.1*	*127,030.7*	*-121.1*	*769.9*	*1,085.9*	*117.0*	*2,159.1*	*10.0*	*94.0*	*107.0*	*2,065.1*	*127,137.7*	*129,095.8*
..... *Natural Gas Steam Turbine*	*Utility Scale Facilities*	*76,147.4*	*80.0*	*0.0*	*76,227.4*	*80.0*	*-2,320.3*	*-2,418.3*	*0.0*	*1.0*	*0.0*	*923.8*	*0.0*	*-922.8*	*76,227.4*	*75,304.6*
..... *Natural Gas Internal Combustion Engine*	*Utility Scale Facilities*	*4,624.3*	*3.0*	*0.0*	*4,627.3*	*3.0*	*328.3*	*330.3*	*19.6*	*308.3*	*0.0*	*0.9*	*19.6*	*307.4*	*4,646.9*	*4,934.7*
..... *Natural Gas with Compressed Air Storage*	*Utility Scale Facilities*	*110.0*	*0.0*	*0.0*	*110.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*110.0*	*110.0*
..... *Other Natural Gas*	*Utility Scale Facilities*	*122.3*	*0.0*	*0.0*	*122.3*	*0.0*	*0.2*	*0.2*	*0.0*	*44.4*	*0.0*	*0.0*	*0.0*	*44.4*	*122.3*	*166.7*
..... Natural Gas Subtotal	Utility Scale Facilities	465,508.4	724.5	206.1	466,026.8	518.4	10,015.2	11,424.3	2,271.7	14,100.1	10.0	1,068.7	2,261.7	13,031.4	468,288.5	479,058.2
..... *Conventional Steam Coal*	*Utility Scale Facilities*	*245,098.6*	*51.7*	*294.4*	*244,855.9*	*-242.7*	*-10,935.4*	*-13,411.4*	*0.0*	*17.0*	*209.9*	*4,211.0*	*-209.9*	*-4,194.0*	*244,646.0*	*240,661.9*
..... *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	245,854.6	51.7	294.4	245,611.9	-242.7	-10,935.4	-13,411.4	0.0	17.0	209.9	4,211.0	-209.9	-4,194.0	245,402.0	241,417.9
..... Petroleum Coke	Utility Scale Facilities	1,527.9	0.0	0.0	1,527.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,527.9	1,527.9
..... Petroleum Liquids	Utility Scale Facilities	31,604.0	3.7	0.0	31,607.7	3.7	-171.1	-235.8	5.5	21.5	2.6	9.0	2.9	12.5	31,610.6	31,620.2
..... Other Gases	Utility Scale Facilities	2,375.8	0.0	0.0	2,375.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2,375.8	2,375.8
... Fossil Fuels Subtotal	***Utility Scale Facilities***	***746,870.7***	***779.9***	***500.5***	***747,150.1***	***279.4***	***-1,091.3***	***-2,222.9***	***2,277.2***	***14,138.6***	***222.5***	***5,288.7***	***2,054.7***	***8,849.9***	***749,204.8***	***756,000.0***
..... Hydroelectric Pumped Storage	Utility Scale Facilities	22,855.4	0.0	0.0	22,855.4	0.0	45.0	45.0	0.0	57.0	0.0	0.0	0.0	57.0	22,855.4	22,912.4
..... 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	763.3	5.6	0.0	768.9	5.6	104.0	89.5	64.1	153.6	0.0	0.0	64.1	153.6	833.0	922.5
... Energy Storage Subtotal	***Utility Scale Facilities***	***23,665.7***	***5.6***	***0.0***	***23,671.3***	***5.6***	***149.0***	***134.5***	***64.1***	***210.6***	***0.0***	***0.0***	***64.1***	***210.6***	***23,735.4***	***23,881.9***
... Nuclear	***Utility Scale Facilities***	***99,628.9***	***155.0***	***607.7***	***99,176.2***	***-452.7***	***-452.7***	***-452.7***	***0.0***	***310.0***	***0.0***	***1,480.0***	***0.0***	***-1,170.0***	***99,176.2***	***98,006.2***
... All Other	***Utility Scale Facilities***	***2,184.9***	***0.0***	***0.0***	***2,184.9***	***0.0***	***10.5***	***10.5***	***0.9***	***48.8***	***0.0***	***0.0***	***0.9***	***48.8***	***2,185.8***	***2,233.7***
TOTAL	**UTILITY SCALE FACILITIES**	**1,086,795.8**	**1,983.3**	**1,140.4**	**1,087,638.7**	**842.9**	**3,269.1**	**7,958.8**	**3,461.3**	**29,867.9**	**223.0**	**6,966.6**	**3,238.3**	**22,901.3**	**1,090,877.0**	**1,110,540.0**
..... *Estimated Small Scale Solar Photovoltaic*	*Small Scale Facilities*	*18,412.4*			*18,708.4*	*296.0*	*2,560.6*	*3,492.0*								
..... Estimated Total Solar Photovoltaic	All Facilities	45,982.1			46,600.1	618.0	5,243.3	8,620.9								
... Estimated Total Solar	***All Facilities***	***47,740.0***			***48,358.0***	***618.0***	***5,243.3***	***8,620.9***								

NOTES:
Planned Capacity Additions reflect plans to begin operating new units and plans to uprate existing units.
Planned Capacity Reductions reflect plans to retire or derate existing units.
Actual Capacity Additions reflect new units, uprates to existing units, corrections to previously reported capacities, and additions not previously reported.
Actual Capacity Reductions reflect retirements of and derates to existing units, corrections to previously reported capacities, and reductions not previously reported.
Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this table.

Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'
Estimated small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861 and from estimation methods described in the technical notes.

Table 6.1.A. Estimated Net Summer Solar Photovoltaic Capacity From Utility and Small Scale Facilities (Megawatts)
2008 - September 2018

Period	Utility Solar Photovoltaic	Estimated Small Scale Solar Photovoltaic	Estimated Total Solar Photovoltaic
Annual Totals			
2008	70.8	N/A	N/A
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
Year 2016			
January	12,470.5	9,865.6	22,336.1
February	12,615.2	10,123.1	22,738.3
March	12,822.0	10,440.2	23,262.2
April	13,298.0	10,687.8	23,985.8
May	13,419.8	10,927.9	24,347.7
June	13,635.3	11,185.2	24,820.5
July	14,360.4	11,385.3	25,745.7
August	15,297.1	11,670.6	26,967.7
Sept	16,064.3	11,913.3	27,977.6
October	16,477.2	12,156.4	28,633.6
November	17,192.0	12,446.4	29,638.4
December	20,192.9	12,765.1	32,958.0
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	25,958.5	16,489.5	42,448.0
February	26,048.3	16,742.2	42,790.5
March	26,546.5	17,029.2	43,575.7
April	26,822.9	17,293.9	44,116.8
May	27,243.0	17,581.1	44,824.1
June	27,393.6	17,862.9	45,256.5
July	27,505.1	18,110.9	45,616.0
August	27,569.7	18,412.4	45,982.1
Sept	27,891.7	18,708.4	46,600.1

Values for 2017 are final. Values for 2018 are preliminary.
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'
Estimated small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861, and from estimation methods described in the technical notes.

Table 6.1.B. Estimated Net Summer Solar Photovoltaic Capacity From Small Scale Facilities by Sector (Megawatts):
2014 - September 2018

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
Year 2016				
January	5,428.5	3,419.8	1,017.3	9,865.6
February	5,627.1	3,458.3	1,037.7	10,123.1
March	5,852.7	3,521.8	1,065.8	10,440.2
April	6,051.1	3,552.6	1,084.1	10,687.8
May	6,238.7	3,589.1	1,100.0	10,927.9
June	6,432.3	3,640.4	1,112.5	11,185.2
July	6,592.9	3,660.7	1,131.7	11,385.3
August	6,785.8	3,734.2	1,150.5	11,670.6
Sept	6,957.7	3,794.2	1,161.5	11,913.3
October	7,147.1	3,837.6	1,171.8	12,156.4
November	7,332.8	3,930.7	1,182.9	12,446.4
December	7,527.0	4,022.8	1,215.3	12,765.1
Year 2017				
January	7,754.9	4,071.5	1,143.7	12,970.1
February	7,946.3	4,110.9	1,214.8	13,272.0
March	8,115.3	4,203.6	1,240.0	13,558.9
April	8,269.3	4,293.6	1,252.2	13,815.1
May	8,453.2	4,381.8	1,280.4	14,115.3
June	8,618.2	4,481.8	1,301.9	14,401.8
July	8,778.3	4,565.3	1,327.2	14,670.8
August	8,961.3	4,711.5	1,346.0	15,018.7
Sept	9,113.0	4,738.4	1,364.9	15,216.3
October	9,265.2	4,826.7	1,364.7	15,456.6
November	9,429.8	4,924.9	1,365.1	15,719.9
December	9,626.8	5,155.8	1,365.1	16,147.8
Year 2018				
January	9,820.2	5,308.4	1,360.8	16,489.5
February	9,985.3	5,389.1	1,367.9	16,742.2
March	10,154.5	5,489.6	1,385.1	17,029.2
April	10,314.3	5,572.4	1,407.3	17,293.9
May	10,491.8	5,661.6	1,427.7	17,581.1
June	10,657.4	5,760.7	1,444.8	17,862.9
July	10,826.0	5,832.1	1,452.8	18,110.9
August	11,008.8	5,934.5	1,469.0	18,412.4
Sept	11,179.9	6,019.6	1,508.9	18,708.4

Values for 2017 are final. Values for 2018 are preliminary.
Improved renewable data reporting has resulted in realignment of the commercial and industrial sectors.
Estimated small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861, and from estimation methods described in the technical notes.

Table 6.2.A. Net Summer Capacity of Utility Scale Units by Technology and by State, September 2018 and 2017 (Megawatts)

Census Division and State	Renewable Sources		Fossil Fuels		Hydroelectric Pumped Storage		Other Energy Storage		Nuclear		All Other Sources		All Sources	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	5,717.5	5,555.5	22,850.3	21,205.7	1,797.4	1,797.4	28.8	24.2	4,014.1	4,014.1	320.9	320.9	34,729.0	32,917.8
Connecticut	390.3	358.8	7,007.0	6,100.4	29.4	29.4	1.6	1.6	2,087.8	2,087.8	298.9	298.9	9,815.0	8,876.9
Maine	2,345.6	2,322.8	2,540.5	2,536.5	0.0	0.0	16.2	16.2	0.0	0.0	22.0	22.0	4,924.3	4,897.5
Massachusetts	1,309.5	1,248.8	9,110.9	8,376.9	1,768.0	1,768.0	9.0	4.4	677.2	677.2	0.0	0.0	12,874.6	12,075.3
New Hampshire	928.9	928.9	2,262.9	2,262.9	0.0	0.0	0.0	0.0	1,249.1	1,249.1	0.0	0.0	4,440.9	4,440.9
Rhode Island	113.3	104.8	1,831.1	1,831.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,944.4	1,935.9
Vermont	629.9	591.4	97.9	97.9	0.0	0.0	2.0	2.0	0.0	0.0	0.0	0.0	729.8	691.3
Middle Atlantic	11,023.2	10,818.6	71,332.8	67,963.5	3,409.8	3,409.8	73.9	72.4	18,687.9	19,295.6	425.4	420.9	104,953.0	101,980.8
New Jersey	946.0	906.2	12,410.9	12,366.4	420.0	420.0	2.5	1.0	3,500.2	4,107.9	15.7	11.2	17,295.3	17,812.7
New York	7,222.6	7,035.8	26,762.1	26,023.8	1,406.8	1,406.8	21.0	21.0	5,390.7	5,390.7	221.7	221.7	41,024.9	40,099.8
Pennsylvania	2,854.6	2,876.6	32,159.8	29,573.3	1,583.0	1,583.0	50.4	50.4	9,797.0	9,797.0	188.0	188.0	46,632.8	44,068.3
East North Central	11,927.2	11,042.5	111,747.5	114,376.2	2,179.0	2,134.0	168.7	187.4	19,024.4	19,024.4	188.1	188.1	145,234.9	146,952.6
Illinois	4,549.9	4,172.4	28,983.1	28,933.1	0.0	0.0	112.7	112.4	11,577.4	11,577.4	78.0	78.0	45,301.1	44,873.3
Indiana	2,442.8	2,312.2	23,892.4	23,159.4	0.0	0.0	22.0	22.0	0.0	0.0	89.0	89.0	26,446.2	25,582.6
Michigan	2,659.0	2,481.7	20,790.5	20,941.1	2,179.0	2,134.0	1.0	0.0	4,119.8	4,119.8	0.0	0.0	29,749.3	29,676.6
Ohio	1,044.3	850.7	25,036.5	26,804.7	0.0	0.0	33.0	53.0	2,134.0	2,134.0	0.0	0.0	28,247.8	29,842.4
Wisconsin	1,231.2	1,225.5	13,045.0	14,537.9	0.0	0.0	0.0	0.0	1,193.2	1,193.2	21.1	21.1	15,490.5	16,977.7
West North Central	26,905.4	25,620.3	60,754.7	60,774.2	657.0	657.0	3.2	3.2	5,443.4	5,443.4	24.5	24.5	93,788.2	92,522.6
Iowa	7,315.7	6,976.4	9,801.9	9,969.6	0.0	0.0	0.0	0.0	601.4	601.4	0.0	0.0	17,719.0	17,547.4
Kansas	5,136.2	5,136.2	9,781.8	9,776.5	0.0	0.0	0.0	0.0	1,225.0	1,225.0	0.8	0.8	16,143.8	16,138.5
Minnesota	5,081.0	4,593.2	10,301.0	10,077.8	0.0	0.0	1.0	1.0	1,657.0	1,657.0	18.4	18.4	17,058.4	16,347.4
Missouri	1,581.4	1,257.5	18,386.9	18,474.5	657.0	657.0	2.2	2.2	1,190.0	1,190.0	0.0	0.0	21,817.5	21,581.2
Nebraska	1,761.5	1,627.4	6,157.7	6,148.4	0.0	0.0	0.0	0.0	770.0	770.0	0.0	0.0	8,689.2	8,545.8
North Dakota	3,592.8	3,592.8	4,633.6	4,635.6	0.0	0.0	0.0	0.0	0.0	0.0	5.3	5.3	8,231.7	8,233.7
South Dakota	2,436.8	2,436.8	1,691.8	1,691.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4,128.6	4,128.6
South Atlantic	19,310.5	17,421.2	161,051.6	159,768.2	7,905.2	7,905.2	94.5	80.5	24,602.6	24,602.6	452.7	446.7	213,417.1	210,224.4
Delaware	48.3	46.1	3,331.4	3,331.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3,379.7	3,377.5
District of Columbia	23.0	23.0	9.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	32.0	32.0
Florida	2,547.2	1,756.0	51,805.4	53,186.0	0.0	0.0	14.0	0.0	3,572.0	3,572.0	348.7	348.7	58,287.3	58,862.7
Georgia	3,963.5	3,923.1	26,973.7	26,974.3	1,862.2	1,862.2	1.0	1.0	4,061.0	4,061.0	44.0	44.0	36,905.4	36,865.6
Maryland	1,161.8	1,088.7	11,837.3	10,278.7	0.0	0.0	13.0	13.0	1,707.8	1,707.8	6.0	0.0	14,725.9	13,088.2
North Carolina	6,274.6	5,715.8	22,130.3	21,644.3	86.0	86.0	1.0	1.0	5,117.6	5,117.6	54.0	54.0	33,663.5	32,618.7
South Carolina	2,147.1	1,966.1	12,137.2	11,435.2	2,716.0	2,716.0	0.0	0.0	6,576.2	6,576.2	0.0	0.0	23,576.5	22,693.5
Virginia	2,117.9	1,875.3	19,046.0	18,746.0	3,241.0	3,241.0	0.0	0.0	3,568.0	3,568.0	0.0	0.0	27,972.9	27,430.3
West Virginia	1,027.1	1,027.1	13,781.3	14,163.3	0.0	0.0	65.5	65.5	0.0	0.0	0.0	0.0	14,873.9	15,255.9
East South Central	8,762.9	8,544.7	64,846.3	65,678.8	1,616.3	1,616.3	1.0	0.0	11,139.1	10,984.1	1.4	1.4	86,367.0	86,825.3
Alabama	4,156.0	4,069.6	20,507.4	20,507.4	0.0	0.0	1.0	0.0	5,215.4	5,060.4	0.0	0.0	29,879.8	29,637.4
Kentucky	1,245.4	1,227.6	18,874.3	18,874.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20,119.7	20,101.9
Mississippi	435.3	333.3	13,274.3	13,989.9	0.0	0.0	0.0	0.0	1,401.0	1,401.0	1.4	1.4	15,112.0	15,725.6
Tennessee	2,926.2	2,914.2	12,190.3	12,307.2	1,616.3	1,616.3	0.0	0.0	4,522.7	4,522.7	0.0	0.0	21,255.5	21,360.4
West South Central	37,051.5	33,381.5	139,983.8	142,811.7	286.0	286.0	99.8	76.5	8,910.7	8,910.7	512.7	512.7	186,844.5	185,979.1
Arkansas	1,694.3	1,608.3	11,193.0	11,183.0	28.0	28.0	0.0	0.0	1,817.8	1,817.8	0.0	0.0	14,733.1	14,637.1
Louisiana	683.2	683.2	20,600.7	20,600.7	0.0	0.0	0.5	0.5	2,132.9	2,132.9	288.7	288.7	23,706.0	23,706.0
Oklahoma	8,661.7	7,701.5	18,577.0	17,775.9	258.0	258.0	0.0	0.0	0.0	0.0	0.0	0.0	27,496.7	25,735.4
Texas	26,012.3	23,388.5	89,613.1	93,252.1	0.0	0.0	99.3	76.0	4,960.0	4,960.0	224.0	224.0	120,908.7	121,900.6
Mountain	26,250.8	25,543.8	62,321.3	63,168.3	778.8	778.8	35.6	23.6	3,937.0	3,937.0	126.3	126.3	93,449.8	93,577.8
Arizona	5,090.8	4,991.6	19,407.3	19,407.3	216.3	216.3	32.0	20.0	3,937.0	3,937.0	0.0	0.0	28,683.4	28,572.2
Colorado	4,286.1	4,176.1	11,119.2	11,161.2	562.5	562.5	1.0	1.0	0.0	0.0	9.3	9.3	15,978.1	15,910.1
Idaho	4,011.9	4,014.6	1,127.6	1,127.6	0.0	0.0	0.0	0.0	0.0	0.0	14.8	14.8	5,154.3	5,157.0
Montana	3,472.8	3,449.3	2,740.4	2,740.4	0.0	0.0	0.0	0.0	0.0	0.0	44.0	44.0	6,257.2	6,233.7
Nevada	3,595.6	3,456.5	7,821.6	7,791.6	0.0	0.0	0.0	0.0	0.0	0.0	6.5	6.5	11,423.7	11,254.6
New Mexico	2,398.7	2,060.8	5,966.8	6,813.8	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.0	8,368.1	8,877.2
Utah	1,600.5	1,600.5	7,360.2	7,348.2	0.0	0.0	0.0	0.0	0.0	0.0	40.2	40.2	9,000.9	8,988.9
Wyoming	1,794.4	1,794.4	6,778.2	6,778.2	0.0	0.0	0.0	0.0	0.0	0.0	11.5	11.5	8,584.1	8,584.1
Pacific Contiguous	67,325.6	65,910.4	48,041.9	49,404.3	4,225.9	4,225.9	223.2	169.9	3,417.0	3,417.0	106.3	106.3	123,339.9	123,233.8
California	30,364.4	29,180.1	38,964.0	40,326.4	3,911.9	3,911.9	210.8	157.5	2,240.0	2,240.0	106.3	106.3	75,797.4	75,922.2
Oregon	12,259.7	12,067.5	4,318.1	4,318.1	0.0	0.0	5.0	5.0	0.0	0.0	0.0	0.0	16,582.8	16,390.6
Washington	24,701.5	24,662.8	4,759.8	4,759.8	314.0	314.0	7.4	7.4	1,177.0	1,177.0	0.0	0.0	30,959.7	30,921.0
Pacific Noncontiguous	1,181.6	1,128.3	4,219.9	4,222.1	0.0	0.0	87.2	88.7	0.0	0.0	26.6	26.6	5,515.3	5,465.7
Alaska	538.2	538.2	2,161.6	2,163.8	0.0	0.0	46.2	46.2	0.0	0.0	0.0	0.0	2,746.0	2,748.2
Hawaii	643.4	590.1	2,058.3	2,058.3	0.0	0.0	41.0	42.5	0.0	0.0	26.6	26.6	2,769.3	2,717.5
U.S. Total	215,456.2	204,966.8	747,150.1	749,373.0	22,855.4	22,810.4	815.9	726.4	99,176.2	99,628.9	2,184.9	2,174.4	1,087,638.7	1,079,679.9

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 are preliminary.

NOTES:
Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report. This exclusion may represent a significant portion of capacity for some technologies such as solar photovoltaic generation.
Concentrated Solar Power Energy Storage is included in 'Renewable sources'; it is not included in 'Other Energy Storage'

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

Table 6.2.B. Net Summer Capacity Using Primarily Renewable Energy Sources and by State, September 2018 and 2017 (Megawatts)

Census Division and State	Summer Capacity at Utility Scale Facilities														Small Scale Capacity		Capacity From Utility and Small Scale Facilities			
	Wind		Solar Photovoltaic		Solar Thermal		Conventional Hydroelectric		Biomass Sources		Geothermal		Total Renewable Sources		Estimated Solar Photovoltaic		Estimated Total Solar Photovoltaic		Estimated Total Solar	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	1,402.1	1,347.8	824.5	716.0	0.0	0.0	1,960.7	1,960.7	1,530.2	1,531.0	0.0	0.0	5,717.5	5,555.5	2,063.8	1,664.2	2,888.3	2,380.2	2,888.3	2,380.2
Connecticut	1.0	1.0	63.6	32.1	0.0	0.0	122.2	122.2	203.5	203.5	0.0	0.0	390.3	358.8	378.9	309.8	442.5	341.9	442.5	341.9
Maine	921.6	898.8	5.6	5.6	0.0	0.0	732.4	732.4	686.0	686.0	0.0	0.0	2,345.6	2,322.8	39.3	30.0	44.9	35.6	44.9	35.6
Massachusetts	94.4	92.9	662.4	602.4	0.0	0.0	267.4	267.4	285.3	286.1	0.0	0.0	1,309.5	1,248.8	1,403.3	1,132.3	2,065.7	1,734.7	2,065.7	1,734.7
New Hampshire	183.1	183.1	0.0	0.0	0.0	0.0	504.8	504.8	241.0	241.0	0.0	0.0	928.9	928.9	79.0	66.1	79.0	66.1	79.0	66.1
Rhode Island	51.8	51.8	18.7	10.2	0.0	0.0	2.7	2.7	40.1	40.1	0.0	0.0	113.3	104.8	64.9	39.9	83.6	50.1	83.6	50.1
Vermont	150.2	120.2	74.2	65.7	0.0	0.0	331.2	331.2	74.3	74.3	0.0	0.0	629.9	591.4	98.4	86.1	172.6	151.8	172.6	151.8
Middle Atlantic	3,284.0	3,205.6	993.2	842.0	0.0	0.0	5,466.2	5,466.2	1,279.8	1,304.8	0.0	0.0	11,023.2	10,818.6	2,894.7	2,395.3	3,887.9	3,237.3	3,887.9	3,237.3
New Jersey	7.6	7.6	698.8	659.0	0.0	0.0	12.3	12.3	227.3	227.3	0.0	0.0	946.0	906.2	1,418.3	1,207.6	2,117.1	1,866.6	2,117.1	1,866.6
New York	1,904.6	1,826.2	239.6	131.2	0.0	0.0	4,554.3	4,554.3	524.1	524.1	0.0	0.0	7,222.6	7,035.8	1,168.6	925.8	1,408.2	1,057.0	1,408.2	1,057.0
Pennsylvania	1,371.8	1,371.8	54.8	51.8	0.0	0.0	899.6	899.6	528.4	553.4	0.0	0.0	2,854.6	2,876.6	307.8	261.9	362.6	313.7	362.6	313.7
East North Central	9,368.8	8,528.5	432.5	366.0	0.0	0.0	857.3	857.3	1,268.6	1,290.7	0.0	0.0	11,927.2	11,042.5	361.7	251.9	794.2	617.9	794.2	617.9
Illinois	4,380.9	3,983.8	34.9	32.8	0.0	0.0	34.1	34.1	100.0	121.7	0.0	0.0	4,549.9	4,172.4	67.4	45.0	102.3	77.8	102.3	77.8
Indiana	2,109.4	1,989.7	196.7	185.8	0.0	0.0	60.4	60.4	76.3	76.3	0.0	0.0	2,442.8	2,312.2	70.4	25.0	267.1	210.8	267.1	210.8
Michigan	1,735.8	1,591.8	97.2	62.5	0.0	0.0	266.9	266.9	559.1	560.5	0.0	0.0	2,659.0	2,481.7	58.8	48.4	156.0	110.9	156.0	110.9
Ohio	713.4	533.9	81.6	67.5	0.0	0.0	101.9	101.9	147.4	147.4	0.0	0.0	1,044.3	850.7	112.1	93.6	193.7	161.1	193.7	161.1
Wisconsin	429.3	429.3	22.1	17.4	0.0	0.0	394.0	394.0	385.8	384.8	0.0	0.0	1,231.2	1,225.5	53.0	40.0	75.1	57.4	75.1	57.4
West North Central	22,283.5	21,317.2	772.8	454.0	0.0	0.0	3,291.7	3,291.7	557.4	557.4	0.0	0.0	26,905.4	25,620.3	316.9	246.5	1,089.7	700.5	1,089.7	700.5
Iowa	7,140.2	6,802.2	7.7	6.4	0.0	0.0	146.4	146.4	21.4	21.4	0.0	0.0	7,315.7	6,976.4	86.7	62.4	94.4	68.8	94.4	68.8
Kansas	5,116.0	5,116.0	4.2	4.2	0.0	0.0	7.0	7.0	9.0	9.0	0.0	0.0	5,136.2	5,136.2	17.6	10.5	21.8	14.7	21.8	14.7
Minnesota	3,707.9	3,507.9	682.2	394.4	0.0	0.0	205.9	205.9	485.0	485.0	0.0	0.0	5,081.0	4,593.2	58.5	41.9	740.7	436.3	740.7	436.3
Missouri	954.3	654.3	62.1	38.2	0.0	0.0	548.5	548.5	16.5	16.5	0.0	0.0	1,581.4	1,257.5	146.4	127.3	208.5	165.5	208.5	165.5
Nebraska	1,454.3	1,326.0	15.6	9.8	0.0	0.0	275.9	275.9	15.7	15.7	0.0	0.0	1,761.5	1,627.4	7.0	3.5	22.6	13.3	22.6	13.3
North Dakota	3,073.0	3,073.0	0.0	0.0	0.0	0.0	510.0	510.0	9.8	9.8	0.0	0.0	3,592.8	3,592.8	0.2	0.2	0.2	0.2	0.2	0.2
South Dakota	837.8	837.8	1.0	1.0	0.0	0.0	1,598.0	1,598.0	0.0	0.0	0.0	0.0	2,436.8	2,436.8	0.6	0.5	1.6	1.5	1.6	1.5
South Atlantic	1,086.3	1,086.3	6,691.9	4,684.6	0.0	0.0	7,229.2	7,268.2	4,303.1	4,382.1	0.0	0.0	19,310.5	17,421.2	1,626.4	1,282.9	8,318.3	5,967.5	8,318.3	5,967.5
Delaware	2.0	2.0	34.1	31.9	0.0	0.0	0.0	0.0	12.2	12.2	0.0	0.0	48.3	46.1	76.8	65.9	110.9	97.8	110.9	97.8
District of Columbia	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.0	23.0	0.0	0.0	23.0	23.0	47.8	34.3	47.8	34.3	47.8	34.3
Florida	0.0	0.0	1,261.9	393.7	0.0	0.0	54.5	54.5	1,230.8	1,307.8	0.0	0.0	2,547.2	1,756.0	262.7	179.3	1,524.6	573.0	1,524.6	573.0
Georgia	0.0	0.0	1,010.9	970.5	0.0	0.0	2,047.2	2,047.2	905.4	905.4	0.0	0.0	3,963.5	3,923.1	158.7	NM	1,169.6	NM	1,169.6	NM
Maryland	190.0	190.0	241.8	166.7	0.0	0.0	590.0	590.0	140.0	142.0	0.0	0.0	1,161.8	1,088.7	695.7	594.8	937.5	761.5	937.5	761.5
North Carolina	208.0	208.0	3,496.3	2,937.5	0.0	0.0	2,002.0	2,002.0	568.3	568.3	0.0	0.0	6,274.6	5,715.8	132.3	111.7	3,628.6	3,049.2	3,628.6	3,049.2
South Carolina	0.0	0.0	287.4	67.4	0.0	0.0	1,328.7	1,367.7	531.0	531.0	0.0	0.0	2,147.1	1,966.1	185.5	105.1	472.9	172.5	472.9	172.5
Virginia	0.0	0.0	359.5	116.9	0.0	0.0	866.0	866.0	892.4	892.4	0.0	0.0	2,117.9	1,875.3	60.2	42.8	419.7	159.7	419.7	159.7
West Virginia	686.3	686.3	0.0	0.0	0.0	0.0	340.8	340.8	0.0	0.0	0.0	0.0	1,027.1	1,027.1	6.6	5.5	6.6	5.5	6.6	5.5
East South Central	29.1	29.1	455.5	232.9	0.0	0.0	7,049.3	7,053.7	1,229.0	1,229.0	0.0	0.0	8,762.9	8,544.7	92.6	81.0	548.1	313.9	548.1	313.9
Alabama	0.0	0.0	179.3	92.9	0.0	0.0	3,290.8	3,290.8	685.9	685.9	0.0	0.0	4,156.0	4,069.6	NM	NM	NM	NM	NM	NM
Kentucky	0.0	0.0	26.3	11.1	0.0	0.0	1,146.9	1,144.3	72.2	72.2	0.0	0.0	1,245.4	1,227.6	22.1	16.0	48.4	27.1	48.4	27.1
Mississippi	0.0	0.0	160.6	58.6	0.0	0.0	0.0	0.0	274.7	274.7	0.0	0.0	435.3	333.3	7.2	6.0	167.8	64.6	167.8	64.6
Tennessee	29.1	29.1	89.3	70.3	0.0	0.0	2,611.6	2,618.6	196.2	196.2	0.0	0.0	2,926.2	2,914.2	56.4	54.1	145.7	124.4	145.7	124.4
West South Central	30,995.9	28,043.5	1,758.4	1,028.9	0.0	0.0	2,987.5	2,987.5	1,309.7	1,321.6	0.0	0.0	37,051.5	33,381.5	595.8	420.8	2,354.2	1,449.7	2,354.2	1,449.7
Arkansas	0.0	0.0	100.0	14.0	0.0	0.0	1,263.9	1,263.9	330.4	330.4	0.0	0.0	1,694.3	1,608.3	14.1	6.4	114.1	20.4	114.1	20.4
Louisiana	0.0	0.0	1.1	1.1	0.0	0.0	192.0	192.0	490.1	490.1	0.0	0.0	683.2	683.2	136.4	119.5	137.5	120.6	137.5	120.6
Oklahoma	7,693.4	6,743.2	30.5	20.5	0.0	0.0	861.6	861.6	76.2	76.2	0.0	0.0	8,661.7	7,701.5	6.7	3.6	37.2	24.1	37.2	24.1
Texas	23,302.5	21,300.3	1,626.8	993.3	0.0	0.0	670.0	670.0	413.0	424.9	0.0	0.0	26,012.3	23,388.5	438.6	291.3	2,065.4	1,284.6	2,065.4	1,284.6
Mountain	8,834.5	8,439.5	5,609.4	5,330.2	473.9	473.9	10,575.9	10,580.1	174.3	174.3	582.8	545.8	26,250.8	25,543.8	2,255.2	1,883.5	7,864.6	7,213.7	8,338.5	7,687.6
Arizona	267.3	267.3	1,776.5	1,677.3	295.4	295.4	2,720.9	2,720.9	30.7	30.7	0.0	0.0	5,090.8	4,991.6	1,227.3	1,031.4	3,003.8	2,708.7	3,299.2	3,004.1
Colorado	3,103.2	3,031.2	466.8	428.8	0.0	0.0	687.4	687.4	28.7	28.7	0.0	0.0	4,286.1	4,176.1	347.0	321.0	813.8	749.8	813.8	749.8
Idaho	970.5	970.5	240.0	240.0	0.0	0.0	2,707.5	2,710.2	83.9	83.9	10.0	10.0	4,011.9	4,014.6	22.7	11.1	262.7	251.1	262.7	251.1
Montana	703.5	678.5	17.0	17.0	0.0	0.0	2,749.3	2,750.8	3.0	3.0	0.0	0.0	3,472.8	3,449.3	13.2	10.4	30.2	27.4	30.2	27.4
Nevada	150.0	150.0	1,707.7	1,605.6	178.5	178.5	1,051.4	1,051.4	9.8	9.8	498.2	461.2	3,595.6	3,456.5	277.2	221.2	1,984.9	1,826.8	2,163.4	2,005.3
New Mexico	1,764.5	1,466.5	544.3	504.4	0.0	0.0	82.9	82.9	5.4	5.4	1.6	1.6	2,398.7	2,060.8	137.4	110.8	681.7	615.2	681.7	615.2
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	226.3	174.5	1,083.4	1,031.6	1,083.4	1,031.6
Wyoming	1,487.3	1,487.3	0.0	0.0	0.0	0.0	307.1	307.1	0.0	0.0	0.0	0.0	1,794.4	1,794.4	4.1	NM	4.1	NM	4.1	NM
Pacific Contiguous	12,121.5	11,966.1	10,252.3	9,009.9	1,284.0	1,284.0	39,854.7	39,799.7	1,939.6	1,988.4	1,873.5	1,862.3	67,325.6	65,910.4	7,899.2	6,425.9	18,151.5	15,435.8	19,435.5	16,719.8
California	5,838.2	5,682.8	9,959.7	8,909.5	1,284.0	1,284.0	10,198.0	10,198.0	1,230.5	1,263.0	1,854.0	1,842.8	30,364.4	29,180.1	7,626.6	6,202.1	17,586.3	15,111.6	18,870.3	16,395.6
Oregon	3,210.2	3,210.2	292.1	99.9	0.0	0.0	8,423.2	8,423.2	314.7	314.7	19.5	19.5	12,259.7	12,067.5	150.9	131.0	443.0	230.9	443.0	230.9
Washington	3,073.1	3,073.1	0.5	0.5	0.0	0.0	21,233.5	21,178.5	394.4	410.7	0.0	0.0	24,701.5	24,662.8	121.8	92.8	122.3	93.3	122.3	93.3
Pacific Noncontiguous	266.2	266.2	101.2	98.3	0.0	0.0	496.5	496.5	274.7	224.3	43.0	43.0	1,181.6	1,128.3	602.0	564.4	703.2	662.7	703.2	662.7
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	3.0	1.9	3.0	1.9	3.0	1.9
Hawaii	205.6	205.6	101.2	98.3	0.0	0.0	25.9	25.9	267.7	217.3	43.0	43.0	643.4	590.1	599.1	562.5	700.3	660.8	700.3	660.8
U.S. Total	89,671.9	84,229.8	27,891.7	22,762.8	1,757.9	1,757.9	79,769.0	79,761.6	13,866.4	14,003.6	2,499.3	2,451.1	215,456.2	204,966.8	18,708.4	15,216.3	46,600.1	37,979.1	48,358.0	39,737.0

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 are preliminary.

Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'
Estimated small scale solar photovoltaic capacity is based on data from Form EIA-861M, Form EIA-861, and from estimation methods described in the technical notes.

Table 6.2.C. Net Summer Capacity of Utility Scale Units Using Primarily Fossil Fuels and by State, September 2018 and 2017 (Megawatts)

Census Division and State	Natural Gas Fired Combined Cycle		Natural Gas Fired Combustion Turbine		Other Natural Gas		Coal		Petroleum Coke		Petroleum Liquids		Other Gases		Total Fossil Fuels	
	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017	September 2018	September 2017
New England	13,404.6	11,859.4	1,212.8	1,118.8	1,607.1	1,605.7	917.3	917.3	0.0	0.0	5,708.5	5,704.5	0.0	0.0	22,850.3	21,205.7
Connecticut	3,147.1	2,331.9	567.6	477.6	873.8	872.4	383.4	383.4	0.0	0.0	2,035.1	2,035.1	0.0	0.0	7,007.0	6,100.4
Maine	1,250.0	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	2,540.5	2,536.5
Massachusetts	5,989.3	5,259.3	333.5	333.5	199.7	199.7	0.0	0.0	0.0	0.0	2,588.4	2,584.4	0.0	0.0	9,110.9	8,376.9
New Hampshire	1,231.0	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	2,262.9	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	12.2	12.2	0.0	0.0	1,831.1	1,831.1
Vermont	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.9	97.9	0.0	0.0	97.9	97.9
Middle Atlantic	29,703.9	26,028.9	7,797.2	7,682.3	14,674.0	15,118.6	13,529.2	13,530.2	78.6	78.6	5,420.7	5,395.7	129.2	129.2	71,332.8	67,963.5
New Jersey	8,530.4	8,158.0	2,959.9	2,845.0	42.6	493.2	609.0	609.0	11.6	11.6	234.0	226.2	23.4	23.4	12,410.9	12,366.4
New York	8,698.4	7,977.3	3,157.0	3,157.0	9,688.5	9,688.5	1,640.2	1,640.2	0.0	0.0	3,578.0	3,560.8	0.0	0.0	26,762.1	26,023.8
Pennsylvania	12,475.1	9,893.6	1,680.3	1,680.3	4,942.9	4,936.9	11,280.0	11,281.0	67.0	67.0	1,608.7	1,608.7	105.8	105.8	32,159.8	29,573.3
East North Central	20,747.0	18,179.4	26,588.1	26,591.8	4,212.5	4,214.9	56,384.9	61,406.3	247.6	247.6	2,474.5	2,643.3	1,092.9	1,092.9	111,747.5	114,376.2
Illinois	3,580.2	3,580.2	10,436.3	10,385.3	289.9	290.9	13,966.0	13,966.0	0.0	0.0	674.2	674.2	36.5	36.5	28,983.1	28,933.1
Indiana	3,807.0	2,406.0	3,355.8	3,405.8	729.1	729.1	15,281.4	15,761.4	0.0	0.0	99.8	237.8	619.3	619.3	23,892.4	23,159.4
Michigan	4,421.0	4,421.0	3,977.6	3,970.8	2,389.6	2,394.0	9,216.7	9,367.7	47.2	47.2	488.4	490.4	250.0	250.0	20,790.5	20,941.1
Ohio	6,188.0	5,021.4	5,446.1	5,446.1	189.2	189.2	12,274.4	15,182.4	142.0	142.0	609.7	636.5	187.1	187.1	25,036.5	26,804.7
Wisconsin	2,750.8	2,750.8	3,372.3	3,383.8	614.7	611.7	5,646.4	7,128.8	58.4	58.4	602.4	604.4	0.0	0.0	13,045.0	14,537.9
West North Central	6,633.1	6,633.1	11,730.9	11,502.1	4,360.5	4,472.3	34,116.0	34,199.0	32.0	32.0	3,873.8	3,927.3	8.4	8.4	60,754.7	60,774.2
Iowa	1,772.6	1,772.6	1,258.2	1,261.4	420.5	532.8	5,497.9	5,497.9	32.0	32.0	820.7	872.9	0.0	0.0	9,801.9	9,969.6
Kansas	266.0	266.0	2,148.3	2,148.3	2,096.7	2,096.7	4,714.2	4,714.2	0.0	0.0	556.6	551.3	0.0	0.0	9,781.8	9,776.5
Minnesota	2,172.0	2,172.0	2,671.4	2,439.4	361.1	369.9	4,309.4	4,309.4	0.0	0.0	787.1	787.1	0.0	0.0	10,301.0	10,077.8
Missouri	1,789.9	1,789.9	3,399.6	3,399.6	836.1	836.1	11,260.8	11,343.8	0.0	0.0	1,100.5	1,105.1	0.0	0.0	18,386.9	18,474.5
Nebraska	342.6	342.6	1,150.8	1,150.8	525.8	516.5	3,817.3	3,817.3	0.0	0.0	321.2	321.2	0.0	0.0	6,157.7	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	65.2	8.4	8.4	4,633.6	4,635.6
South Dakota	290.0	290.0	694.6	694.6	8.7	8.7	474.0	474.0	0.0	0.0	224.5	224.5	0.0	0.0	1,691.8	1,691.8
South Atlantic	56,295.9	53,188.3	31,944.6	31,796.6	7,387.0	7,308.6	54,752.3	56,789.3	142.8	142.8	10,394.0	10,407.6	135.0	135.0	161,051.6	159,768.2
Delaware	1,512.0	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	3,331.4	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	27,953.7	27,953.7	7,773.1	7,900.1	2,479.6	2,481.2	8,570.0	9,822.0	59.0	59.0	4,970.0	4,970.0	0.0	0.0	51,805.4	53,186.0
Georgia	7,963.9	7,963.9	7,787.2	7,787.2	832.9	832.9	9,360.5	9,360.5	83.8	83.8	945.4	946.0	0.0	0.0	26,973.7	26,974.3
Maryland	2,844.6	976.0	1,965.6	1,957.6	1,494.2	1,414.2	4,327.0	4,712.0	0.0	0.0	1,205.9	1,218.9	0.0	0.0	11,837.3	10,278.7
North Carolina	5,210.8	4,724.8	6,045.1	6,045.1	0.0	0.0	10,536.8	10,536.8	0.0	0.0	337.6	337.6	0.0	0.0	22,130.3	21,644.3
South Carolina	3,152.0	2,399.0	2,763.8	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	12,137.2	11,435.2
Virginia	7,658.9	7,658.9	4,194.3	3,894.3	1,068.2	1,068.2	3,778.0	3,778.0	0.0	0.0	2,346.6	2,346.6	0.0	0.0	19,046.0	18,746.0
West Virginia	0.0	0.0	1,089.3	1,071.3	123.0	123.0	12,558.0	12,958.0	0.0	0.0	11.0	11.0	0.0	0.0	13,781.3	14,163.3
East South Central	21,684.2	20,632.1	12,640.1	12,646.9	5,354.0	6,053.8	25,015.2	26,184.2	0.0	0.0	133.0	142.0	19.8	19.8	64,846.3	65,678.8
Alabama	9,618.4	9,618.4	2,532.2	2,532.2	2,791.3	2,791.3	5,503.1	5,503.1	0.0	0.0	42.6	42.6	19.8	19.8	20,507.4	20,507.4
Kentucky	1,763.0	1,763.0	4,976.6	4,976.6	260.0	260.0	11,862.8	11,862.8	0.0	0.0	11.9	11.9	0.0	0.0	18,874.3	18,874.3
Mississippi	7,847.7	7,847.7	1,350.8	1,357.6	2,236.5	2,936.3	1,804.0	1,804.0	0.0	0.0	35.3	44.3	0.0	0.0	13,274.3	13,989.9
Tennessee	2,455.1	1,403.0	3,780.5	3,780.5	66.2	66.2	5,845.3	7,014.3	0.0	0.0	43.2	43.2	0.0	0.0	12,190.3	12,307.2
West South Central	60,415.1	59,942.6	14,301.4	13,549.7	31,886.1	31,670.9	31,593.2	35,856.2	957.9	957.9	174.8	179.1	655.3	655.3	139,983.8	142,811.7
Arkansas	4,566.0	4,566.0	702.8	702.8	802.0	802.0	5,110.0	5,100.0	0.0	0.0	12.2	12.2	0.0	0.0	11,193.0	11,183.0
Louisiana	7,537.0	7,537.0	2,357.9	2,357.9	6,528.4	6,528.4	2,832.6	2,832.6	894.1	894.1	43.3	43.3	407.4	407.4	20,600.7	20,600.7
Oklahoma	7,247.6	6,780.1	1,684.9	1,342.9	5,235.5	5,243.9	4,334.6	4,334.6	0.0	0.0	74.4	74.4	0.0	0.0	18,577.0	17,775.9
Texas	41,064.5	41,059.5	9,555.8	9,146.1	19,320.2	19,096.6	19,316.0	23,589.0	63.8	63.8	44.9	49.2	247.9	247.9	89,613.1	93,252.1
Mountain	22,513.8	22,483.8	8,638.9	8,648.9	3,663.9	3,693.9	26,989.0	27,826.0	52.0	52.0	356.3	356.3	107.4	107.4	62,321.3	63,168.3
Arizona	9,891.6	9,891.6	2,367.6	2,367.6	1,303.6	1,303.6	5,754.0	5,754.0	0.0	0.0	90.5	90.5	0.0	0.0	19,407.3	19,407.3
Colorado	3,240.5	3,240.5	2,572.3	2,572.3	639.0	681.0	4,499.0	4,499.0	0.0	0.0	168.4	168.4	0.0	0.0	11,119.2	11,161.2
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	2,293.1	2,293.1	52.0	52.0	0.0	0.0	1.5	1.5	2,740.4	2,740.4
Nevada	5,445.0	5,415.0	1,185.6	1,185.6	444.6	444.6	740.4	740.4	0.0	0.0	6.0	6.0	0.0	0.0	7,821.6	7,791.6
New Mexico	1,465.0	1,465.0	966.0	976.0	849.4	849.4	2,634.0	3,471.0	0.0	0.0	52.4	52.4	0.0	0.0	5,966.8	6,813.8
Utah	1,830.0	1,830.0	520.2	520.2	328.2	316.2	4,654.0	4,654.0	0.0	0.0	27.8	27.8	0.0	0.0	7,360.2	7,348.2
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	105.9	105.9	6,778.2	6,778.2
Pacific Contiguous	26,032.3	26,056.1	11,550.4	11,781.4	7,766.9	8,861.1	1,982.0	1,982.0	17.0	17.0	471.9	485.3	221.4	221.4	48,041.9	49,404.3
California	20,003.8	20,027.6	10,697.2	10,928.2	7,510.9	8,605.1	57.0	57.0	17.0	17.0	456.7	470.1	221.4	221.4	38,964.0	40,326.4
Oregon	3,374.9	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	4,318.1	4,318.1
Washington	2,653.6	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	4,759.8	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	2,600.2	2,602.4	6.4	6.4	4,219.9	4,222.1
Alaska	479.2	479.2	626.3	626.3	175.0	175.0	152.8	152.8	0.0	0.0	728.3	730.5	0.0	0.0	2,161.6	2,163.8
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	257,909.1	245,482.9	127,030.7	125,944.8	81,087.0	83,174.8	245,611.9	259,023.3	1,527.9	1,527.9	31,607.7	31,843.5	2,375.8	2,375.8	747,150.1	749,373.0

NM = Not meaningful due to large relative standard error.
Values for 2017 are final. Values for 2018 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, 2018

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
2018	1	60118	83WI 8ME, LLC	IPP	Midway Solar Farm 1	CA	60336	MSF1	50.0	Solar Photovoltaic	SUN	PV
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3A	0.4	Petroleum Liquids	DFO	IC
2018	1	56769	Consolidated Edison Development Inc.	IPP	Panoche Valley Solar Farm	CA	57340	1	240.0	Solar Photovoltaic	SUN	PV
2018	1	4254	Consumers Energy Co	Electric Utility	Cross Winds Energy Park	MI	58830	CWEP2	44.0	Onshore Wind Turbine	WND	WT
2018	1	61060	Cypress Creek Renewables	IPP	LeSun CSG, LLC	MN	61544	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	1	61060	Cypress Creek Renewables	IPP	WrightSun CSG, LLC	MN	61547	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Versailles	OH	61437	AMPVS	1.8	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40802	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40803	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40804	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40805	1.0	Solar Photovoltaic	SUN	PV
2018	1	61187	DG Minnesota CSG, LLC	IPP	Scandia CSG	MN	61585	40806	1.0	Solar Photovoltaic	SUN	PV
2018	1	61111	DG New Jersey Solar, LLC	IPP	DG New Jersey Solar RLS Logistics	NJ	61507	RLSNJ	4.0	Solar Photovoltaic	SUN	PV
2018	1	56215	E ON Climate Renewables N America LLC	IPP	Inadale Wind Farm LLC	TX	56984	INABT	9.9	Batteries	MWH	BA
2018	1	56215	E ON Climate Renewables N America LLC	IPP	Pyron Wind Farm LLC	TX	56981	PYRBT	9.9	Batteries	MWH	BA
2018	1	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN5	3.9	Petroleum Liquids	DFO	IC
2018	1	57249	EPP Renewable Energy	IPP	Haworth Water Treatment Plant	NJ	56701	GEN6	3.9	Petroleum Liquids	DFO	IC
2018	1	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 5, LLC	OR	61423	PV1	8.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN1	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN2	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN3	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN4	1.0	Solar Photovoltaic	SUN	PV
2018	1	61015	ETCAP NES CS MN 08 LLC	IPP	Johnson Solar CSG	MN	61380	JOHN5	1.0	Solar Photovoltaic	SUN	PV
2018	1	59218	East. Michigan Univ. Heating Plant	Commercial	East. Michigan Univ. Heating Plant	MI	59452	COGN2	6.8	Natural Gas Fired Combustion Turbine	NG	GT
2018	1	58135	Ecos Energy LLC	IPP	Jefferson Solar	CT	62024	JEFRS	1.0	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Coral Farms Solar Energy Center	FL	61022	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Horizon Solar Energy Center	FL	61021	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Indian River Solar Center	FL	61020	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	6452	Florida Power & Light Co	Electric Utility	Wildflower Solar Energy Center	FL	61050	1	74.5	Solar Photovoltaic	SUN	PV
2018	1	7140	Georgia Power Co	Electric Utility	Comer Solar	GA	61554	1	2.0	Solar Photovoltaic	SUN	PV
2018	1	59462	Heelstone Energy Holdings, LLC	IPP	Chiloquin Solar, LLC	OR	61631	CHILO	9.9	Solar Photovoltaic	SUN	PV
2018	1	12341	MidAmerican Energy Co	IPP	Prairie Wind Farm	IA	60873	PWE	168.0	Onshore Wind Turbine	WND	WT
2018	1	61227	Nautilus Solar Solutions	IPP	Kilroy Solar	CA	61628	KILRO	1.1	Solar Photovoltaic	SUN	PV
2018	1	60644	OEE XXIV LLC	Industrial	Whirlpool Corporation - Ottawa Wind Farm	OH	61004	W1	1.5	Onshore Wind Turbine	WND	WT
2018	1	49748	ORCAL Geothermal, Inc	IPP	Heber Geothermal	CA	54689	4	16.0	Geothermal	GEO	BT
2018	1	60882	Red Dirt Wind Project, LLC	IPP	Red Dirt Wind Project	OK	61270	RDDRT	299.3	Onshore Wind Turbine	WND	WT
2018	1	60520	SoCore Energy LLC	IPP	Gopher CSG	MN	61426	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Lahr 1, LLC	MN	61203	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV4	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Nesvold Watertown Solar	MN	60958	PV5	1.0	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	New Auburn DPC Solar	WI	60936	PV1	2.5	Solar Photovoltaic	SUN	PV
2018	1	60520	SoCore Energy LLC	IPP	Taylors Falls CSG	MN	61428	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	1	60871	Stuttgart Solar, LLC	IPP	Stuttgart Solar	AR	61262	STGRT	81.0	Solar Photovoltaic	SUN	PV
2018	1	60881	Thunder Ranch Wind Project, LLC	IPP	Thunder Ranch Wind Project	OK	61269	WT1	297.8	Onshore Wind Turbine	WND	WT
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	1	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	2	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	3	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	4	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	24431	Utah Municipal Power Agency	Electric Utility	Provo Power Plant	UT	61508	5	2.4	Natural Gas Internal Combustion Engine	NG	IC
2018	1	61361	Walton Solar	IPP	Gratis Road Solar Facility	GA	61740	GR01	3.0	Solar Photovoltaic	SUN	PV
2018	2	61105	ABEC #2 LLC	IPP	ABEC #2 dba West-Star Dairy	CA	61501	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	61106	ABEC #3 LLC	IPP	ABEC #3 dba Lakeview Dairy	CA	61502	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	61107	ABEC #4 LLC	IPP	ABEC #4 dba CE&S Dairy	CA	61503	GEN1	1.0	Other Waste Biomass	OBG	IC
2018	2	60571	AEP Onsite Partners	IPP	Porter Way Community Solar Garden	MN	61500	PV1	3.0	Solar Photovoltaic	SUN	PV
2018	2	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 2	CA	61723	IRV2W	3.3	Batteries	MWH	BA
2018	2	59247	Bearford Solar II, LLC	IPP	Bearford Solar II	NC	59488	BEARF	4.9	Solar Photovoltaic	SUN	PV
2018	2	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKAT	196.7	Onshore Wind Turbine	WND	WT
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS1	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS2	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS3	0.9	Solar Photovoltaic	SUN	PV
2018	2	60827	Carina Community Solar	IPP	Carina Community Solar	MN	61179	JCCS4	0.9	Solar Photovoltaic	SUN	PV
2018	2	56769	Consolidated Edison Development Inc.	IPP	Big Timber Wind Farm	MT	61155	BT-MT	25.0	Onshore Wind Turbine	WND	WT
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Coldwater	MI	61435	AMPCW	1.3	Solar Photovoltaic	SUN	PV
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Jackson Center	OH	61438	AMPJC	1.6	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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
2018	2	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Orrville 3	OH	61436	AMPO3	2.3	Solar Photovoltaic	SUN	PV
2018	2	57249	EPP Renewable Energy	IPP	Pennsauken Solar	NJ	56883	GEN10	2.4	Solar Photovoltaic	SUN	PV
2018	2	7140	Georgia Power Co	Electric Utility	Marine Corps Logistics Base Solar	GA	59876	1	31.0	Solar Photovoltaic	SUN	PV
2018	2	61171	Lake Waconia Solar IV LLC	IPP	Lake Waconia IV Community Solar Garden	MN	61573	40926	1.0	Solar Photovoltaic	SUN	PV
2018	2	61170	Lake Waconia Solar LLC	IPP	Lake Waconia Community Solar Garden	MN	61572	38610	1.0	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS1	0.9	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS2	0.9	Solar Photovoltaic	SUN	PV
2018	2	60830	Lyra Community Solar	IPP	Lyra Community Solar	MN	61182	RLCS3	0.9	Solar Photovoltaic	SUN	PV
2018	2	61156	NMRD Data Center, LLC	IPP	Facebook 2 Solar Energy Center	NM	61557	FB2	10.0	Solar Photovoltaic	SUN	PV
2018	2	14063	Oklahoma Gas & Electric Co	Electric Utility	Covington Solar Farm	OK	61759	CVS1	10.0	Solar Photovoltaic	SUN	PV
2018	2	17470	PUD 1 of Snohomish County	Electric Utility	Calligan Creek Hydroelectric Project	WA	60418	CC6MW	6.0	Conventional Hydroelectric	WAT	HY
2018	2	17470	PUD 1 of Snohomish County	Electric Utility	Hancock Creek Hydroelectric Project	WA	60517	HY1	6.0	Conventional Hydroelectric	WAT	HY
2018	2	60755	Phelps 158 Solar Farm, LLC	IPP	Phelps 158 Solar Farm	NC	61134	15800	5.0	Solar Photovoltaic	SUN	PV
2018	2	60947	Tesla Inc.	IPP	Greene County Meter #1	NY	60463	PV1	1.6	Solar Photovoltaic	SUN	PV
2018	2	61168	Veseli Solar I LLC	IPP	Veseli Community Solar Garden	MN	61570	40921	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	0000H	3.4	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE2	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE3	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE4	1.0	Solar Photovoltaic	SUN	PV
2018	2	61144	WasecaSun, LLC	IPP	WasecaSun	MN	61142	WASE5	1.0	Solar Photovoltaic	SUN	PV
2018	3	60571	AEP Onsite Partners	IPP	Sherburne Community Solar	MN	61672	PV1	5.0	Solar Photovoltaic	SUN	PV
2018	3	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS1	0.9	Solar Photovoltaic	SUN	PV
2018	3	60922	Belchertown Renewables, LLC	IPP	Belchertown Renewables Community Solar	MA	61295	02675	4.0	Solar Photovoltaic	SUN	PV
2018	3	61060	Cypress Creek Renewables	IPP	Gaston Solar I - SC	SC	61530	GEN1	10.2	Solar Photovoltaic	SUN	PV
2018	3	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS1	0.9	Solar Photovoltaic	SUN	PV
2018	3	60968	Delphinus Community Solar	IPP	Delphinus Community Solar	MN	61329	QDCS2	0.9	Solar Photovoltaic	SUN	PV
2018	3	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN8	150.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	3	61228	Dundas Solar Holdings LLC	IPP	Dundas Solar Holdings LLC CSG	MN	61626	DU	5.0	Solar Photovoltaic	SUN	PV
2018	3	60853	ET CAP OR HOLDINGS LLC	IPP	OR Solar 8, LLC	OR	61424	PV1	10.0	Solar Photovoltaic	SUN	PV
2018	3	60904	ETCAP NES CS MN 06 LLC	IPP	Armstrong Solar	MN	61138	0000A	3.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR4	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Cottage Grove CSG, LLC	MN	61483	CTGR5	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX4	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Fox CSG, LLC	MN	61484	FOX5	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL1	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL2	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	SunE Stolee CSG, LLC	MN	61485	STOL3	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY01	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY02	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY03	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY04	1.0	Solar Photovoltaic	SUN	PV
2018	3	58970	Ecoplexus, Inc	IPP	Wyoming 2 CSG, LLC	MN	61486	WY05	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Adams Solar	CT	62026	ADAMS	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Franklin Solar	CT	62021	FRANK	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Hamilton Solar	CT	62025	HAMLT	1.0	Solar Photovoltaic	SUN	PV
2018	3	58135	Ecos Energy LLC	IPP	Wilson Solar	CT	62023	WILSN	1.0	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Babcock Solar Energy Center	FL	59993	BA	10.0	Batteries	MWH	BA
2018	3	6452	Florida Power & Light Co	Electric Utility	Barefoot Bay Solar Energy Center	FL	61051	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Blue Cypress Solar Energy Center	FL	61029	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Citrus Solar Energy Center	FL	60061	BA	4.0	Batteries	MWH	BA
2018	3	6452	Florida Power & Light Co	Electric Utility	Hammock Solar	FL	61024	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	6452	Florida Power & Light Co	Electric Utility	Loggerhead Solar Energy Center	FL	61052	1	74.5	Solar Photovoltaic	SUN	PV
2018	3	60556	Fusion Solar Centre, L.L.C	IPP	Fusion Solar Center LLC	CT	58876	PV	20.0	Solar Photovoltaic	SUN	PV
2018	3	59633	Great Bay Solar I LLC	IPP	Great Bay Solar 1	MD	59851	GBS01	57.0	Solar Photovoltaic	SUN	PV
2018	3	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN1	465.0	Natural Gas Fired Combined Cycle	NG	CS
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS1	1.1	Solar Photovoltaic	SUN	PV
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS2	1.1	Solar Photovoltaic	SUN	PV
2018	3	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	SCSS3	1.1	Solar Photovoltaic	SUN	PV
2018	3	61323	PowerFin ASL 1, LLC	IPP	PowerFin Kingsbery	TX	61700	PFPKB	2.6	Solar Photovoltaic	SUN	PV
2018	3	61069	RE Gaskell West LLC	IPP	RE Gaskell West 1 LLC	CA	61445	PV1	20.0	Solar Photovoltaic	SUN	PV
2018	3	61491	ReNew Petra Integrators, LLC	IPP	Bartow Solar Energy LLC	FL	61879	PV	7.3	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES1	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES2	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES3	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES4	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16181	Rochester Public Utilities	Electric Utility	Westside Energy Station	MN	60564	WES5	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	3	60520	SoCore Energy LLC	IPP	Carrizozo Solar	NM	61662	PV1	3.0	Solar Photovoltaic	SUN	PV
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT1	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT2	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT3	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	40580	Southern Minnesota Mun P Agny	Electric Utility	Owatonna Energy Station	MN	60254	UNIT4	9.7	Natural Gas Internal Combustion Engine	NG	IC
2018	3	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS3	0.9	Solar Photovoltaic	SUN	PV
2018	3	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS4	0.9	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Intel - Ocotillo Campus Solar	AZ	60822	PV2	1.4	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Onondaga County- Jamesville	NY	60232	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	Town of Rocky Hill	CT	61541	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	3	60947	Tesla Inc.	IPP	US GSA - Sacramento	CA	60846	PV1	1.1	Solar Photovoltaic	SUN	PV
2018	3	60923	Theodore Drive Solar, LLC	IPP	Theodore Drive Community Solar	MA	61296	02529	1.5	Solar Photovoltaic	SUN	PV
2018	3	61397	Town of Otis	Commercial	Town of Otis Wind Energy Project	MA	61775	OT196	1.5	Onshore Wind Turbine	WND	WT
2018	3	57081	WGL Energy Systems, Inc	IPP	Bowie State Solar	MD	61915	SO285	1.3	Solar Photovoltaic	SUN	PV
2018	3	57081	WGL Energy Systems, Inc	IPP	Danville	VA	61849	SO291	6.0	Solar Photovoltaic	SUN	PV
2018	3	61229	Waterville Solar Holdings LLC	IPP	Waterville Solar Holdings LLC	MN	61627	WA	5.0	Solar Photovoltaic	SUN	PV
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	3B	0.4	Petroleum Liquids	DFO	IC
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Pilot Station	AK	57058	1	0.5	Petroleum Liquids	DFO	IC
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5501	3.0	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5502	1.3	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5511	1.7	All Other	OTH	OT
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5EG	1.0	Petroleum Liquids	DFO	IC
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STA	40.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	58889	Dominion Cove Point LNG, LP	Commercial	Cove Point LNG Terminal	MD	59073	5STB	40.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	5310	Doswell Ltd Partnership	IPP	Doswell Energy Center	VA	52019	GEN9	150.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT11	216.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	CT12	216.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	5416	Duke Energy Carolinas, LLC	Electric Utility	W S Lee	SC	3264	ST10	321.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	0000C	5.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM2	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM3	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM4	1.0	Solar Photovoltaic	SUN	PV
2018	4	60905	ETCAP NES CS MN 03 LLC	IPP	Marmas Solar CSG	MN	61139	MARM5	1.0	Solar Photovoltaic	SUN	PV
2018	4	61124	Great Valley Solar Portfolio Holdings, LLC	IPP	Great Valley Solar Portfolio Holdings, LLC	CA	59940	TQ8	200.0	Solar Photovoltaic	SUN	PV
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT1	207.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	GT2	207.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	9273	Indianapolis Power & Light Co	Electric Utility	Eagle Valley (IN)	IN	991	STG1	230.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	61417	Lavio Solar, LLC	IPP	Lavio Solar	CA	61792	5002	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND1	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND2	1.0	Solar Photovoltaic	SUN	PV
2018	4	61017	Lindstrom CSG 1, LLC	IPP	Lindstrom Solar CSG	MN	61382	LIND3	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42254	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42255	1.0	Solar Photovoltaic	SUN	PV
2018	4	61102	Minnesota Solar CSG 8, LLC	IPP	Carver Gladden CSG	MN	61495	42256	1.0	Solar Photovoltaic	SUN	PV
2018	4	61156	NMRD Data Center, LLC	IPP	Facebook 3 Solar Energy Center	NM	61558	FB3	10.0	Solar Photovoltaic	SUN	PV
2018	4	61169	New Germany Solar I LLC	IPP	New Germany Community Solar Garden	MN	61571	39062	1.0	Solar Photovoltaic	SUN	PV
2018	4	13781	Northern States Power Co - Minnesota	Electric Utility	Black Dog	MN	1904	6-1	215.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT1	310.3	Natural Gas Fired Combined Cycle	NG	CT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	CT2	310.3	Natural Gas Fired Combined Cycle	NG	CT
2018	4	40229	Old Dominion Electric Coop	Electric Utility	Wildcat Point Generation Facility	MD	59220	ST1	493.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60584	Onyx Asset Services Group	IPP	Amsterdam North	NY	61904	10044	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Amsterdam South	NY	61905	10045	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Broadalbin	NY	61847	10046	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Duanesburg	NY	61863	10048	2.0	Solar Photovoltaic	SUN	PV
2018	4	60584	Onyx Asset Services Group	IPP	Johnstown	NY	61888	10049	2.0	Solar Photovoltaic	SUN	PV
2018	4	58764	Origis Energy USA, Inc	IPP	MA Solar Storage 1	MA	61730	61730	1.0	Batteries	MWH	BA
2018	4	61295	Pinal Central Energy Center, LLC	IPP	Pinal Central Energy Center	AZ	61678	BA1	10.0	Batteries	MWH	BA
2018	4	61295	Pinal Central Energy Center, LLC	IPP	Pinal Central Energy Center	AZ	61678	PCEC	20.0	Solar Photovoltaic	SUN	PV
2018	4	61494	Radian Generation	IPP	Hanover Solar, LLC	NC	61877	HAN01	5.0	Solar Photovoltaic	SUN	PV
2018	4	17164	Sierra Pacific Industries Inc	Industrial	Sierra Pacific Sonora	CA	54517	GEN3	6.0	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
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT1	229.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	CT2	229.0	Natural Gas Fired Combined Cycle	NG	CT
2018	4	57109	St Joseph Energy Center LLC	IPP	St Joseph Energy Center	IN	57794	ST1	245.0	Natural Gas Fired Combined Cycle	NG	CA
2018	4	61418	Stage Gulch Solar, LLC	IPP	Stage Gulch Solar	CA	61791	5001	0.8	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL1	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL2	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL3	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL4	1.0	Solar Photovoltaic	SUN	PV
2018	4	61019	SunE St. Cloud 1, LLC	IPP	St. Cloud Solar CSG	MN	61384	STCL5	1.0	Solar Photovoltaic	SUN	PV
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	CTG1	311.9	Natural Gas Fired Combined Cycle	NG	CT
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	CTG2	311.9	Natural Gas Fired Combined Cycle	NG	CT
2018	4	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	STG1	428.3	Natural Gas Fired Combined Cycle	NG	CA
2018	4	60059	ZGlobal Inc	IPP	Merced 1 PV	CA	61420	MRCD1	3.0	Solar Photovoltaic	SUN	PV
2018	4	61172	Zumbro Solar LLC	IPP	Zumbro Community Solar Garden	MN	61574	38674	1.0	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Imboden Solar Garden	CO	61753	PV1	1.5	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Imboden Solar Garden	CO	61753	PV2	1.5	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Ohio Northern University Solar Site	OH	60913	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	5	60571	AEP Onsite Partners	IPP	Quincy II Solar Garden	CO	61752	PV1	1.5	Solar Photovoltaic	SUN	PV
2018	5	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 1	CA	61722	IRV01	1.0	Batteries	MWH	BA
2018	5	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 1	CA	61722	IRV1W	4.5	Batteries	MWH	BA
2018	5	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS2	0.9	Solar Photovoltaic	SUN	PV
2018	5	56267	Bayonne Energy Center LLC	IPP	Bayonne Energy Center	NJ	56964	GT10	59.5	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	56267	Bayonne Energy Center LLC	IPP	Bayonne Energy Center	NJ	56964	GT9	59.5	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	59777	Buckthorn Westex, LLC	IPP	Buckthorn Solar 1	TX	60044	BKTH1	202.0	Solar Photovoltaic	SUN	PV
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG1	233.6	Natural Gas Fired Combined Cycle	NG	CT
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	CTG2	233.6	Natural Gas Fired Combined Cycle	NG	CT
2018	5	19002	CPV Towantic, LLC	IPP	CPV Towantic Energy Center	CT	56047	STG	277.8	Natural Gas Fired Combined Cycle	NG	CA
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG1	198.2	Natural Gas Fired Combined Cycle	NG	CT
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	CTG2	198.2	Natural Gas Fired Combined Cycle	NG	CT
2018	5	56204	CPV Valley, LLC	IPP	CPV Valley Energy Center	NY	56940	STG	308.7	Natural Gas Fired Combined Cycle	NG	CA
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT1	2.0	Petroleum Liquids	DFO	IC
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT2	2.0	Petroleum Liquids	DFO	IC
2018	5	14203	City of Osawatomie - (KS)	Electric Utility	Osawatomie Power Plant North Sub	KS	60751	CAT3	2.0	Petroleum Liquids	DFO	IC
2018	5	61481	Dignity - San Martin	IPP	Dignity - San Martin	NV	61862	PV1	1.7	Solar Photovoltaic	SUN	PV
2018	5	61442	Dignity - Siena Campus	IPP	Dignity - Siena Campus	NV	61825	PV1	1.4	Solar Photovoltaic	SUN	PV
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	1	147.5	Natural Gas Fired Combined Cycle	NG	CA
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	2	147.5	Natural Gas Fired Combined Cycle	NG	CA
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	3	217.5	Natural Gas Fired Combined Cycle	NG	CT
2018	5	59928	Footprint Salem Harbor Development LP	IPP	Salem Harbor Station NGCC	MA	60903	4	217.5	Natural Gas Fired Combined Cycle	NG	CT
2018	5	61303	Grimm CSG LLC	IPP	Grimm Community Solar	MN	61689	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	5	61109	Huneke I CSG LLC	IPP	Huneke I CSG	MN	61505	HUNE1	1.0	Solar Photovoltaic	SUN	PV
2018	5	61110	Krause CSG LLC	IPP	Krause CSG	MN	61506	KRAUS	1.0	Solar Photovoltaic	SUN	PV
2018	5	56990	NJR Clean Energy Ventures Corporation	IPP	Raritan Solar - 53 Highway	NJ	61601	RARIT	8.4	Solar Photovoltaic	SUN	PV
2018	5	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC1	257.0	Natural Gas Fired Combined Cycle	NG	CT
2018	5	59124	NTE Ohio LLC	IPP	Middletown Energy Center	OH	59326	MEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA
2018	5	60584	Onyx Asset Services Group	IPP	SeaWorld Aquatica	CA	61843	10276	1.0	Solar Photovoltaic	SUN	PV
2018	5	60584	Onyx Asset Services Group	IPP	Sharon Springs	NY	61903	10116	2.0	Solar Photovoltaic	SUN	PV
2018	5	61114	School Sisters CSG LLC	IPP	School Sisters CSG	MN	61516	SCHOO	1.0	Solar Photovoltaic	SUN	PV
2018	5	60712	South Maui Renewable Resources LLC	IPP	Kihei Solar Farm	HI	61099	KIHEI	2.9	Solar Photovoltaic	SUN	PV
2018	5	60653	Stafford St Solar 2, LLC	IPP	Stafford St 2 Community Solar	MA	61017	STAF2	2.0	Solar Photovoltaic	SUN	PV
2018	5	61210	Stenner Creek Solar LLC	Commercial	Stenner Creek Solar	CA	61607	CPOLY	4.5	Solar Photovoltaic	SUN	PV
2018	5	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS1	0.9	Solar Photovoltaic	SUN	PV
2018	5	60822	Taurus Community Solar	IPP	Taurus Community Solar	MN	61174	ETCS2	0.9	Solar Photovoltaic	SUN	PV
2018	5	60947	Tesla Inc.	IPP	Time Warner Cable - Knowles	NY	60904	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	5	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	CGAP	180.0	Solar Photovoltaic	SUN	PV
2018	5	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG6	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	56927	Wallingford Energy LLC	IPP	Wallingford Energy	CT	55517	CTG7	45.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS1	0.9	Solar Photovoltaic	SUN	PV
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS2	0.9	Solar Photovoltaic	SUN	PV
2018	6	60824	Antares Community Solar	IPP	Antares Community Solar	MN	61176	FACS3	0.9	Solar Photovoltaic	SUN	PV
2018	6	803	Arizona Public Service Co	Electric Utility	Punkin Center Battery Storage	AZ	61913	B1	2.0	Batteries	MWH	BA
2018	6	58519	Clean Energy Collective LLC	IPP	SCE&G Nimitz CSG	SC	61433	SCNM1	8.0	Solar Photovoltaic	SUN	PV
2018	6	58519	Clean Energy Collective LLC	IPP	SCE&G Springfield CSG	SC	61434	SCSP1	6.1	Solar Photovoltaic	SUN	PV
2018	6	61187	DG Minnesota CSG, LLC	IPP	Big Lake Project	MN	61817	BIGLA	5.0	Solar Photovoltaic	SUN	PV
2018	6	61406	Delta Solar Power I, LLC	IPP	Delta Solar Power I	MI	61954	DSPI	7.7	Solar Photovoltaic	SUN	PV
2018	6	61435	EGP Stillwater Solar PV II, LLC	IPP	EGP Stillwater Solar PV II, LLC	NV	61809	STWII	20.0	Solar Photovoltaic	SUN	PV
2018	6	61538	Ecogy Delaware II LLC.	IPP	WHA Southbridge Solar Park	DE	61934	2	1.0	Solar Photovoltaic	SUN	PV

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Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2018	6	60886	Gray Hawk Solar, LLC	IPP	Gray Hawk Solar	AZ	61272	GHS	55.0	Solar Photovoltaic	SUN	PV
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S1	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S2	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S3	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S4	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S5	8.4	Other Waste Biomass	OBL	IC
2018	6	19547	Hawaiian Electric Co Inc	Electric Utility	Schofield Generating Station	HI	60328	S6	8.4	Other Waste Biomass	OBL	IC
2018	6	61409	Heyer CSG LLC	IPP	Heyer CSG	MN	61793	HEYER	1.0	Solar Photovoltaic	SUN	PV
2018	6	57389	IKEA Property Inc	Commercial	IKEA Oak Creek Rooftop PV System	WI	61816	PV1	1.2	Solar Photovoltaic	SUN	PV
2018	6	49893	Invenergy Services LLC	IPP	Bishop Hill III	IL	61787	BHIII	119.0	Onshore Wind Turbine	WND	WT
2018	6	61369	Kimball Wind, LLC	Electric Utility	Kimball Wind	NE	56106	KIM01	30.0	Onshore Wind Turbine	WND	WT
2018	6	58822	MC Power Companies Inc	IPP	El Dorado Springs Solar Farm	MO	61566	EDSF1	2.5	Solar Photovoltaic	SUN	PV
2018	6	58822	MC Power Companies Inc	IPP	Independence II Solar Farm	MO	61588	1	4.1	Solar Photovoltaic	SUN	PV
2018	6	58822	MC Power Companies Inc	IPP	Independence II Solar Farm	MO	61588	2	4.4	Solar Photovoltaic	SUN	PV
2018	6	61211	Montgomery County Solar	Commercial	Montgomery County Solar	MD	61608	1	1.9	Solar Photovoltaic	SUN	PV
2018	6	56990	NJR Clean Energy Ventures Corporation	IPP	New Road Solar, LLC	NJ	61599	NEWRD	10.0	Solar Photovoltaic	SUN	PV
2018	6	60635	Northern Cardinal Solar LLC	IPP	Northern Cardinal Solar	NC	60992	NCARD	2.0	Solar Photovoltaic	SUN	PV
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	701	328.0	Natural Gas Fired Combined Cycle	NG	CT
2018	6	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	702	196.5	Natural Gas Fired Combined Cycle	NG	CA
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG1	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG2	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	CTG3	226.3	Natural Gas Fired Combined Cycle	NG	CT
2018	6	60162	Panda Hummel Station LLC	IPP	Panda Hummel Station LLC	PA	60368	STG	417.6	Natural Gas Fired Combined Cycle	NG	CA
2018	6	61298	Pine Gate Renewables	IPP	Sadiebrook Solar, LLC	SC	60719	SADIE	5.0	Solar Photovoltaic	SUN	PV
2018	6	61285	RJC II CSG LLC	IPP	RJC II Community Solar Garden	MN	61670	RJCII	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV2	1.0	Solar Photovoltaic	SUN	PV
2018	6	60520	SoCore Energy LLC	IPP	Red Maple Solar	MN	60962	PV3	1.0	Solar Photovoltaic	SUN	PV
2018	6	61443	Solar Star RPUWD, LLC	IPP	RPUWD Scheuer Well Solar PV Project	CA	61824	RPU2	3.0	Solar Photovoltaic	SUN	PV
2018	6	61376	SunSelect 1	Industrial	SunSelect1	CA	61754	1	2.0	Natural Gas Internal Combustion Engine	NG	IC
2018	6	60947	Tesla Inc.	IPP	Broome County	NY	60507	NORTH	2.0	Solar Photovoltaic	SUN	PV
2018	6	60947	Tesla Inc.	IPP	Broome County	NY	60507	SOUTH	2.0	Solar Photovoltaic	SUN	PV
2018	6	60947	Tesla Inc.	IPP	Oswego County - Fulton Solar	NY	60818	PV1	2.0	Solar Photovoltaic	SUN	PV
2018	6	61522	Viridity Energy Solutions, Inc.	IPP	Viridity Energy Solutions ACUA	NJ	61923	VACUA	1.0	Batteries	MWH	BA
2018	6	61277	Vista Energy Storage, LLC	IPP	Vista Energy Storage System	CA	61661	VISTA	40.0	Batteries	MWH	BA
2018	7	61012	AES Distributed Energy	IPP	Anheuser-Busch Baldwinsville	NY	61575	BAL01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Call Farms 1	NY	61470	CFM11	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Call Farms 3	NY	61471	CFM31	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Columbia University - Johnson Farms	NY	61576	JF01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Columbia University - Minisink	NY	61578	MIN01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Lichtenthal	NY	61469	LIC01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	St. Lawerence University - Sutton	NY	61579	SUT01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61012	AES Distributed Energy	IPP	Time Warner Cable Enterprises - Martino	NY	61577	MRT01	2.0	Solar Photovoltaic	SUN	PV
2018	7	61103	Adams Solar Center LLC	IPP	Adams Solar Center	OR	61496	ADAMS	10.0	Solar Photovoltaic	SUN	PV
2018	7	60146	Ameresco Federal Solutions	IPP	Fort Bliss (DEA EPIC)	TX	61887	DEPIC	2.0	Solar Photovoltaic	SUN	PV
2018	7	60831	Argo Navis Community Solar	IPP	Argo Navis Community Solar	MN	61183	UACS3	0.9	Solar Photovoltaic	SUN	PV
2018	7	59474	BQ Energy LLC	IPP	Sunlight Beacon	NY	61922	BEACO	2.0	Solar Photovoltaic	SUN	PV
2018	7	60655	Bullock Road Solar 1, LLC	IPP	Bullock Road Solar 1	MA	61010	BULLO	3.9	Solar Photovoltaic	SUN	PV
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC1	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC10	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC11	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC12	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC2	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC3	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC4	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC5	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC6	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC7	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC8	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	5063	City of Denton - (TX)	Electric Utility	Denton Energy Center	TX	61643	DEC9	18.8	Natural Gas Internal Combustion Engine	NG	IC
2018	7	61060	Cypress Creek Renewables	IPP	Old Caroleen Solar Farm	NC	61534	GEN1	2.0	Solar Photovoltaic	SUN	PV
2018	7	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Smyrna	DE	61800	AMPSM	1.2	Solar Photovoltaic	SUN	PV
2018	7	61407	Delta Solar Power II, LLC	IPP	Delta Solar Power II	MI	61955	DSPII	15.2	Solar Photovoltaic	SUN	PV
2018	7	61304	Foreman's Hill CSG LLC	IPP	Foreman's Hill Community Solar	MN	61690	FOREM	5.0	Solar Photovoltaic	SUN	PV
2018	7	61499	Georgia-Pacific Wood Products LLC	Industrial	Georgia-Pacific Taylorsville Plywood	MS	61927	CTG1	6.2	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	49893	Invenergy Services LLC	IPP	Shoreham Solar Commons	NY	60045	GEN1	24.9	Solar Photovoltaic	SUN	PV
2018	7	61520	Kearsarge Oppenheim LLC	IPP	Kearsarge Oppenheim	NY	61917	OPPEN	1.4	Solar Photovoltaic	SUN	PV

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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
2018	7	11161	Loma Linda University	Commercial	Loma Linda University Cogen	CA	10206	GEN5	1.0	Petroleum Liquids	DFO	IC
2018	7	61383	MN Solar Community, LLC	IPP	Sherburne North Project	MN	61762	SHERB	5.0	Solar Photovoltaic	SUN	PV
2018	7	61461	Mustang Solar LLC	IPP	Mustang Solar	NC	61533	GEN1	5.0	Solar Photovoltaic	SUN	PV
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT1	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT2	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT3	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT4	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT5	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	54888	NRG Texas Power LLC	IPP	Bacliff	TX	60264	BCGT6	54.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	7	60685	Novel Energy Solutions	IPP	Novel - OYA of Mapleton	MN	61060	0000I	3.5	Solar Photovoltaic	SUN	PV
2018	7	60685	Novel Energy Solutions	IPP	Novel OYA of Osakis	MN	61059	0000G	5.0	Solar Photovoltaic	SUN	PV
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	10	327.0	Natural Gas Fired Combined Cycle	NG	CA
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	11	214.0	Natural Gas Fired Combined Cycle	NG	CT
2018	7	60100	PSEG Keys Energy Center, LLC	IPP	Keys Energy Center	MD	60302	12	214.0	Natural Gas Fired Combined Cycle	NG	CT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-1	2.3	Onshore Wind Turbine	WND	WT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-2	2.3	Onshore Wind Turbine	WND	WT
2018	7	61288	Perennial Wind, LLC	IPP	Perennial Windfarm	NE	61677	T-3	2.3	Onshore Wind Turbine	WND	WT
2018	7	61108	RJC I CSG LLC	IPP	RJC I CSG	MN	61504	RCJ1	1.0	Solar Photovoltaic	SUN	PV
2018	7	61284	Scandia CSG LLC	IPP	Scandia Community Solar Garden	MN	61669	SCAND	2.5	Solar Photovoltaic	SUN	PV
2018	7	60163	Soltage LLC	IPP	Kelly Solar, LLC	NC	61219	KELLY	5.0	Solar Photovoltaic	SUN	PV
2018	7	17650	Southern Power Co	IPP	Cactus Flats Wind Energy Project	TX	61001	WT1	150.0	Onshore Wind Turbine	WND	WT
2018	7	61188	West Texas A&M University	Commercial	UL Advanced Wind Turbine Test Facility	TX	61589	UT-1	3.4	Onshore Wind Turbine	WND	WT
2018	8	61344	Advanced Microgrid Solutions	IPP	HEBT Irvine 2	CA	61723	IRV06	2.5	Batteries	MWH	BA
2018	8	58261	Arkwright Summit Wind Farm LLC	IPP	Arkwright Summit Wind Farm LLC	NY	61673	WT	78.4	Onshore Wind Turbine	WND	WT
2018	8	15399	Avangrid Renewables LLC	IPP	WyEast Solar	OR	61345	PV1	10.0	Solar Photovoltaic	SUN	PV
2018	8	59474	BQ Energy LLC	IPP	Annapolis Solar Park, LLC	MD	60681	ASP12	12.0	Solar Photovoltaic	SUN	PV
2018	8	61256	Betcher CSG LLC	IPP	Betcher Community Solar Garden	MN	61671	BETCH	1.0	Solar Photovoltaic	SUN	PV
2018	8	61410	Broad Street Fuel Cell, LLC	IPP	Trinity College Fuel Cell	CT	61786	MB-22	1.4	Other Natural Gas	NG	FC
2018	8	6175	City of Falls City - (NE)	Electric Utility	Falls City	NE	2237	9	9.3	Natural Gas Internal Combustion Engine	NG	IC
2018	8	60609	Clean Focus Renewables, Inc.	IPP	BHE Pueblo 2 Community Solar Array	CO	60801	PUEB2	1.5	Solar Photovoltaic	SUN	PV
2018	8	61060	Cypress Creek Renewables	IPP	Antanavica Solar	MA	61526	GEN1	1.0	Solar Photovoltaic	SUN	PV
2018	8	61104	Elbe Solar Center LLC	IPP	Elbe Solar Center	OR	61497	ELBE	10.0	Solar Photovoltaic	SUN	PV
2018	8	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation California Training Facility	CA	61442	WTG1	1.8	Onshore Wind Turbine	WND	WT
2018	8	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Salinas Valley State Prison	CA	61444	WTG1	1.8	Onshore Wind Turbine	WND	WT
2018	8	60849	Green Beanworks C, LLC	IPP	Green Beanworks C PV	CA	61215	GBWXC	3.0	Solar Photovoltaic	SUN	PV
2018	8	60850	Green Beanworks D, LLC	IPP	Green Beanworks D PV	CA	61216	GBWXD	3.0	Solar Photovoltaic	SUN	PV
2018	8	61287	Johnson I CSG LLC	IPP	Johnson 1 Community Solar	MN	61686	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	8	61346	Lisbon East	IPP	COU Solar I, LLC	NY	61720	LECOU	1.5	Solar Photovoltaic	SUN	PV
2018	8	61345	Lisbon West	IPP	CJ Solar I, LLC	NY	61719	LWCJ1	2.0	Solar Photovoltaic	SUN	PV
2018	8	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN1	490.0	Natural Gas Fired Combined Cycle	NG	CS
2018	8	56990	NJR Clean Energy Ventures Corporation	IPP	Old Bridge Solar Farm	NJ	61600	OLDBR	8.8	Solar Photovoltaic	SUN	PV
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC1	259.0	Natural Gas Fired Combined Cycle	NG	CT
2018	8	59123	NTE Carolinas, LLC	IPP	Kings Mountain Energy Center	NC	59325	KMEC2	227.0	Natural Gas Fired Combined Cycle	NG	CA
2018	8	61348	PCS Energy, LLC	Industrial	Aerolease	CA	61718	APLEX	1.1	Solar Photovoltaic	SUN	PV
2018	8	61575	Pacific Ethanol Madera	Industrial	Pacific Ethanol Madera Solar Array	CA	61989	PV	3.9	Solar Photovoltaic	SUN	PV
2018	8	60748	Salisbury Solar, LLC	IPP	Salisbury Solar	NC	61128	12349	3.8	Solar Photovoltaic	SUN	PV
2018	8	57081	WGL Energy Systems, Inc	IPP	Cornillie	MN	61977	SO334	1.0	Solar Photovoltaic	SUN	PV
2018	9	61012	AES Distributed Energy	IPP	Broadalbin-Perth Solar	NY	61958	BAP1	1.5	Solar Photovoltaic	SUN	PV
2018	9	60281	Altus Power America Management, LLC	IPP	Big George PV CSG	MA	61429	12344	1.0	Solar Photovoltaic	SUN	PV
2018	9	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	GRDMT	4.4	Solar Photovoltaic	SUN	PV
2018	9	1015	Austin Energy	Electric Utility	Kingsberry Energy Storage System	TX	61741	KBESS	1.5	Batteries	MWH	BA
2018	9	60899	Bear Creek Solar Center, LLC	IPP	Bear Creek Solar Center	OR	61281	BCRSC	10.0	Solar Photovoltaic	SUN	PV
2018	9	4254	Consumers Energy Co	Electric Utility	Parkview Battery	MI	61909	PKVWB	1.0	Batteries	MWH	BA
2018	9	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Piqua Staunton	OH	61805	AMPPS	1.8	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY1	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY2	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY3	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY4	1.0	Solar Photovoltaic	SUN	PV
2018	9	58970	Ecoplexus, Inc	IPP	SunE Feely 1 CSG, LLC	MN	61478	FELY5	1.0	Solar Photovoltaic	SUN	PV
2018	9	60844	Flat Top Wind I, LLC	IPP	Flat Top Wind I	TX	61212	FTWI	200.0	Onshore Wind Turbine	WND	WT
2018	9	57484	Foundation CA Fund V Manager, LLC	IPP	Foundation NWNA	CA	58114	WTG3	1.9	Onshore Wind Turbine	WND	WT
2018	9	60025	Greenbacker Renewable Energy Corporation	IPP	Midway Solar Farm III	CA	60315	MSF3	20.0	Solar Photovoltaic	SUN	PV
2018	9	61620	IOS II LLC	IPP	Cuyahoga County Landfill	OH	62041	CCBO1	3.7	Solar Photovoltaic	SUN	PV
2018	9	61309	Johnson II CSG LLC	IPP	Johnson II Community Solar	MN	61695	PV1	1.0	Solar Photovoltaic	SUN	PV
2018	9	61642	Lane Solar Farm LLC	IPP	Lane Solar	NC	62104	PGRF2	5.0	Solar Photovoltaic	SUN	PV
2018	9	58822	MC Power Companies Inc	IPP	Farmington Solar Farm	MO	61450	FSF1	2.5	Solar Photovoltaic	SUN	PV
2018	9	59675	Moxie Freedom LLC	IPP	Moxie Freedom Generation Plant	PA	59906	GEN2	490.0	Natural Gas Fired Combined Cycle	NG	CS

Table 6.3. New Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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
2018	9	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA
2018	9	61209	NC 102 Project LLC	IPP	NC 102 Project LLC	NC	61610	NC102	74.8	Solar Photovoltaic	SUN	PV
2018	9	61598	Novel Solar Three, LLC	IPP	Gibbon Solar	MN	62010	PGRK1	3.3	Solar Photovoltaic	SUN	PV
2018	9	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W1	1.5	Onshore Wind Turbine	WND	WT
2018	9	60996	OEE XXV LLC	Industrial	Valfilm Wind Project	OH	61356	W2	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG1	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG2	1.5	Onshore Wind Turbine	WND	WT
2018	9	61278	OEE XXVI LLC	IPP	Whirlpool Corp-Greenville Wind Farm	OH	61660	WTG3	1.5	Onshore Wind Turbine	WND	WT
2018	9	61495	Persimmon Creek Wind Farm 1, LLC	IPP	Persimmon Creek Wind Farm 1, LLC	OK	61876	PCWF1	198.6	Onshore Wind Turbine	WND	WT
2018	9	61298	Pine Gate Renewables	IPP	Soluga Farms IV	NC	59934	SFIV	4.9	Solar Photovoltaic	SUN	PV
2018	9	60443	Rattlesnake Power, LLC	IPP	Rattlesnake Power, LLC	TX	60743	WT1	160.0	Onshore Wind Turbine	WND	WT
2018	9	18454	Tampa Electric Co	Electric Utility	Balm Solar	FL	61654	PV1	74.4	Solar Photovoltaic	SUN	PV
2018	9	18454	Tampa Electric Co	Electric Utility	Payne Creek Solar	FL	61665	GEN1	70.3	Solar Photovoltaic	SUN	PV
2018	9	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH1	100.0	Onshore Wind Turbine	WND	WT
2018	9	19876	Virginia Electric & Power Co	Electric Utility	Hollyfield	VA	61023	1	6.8	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Eichtens II CSG	MN	62137	SO340	1.0	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Huneke II CSG	MN	62139	SO346	1.1	Solar Photovoltaic	SUN	PV
2018	9	57081	WGL Energy Systems, Inc	IPP	Susquehanna University Solar	PA	61914	SO829	3.0	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, 2018

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
2018	1	221	Alaska Village Elec Coop, Inc	Electric Utility	Brevig Mission	AK	60260	3	0.5	Petroleum Liquids	DFO	IC
2018	1	4329	Copper Valley Elec Assn, Inc	Electric Utility	Valdez	AK	6306	7	2.8	Petroleum Liquids	DFO	GT
2018	1	9617	JEA	Electric Utility	St Johns River Power Park	FL	207	1	626.0	Conventional Steam Coal	BIT	ST
2018	1	9617	JEA	Electric Utility	St Johns River Power Park	FL	207	2	626.0	Conventional Steam Coal	BIT	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	1	535.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	2	535.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Monticello	TX	6147	3	795.0	Conventional Steam Coal	SUB	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Sandow No 4	TX	6648	4	600.0	Conventional Steam Coal	LIG	ST
2018	1	55983	Luminant Generation Company LLC	IPP	Sandow No 5	TX	52071	5	600.0	Conventional Steam Coal	LIG	ST
2018	1	58247	National Centers for Animal Health	Commercial	NCAH Central Utility Plant	IA	58265	S-7A	1.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	1	17887	St Joseph's Hospital	Commercial	St Josephs Hospital	FL	54534	0001	1.6	Natural Gas Internal Combustion Engine	NG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT1	0.5	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT2	0.3	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT3	0.3	Landfill Gas	LFG	IC
2018	1	5677	Waste Energy Services Inc	Electric CHP	Waste Energy Services	MI	50077	CAT4	0.3	Landfill Gas	LFG	IC
2018	2	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	1	3.8	Landfill Gas	LFG	CT
2018	2	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	2	3.8	Landfill Gas	LFG	CT
2018	2	7011	Gas Recovery Services-IL Inc	IPP	Mallard Lake Electric	IL	55592	4	7.6	Landfill Gas	LFG	CA
2018	2	55983	Luminant Generation Company LLC	IPP	Big Brown	TX	3497	1	606.0	Conventional Steam Coal	SUB	ST
2018	2	55983	Luminant Generation Company LLC	IPP	Big Brown	TX	3497	2	602.0	Conventional Steam Coal	SUB	ST
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	03	130.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	1	215.0	Natural Gas Steam Turbine	NG	ST
2018	2	15908	NRG California South LP	IPP	Mandalay	CA	345	2	215.0	Natural Gas Steam Turbine	NG	ST
2018	2	17633	Southern Indiana Gas & Elec Co	Electric Utility	Broadway (IN)	IN	1011	1	50.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN1	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN2	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN3	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN4	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN5	1.7	Landfill Gas	LFG	IC
2018	2	56772	TX LFG Energy, LP	IPP	Atascosita	TX	55526	GEN6	1.7	Landfill Gas	LFG	IC
2018	2	57305	Wright Patterson AFB	Commercial	Heat Plant 770	OH	57926	HP	0.0	Natural Gas Steam Turbine	NG	ST
2018	2	57305	Wright Patterson AFB	Commercial	Heat Plant 770	OH	57926	LP	0.0	Natural Gas Steam Turbine	NG	ST
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	1	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	2	1.0	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	3	1.0	Petroleum Liquids	DFO	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	4	1.0	Petroleum Liquids	DFO	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	5	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	3	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	6	1.2	Natural Gas Internal Combustion Engine	NG	IC
2018	3	12686	Mississippi Power Co	Electric Utility	Jack Watson	MS	2049	3	107.0	Natural Gas Steam Turbine	NG	ST
2018	3	12199	Montana-Dakota Utilities Co	Electric Utility	Portable Generator 1	ND	59196	IC1	2.0	Petroleum Liquids	DFO	IC
2018	3	17164	Sierra Pacific Industries Inc	Industrial	Sierra Pacific Sonora	CA	54517	GEN2	6.0	Wood/Wood Waste Biomass	WDS	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	1	247.0	Conventional Steam Coal	SUB	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	2	247.0	Conventional Steam Coal	SUB	ST
2018	3	18642	Tennessee Valley Authority	Electric Utility	Allen	TN	3393	3	247.0	Conventional Steam Coal	SUB	ST
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Hooper Bay	AK	6319	3A	0.3	Petroleum Liquids	DFO	IC
2018	4	221	Alaska Village Elec Coop, Inc	Electric Utility	Pilot Station	AK	57058	UNIT1	0.4	Petroleum Liquids	DFO	IC
2018	4	11460	City of Macon - (MO)	Electric Utility	Macon	MO	2141	3	4.6	Petroleum Liquids	DFO	IC
2018	4	59936	Georgia-Pacific Consumer Operations (Camas) LLC	Industrial	Consumer Operations LLC	WA	57759	STG1	16.3	Wood/Wood Waste Biomass	BLQ	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	1	594.0	Conventional Steam Coal	RC	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	2	594.0	Conventional Steam Coal	RC	ST
2018	4	20847	Wisconsin Electric Power Co	Electric Utility	Pleasant Prairie	WI	6170	3	2.0	Petroleum Liquids	DFO	IC
2018	5	57017	DOE National Renewable Energy Laboratory	Commercial	DOE Golden NWTC Turbine Side	CO	57693	ALSTO	3.0	Onshore Wind Turbine	WND	WT
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	3	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	4	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	7	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Great Falls (SC)	SC	3259	8	3.0	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	1	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	2	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	3	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	4	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	5	4.8	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	6	4.8	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	7	2.9	Conventional Hydroelectric	WAT	HY
2018	5	5416	Duke Energy Carolinas, LLC	Electric Utility	Rocky Creek	SC	3266	8	2.9	Conventional Hydroelectric	WAT	HY
2018	5	3046	Duke Energy Progress - (NC)	Electric Utility	Darlington County	SC	3250	5	51.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	5	57400	Evergreen Community Power, LLC	Industrial	Evergreen Community Power	PA	58023	ECP	25.0	Wood/Wood Waste Biomass	WDS	ST
2018	5	9205	Illinois Electricial Gen Partn	IPP	Morris Genco LLC	IL	55774	MO4	1.0	Landfill Gas	LFG	IC

Table 6.4. Retired Utility Scale Generating Units by Operating Company, Plant, and Month, 2018

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
2018	5	9205	Illinois Electricial Gen Partn	IPP	Morris Genco LLC	IL	55774	MO5	1.0	Landfill Gas	LFG	IC
2018	5	10071	Kauai Island Utility Cooperative	Electric Utility	KRS II Koloa Solar	HI	58640	BESS3	1.5	Batteries	MWH	BA
2018	5	15908	NRG California South LP	IPP	Etiwanda Generating Station	CA	331	3	320.0	Natural Gas Steam Turbine	NG	ST
2018	5	15908	NRG California South LP	IPP	Etiwanda Generating Station	CA	331	4	320.0	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	1	102.8	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	2	118.0	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	3	106.2	Natural Gas Steam Turbine	NG	ST
2018	5	15147	PSEG Fossil LLC	IPP	PSEG Sewaren Generating Station	NJ	2411	4	123.6	Natural Gas Steam Turbine	NG	ST
2018	6	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	1	190.0	Conventional Steam Coal	SUB	ST
2018	6	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	2	195.0	Conventional Steam Coal	SUB	ST
2018	6	60415	CP Crane Power, LLC	IPP	CP Crane Power, LLC	MD	1552	GT1	14.0	Petroleum Liquids	DFO	GT
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	2	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	3	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	4	577.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D1	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D2	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D3	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	J M Stuart	OH	2850	D4	2.2	Petroleum Liquids	DFO	IC
2018	6	4922	Dayton Power & Light Co	Electric Utility	Killen Station	OH	6031	2	600.0	Conventional Steam Coal	BIT	ST
2018	6	4922	Dayton Power & Light Co	Electric Utility	Killen Station	OH	6031	GT1	18.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Connersville	IN	1002	1	37.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Connersville	IN	1002	2	37.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	1	14.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	2	12.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	3	12.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	5	14.0	Petroleum Liquids	DFO	GT
2018	6	15470	Duke Energy Indiana, LLC	Electric Utility	Miami Wabash	IN	1006	6	12.0	Petroleum Liquids	DFO	GT
2018	6	12685	Entergy Mississippi Inc	Electric Utility	Baxter Wilson	MS	2050	2	530.7	Natural Gas Steam Turbine	NG	ST
2018	6	12685	Entergy Mississippi Inc	Electric Utility	Rex Brown	MS	2053	3	29.3	Natural Gas Steam Turbine	NG	ST
2018	6	3303	Florida Power Development	IPP	Florida Power Development	FL	10333	GEN1	66.0	Other Waste Biomass	OBS	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	1	11.0	Natural Gas Steam Turbine	NG	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	3	17.9	Natural Gas Steam Turbine	NG	ST
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H10	1.3	Natural Gas Internal Combustion Engine	NG	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H11	1.3	Natural Gas Internal Combustion Engine	NG	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H2	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H4	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H5	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H6	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H7	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H8	1.8	Petroleum Liquids	DFO	IC
2018	6	7651	Greenwood Utilities Comm	Electric Utility	Henderson	MS	2062	H9	1.3	Natural Gas Internal Combustion Engine	NG	IC
2018	6	9397	International Turbine Res Inc	IPP	Dinosaur Point	CA	10005	WTGS	17.0	Onshore Wind Turbine	WND	WT
2018	6	9417	Interstate Power and Light Co	Electric Utility	Milton L Kapp	IA	1048	2	112.5	Natural Gas Steam Turbine	NG	ST
2018	6	9417	Interstate Power and Light Co	Electric Utility	Red Cedar	IA	7595	1	13.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	6	11217	Los Angeles County Sanitation	IPP	Commerce Refuse To Energy	CA	10090	GEN1	10.0	Municipal Solid Waste	MSW	ST
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG1	163.0	Natural Gas Fired Combined Cycle	NG	CT
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG2		Natural Gas Fired Combined Cycle	NG	CT
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	GTG3		Natural Gas Fired Combined Cycle	NG	CT
2018	6	56516	Morris Energy Operations Company, LLC	Electric CHP	Bayonne Plant Holding LLC	NJ	50497	STG1		Natural Gas Fired Combined Cycle	NG	CA
2018	6	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	7	160.0	Conventional Steam Coal	BIT	ST
2018	6	13756	Northern Indiana Pub Serv Co	Electric Utility	Bailly	IN	995	8	320.0	Conventional Steam Coal	BIT	ST
2018	7	57101	FC Landfill Energy	IPP	FC Landfill Energy	MD	57786	UNIT1	1.0	Landfill Gas	LFG	IC
2018	7	57101	FC Landfill Energy	IPP	FC Landfill Energy	MD	57786	UNIT2	1.0	Landfill Gas	LFG	IC
2018	7	56772	TX LFG Energy, LP	IPP	Coastal Plains	TX	55554	UNT2	1.7	Landfill Gas	LFG	IC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	63	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	64	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	65	0.3	Other Natural Gas	NG	FC
2018	8	58416	California State University, Northridge	Commercial	CSU Northridge Plant	CA	58422	67	0.3	Other Natural Gas	NG	FC
2018	9	2872	Auburndale Peaker Energy Center LLC	IPP	Auburndale Peaker Energy Center	FL	55833	CTP	117.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	9	55951	Exelon Nuclear	IPP	Oyster Creek	NJ	2388	1	607.7	Nuclear	NUC	ST
2018	9	8927	Hunterdon Cogeneration LP	Commercial	Hunterdon Cogen Facility	NJ	54707	1	4.1	Natural Gas Fired Combustion Turbine	NG	GT
2018	9	20856	Wisconsin Power & Light Co	Electric Utility	Edgewater	WI	4050	4	294.4	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)
2018	10	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	CARPT	1.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.6
2018	10	60146	Ameresco Federal Solutions	IPP	MCRD Parris Island PV	SC	61956	TBESS	4.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	4.0
2018	10	61639	Atkinson Solar II LLC	IPP	Atkinson Solar II	NC	62096	PGRF3	1.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.9
2018	10	61230	CD Arevon USA, Inc.	IPP	Mount Signal Solar Farm 3	CA	61202	MTSG3	252.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	252.3
2018	10	60533	Carl Friedrich Gauss Solar LLC	IPP	Carl Friedrich Gauss Solar	NC	60882	GAUSS	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2018	10	3037	City of Carlyle - (IL)	Electric Utility	Carlyle	IL	936	11	2.8	Petroleum Liquids	DFO	IC	(OT) Other	2.8
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC1	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	Sub 12	FL	61080	IC2	9.3	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	9.3
2018	10	18947	City of Tipton - (IA)	Electric Utility	Tipton	IA	8106	7	2.0	Petroleum Liquids	DFO	IC	(V) Under construction, more than 50 percent complete	2.0
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG1	263.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	311.0
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	CTG2	263.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	311.0
2018	10	60170	Clean Energy Future-Lordstown, LLC	IPP	Clean Energy Future-Lordstown, LLC	OH	60376	STG1	324.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	340.0
2018	10	56769	Consolidated Edison Development Inc.	IPP	Aurora County Wind	SD	61745	ACSD	20.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	20.0
2018	10	56769	Consolidated Edison Development Inc.	IPP	Brule County Wind	SD	61746	BCSD	20.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	20.0
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS1	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS2	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS3	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS4	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	10	60825	Corvus Community Solar	IPP	Corvus Community Solar	MN	61177	GCCS5	0.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	0.9
2018	10	61060	Cypress Creek Renewables	IPP	Brantley Solar	NC	60623	PV1	50.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.2
2018	10	61060	Cypress Creek Renewables	IPP	Saint Albans Solar	VT	61928	GEN1	4.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.9
2018	10	61060	Cypress Creek Renewables	IPP	Staunton	IN	61885	GEN1	4.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.0
2018	10	61187	DG Minnesota CSG, LLC	IPP	Cottage Grove Project CSG	MN	61983	COTG	4.9	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.9
2018	10	5199	Devon Energy Production Co	Industrial	Beaver Creek Gas Plant	WY	55278	STG-1	0.9	All Other	WH	ST	(U) Under construction, less than or equal to 50 percent complete	0.9
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	10	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	CC1ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	364.7
2018	10	5701	El Paso Electric Co	Electric Utility	Holloman Solar Facility	NM	60301	HPV1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	10	60147	Enerparc Solar Development, LLC	IPP	Gastonia Solar Center	NC	60359	60916	4.3	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.3
2018	10	60252	Friendswood Energy Genco, LLC	IPP	Friendswood Energy	TX	60468	GT-1	117.0	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	121.5
2018	10	60399	GASNA 6P, LLC	IPP	San Joaquin Solar	CA	60678	SJ1A	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2018	10	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
2018	10	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN2	465.0	Natural Gas Fired Combined Cycle	NG	CS	(TS) Construction complete, but not yet in commercial operation	555.0
2018	10	60713	Ku'ia Solar LLC	IPP	Ku'ia Solar	HI	61101	KUIA	2.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.9
2018	10	61334	Libra Community Solar Garden, LLC	IPP	Libra Community Solar	MN	61709	LIBR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	10	11208	Los Angeles Department of Water & Power	Electric Utility	Beacon BESS 1	CA	61431	BCNB1	20.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	20.0
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41327	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41328	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41329	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61101	Minnesota Solar CSG 1, LLC	IPP	Wright Cuddyer CSG	MN	61494	41330	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	56990	NJR Clean Energy Ventures Corporation	IPP	Springfield Solar Project	NJ	61907	NJLND	7.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	7.5
2018	10	54913	NSTAR Electric Company	Electric Utility	East Springfield Solar PV	MA	62093	REC34	1.4	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.4
2018	10	54913	NSTAR Electric Company	Electric Utility	Hatfield Solar PV	MA	62091	LG395	3.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.6
2018	10	54913	NSTAR Electric Company	Electric Utility	Montague Site 36-Grosolar	MA	62092	REC34	4.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.1
2018	10	54913	NSTAR Electric Company	Electric Utility	Southwick Solar PV	MA	62082	REC34	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	10	54913	NSTAR Electric Company	Electric Utility	Sunderland Solar PV	MA	62090	REC34	1.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.1
2018	10	61080	North Smithfield Solar Power 1, LLC	IPP	North Smithfield Solar Power 1	RI	61461	NSS01	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	10	56545	Pattern Operators LP	IPP	Stillwater Wind, LLC	MT	61858	WT	80.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	80.0
2018	10	61585	Pisces Community Solar Garden LLC	IPP	Pisces Community Solar Garden	MN	61992	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	10	61507	Plumsted 537 LLC	IPP	Plumsted 537 LLC	NJ	61892	PLMST	19.8	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	19.8
2018	10	15466	Public Service Co of Colorado	Electric Utility	Rush Creek Wind	CO	60619	GEN1	576.0	Onshore Wind Turbine	WND	WT	(TS) Construction complete, but not yet in commercial operation	600.0
2018	10	61640	Quarter Horse Farm LLC	IPP	Quarter Horse Solar	NC	62095	PGRF5	4.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.5
2018	10	16191	Robbins Lumber Inc	Industrial	Robbins Lumber	ME	50230	WEG	8.5	Wood/Wood Waste Biomass	WDS	ST	(V) Under construction, more than 50 percent complete	10.0
2018	10	61587	Sagittarius Community Solar Gardens LLC	IPP	Sagittarius Community Solar Gardens LLC	MN	61994	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	10	60520	SoCore Energy LLC	IPP	Anoka County MN CONX	MN	62061	PV1	3.4	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.4
2018	10	60520	SoCore Energy LLC	IPP	Hampton MN GRE	MN	62060	PV1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	10	61506	Stryker 22, L.L.C.	IPP	Stryker 22, L.L.C.	NJ	61891	EDGRD	19.8	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	19.8
2018	10	59138	SunPower Corporation, Systems	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
2018	10	59138	SunPower Corporation, Systems	IPP	Gavilan District College Solar Project	CA	61993	GDCPV	1.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.4
2018	10	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
2018	10	60947	Tesla Inc.	IPP	Lancaster SCE ReMAT	CA	61081	PV1	3.0	Solar Photovoltaic	SUN	PV	(OT) Other	3.0
2018	10	61580	USS Big Lake 1 LLC	IPP	USS Big Lake 1 Solar CSG	MN	61997	USSBL	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61581	USS Good Solar LLC	IPP	USS Good Solar CSG	MN	61998	USSGO	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61582	USS Kasch Solar LLC	IPP	USS Kasch Solar CSG	MN	61999	USSKA	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	10	61583	USS Rockpoint Solar LLC	IPP	USS Rockpoint Solar CSG	MN	62000	USSRP	1.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.0
2018	11	61633	AVS Phase 2 LLC	IPP	Lancaster	CA	62056	LANC	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2018	11	61529	Adams Nielson Solar, LLC	IPP	Adams Nielson Solar	WA	61933	ADAMS	19.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	19.2
2018	11	61514	Agilitas Energy, LLC	IPP	Blydenburgh Solar Project	NY	61900	BLYD	1.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.5
2018	11	61514	Agilitas Energy, LLC	IPP	Lincoln Ave Solar Project	NY	61899	LINC	2.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	2.0
2018	11	60476	Bluebell Solar, LLC	IPP	Bluebell Solar	TX	60789	UNIT1	30.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	30.0
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 6	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 7	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 8	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC 9	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	58847	Carlsbad Energy Center	IPP	Carlsbad Energy Center	CA	59002	CEC10	105.5	Natural Gas Fired Combustion Turbine	NG	GT	(TS) Construction complete, but not yet in commercial operation	105.5
2018	11	61531	Casa Mesa Wind, LLC	IPP	Casa Mesa Wind Energy Center	NM	61925	CMNM	50.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	50.9
2018	11	61531	Casa Mesa Wind, LLC	IPP	Casa Mesa Wind Energy Center	NM	61925	CMNMB	1.0	Batteries	MWH	BA	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	58840	Copenhagen Wind Farm, LLC	IPP	Copenhagen Wind Farm	NY	58979	CPHGN	79.9	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	79.9
2018	11	61060	Cypress Creek Renewables	IPP	Bar D	CO	61886	GEN1	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2018	11	61060	Cypress Creek Renewables	IPP	Buckleberry Solar	NC	61693	GEN	52.1	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.1
2018	11	61060	Cypress Creek Renewables	IPP	Chisum	TX	61810	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	Eddy II	TX	61874	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	Fox Creek Solar	NC	60624	PV1	50.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.2
2018	11	61060	Cypress Creek Renewables	IPP	Hopewell Friends	NC	61883	GEN1	1.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2018	11	61060	Cypress Creek Renewables	IPP	Pinesage	NC	61978	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61060	Cypress Creek Renewables	IPP	Sterling Solar (TX)	TX	61871	GEN1	10.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	10.0
2018	11	61060	Cypress Creek Renewables	IPP	West Moore Solar II	TX	61625	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61060	Cypress Creek Renewables	IPP	Yellow Jacket	TX	61873	GEN1	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61187	DG Minnesota CSG, LLC	IPP	Hammer CSG	MN	62099	HAMME	4.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	4.8
2018	11	61187	DG Minnesota CSG, LLC	IPP	Monticello Project CSG	MN	62105	MONTI	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2018	11	61187	DG Minnesota CSG, LLC	IPP	Schultz CSG	MN	62088	SCHUL	1.8	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.8
2018	11	61187	DG Minnesota CSG, LLC	IPP	Tiller CSG	MN	62098	TILLE	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2018	11	58970	Ecoplexus, Inc	IPP	Manning PV 1	NC	59520	MANN	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	7019	Gay & Robinson Inc	Industrial	Gay Robinson	HI	50333	HYD3	6.5	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	6.5
2018	11	60428	Green City Recovery, LLC	IPP	Green City Recovery, LLC	KY	60703	2	1.0	Landfill Gas	LFG	IC	(L) Regulatory approvals pending. Not under construction	1.0
2018	11	61674	Greenskies	IPP	Roseville Solar	CA	62114	ROSE	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	11	9234	Indiana Municipal Power Agency	Electric Utility	Rensselaer Solar Site 2	IN	61799	SREN2	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2018	11	9234	Indiana Municipal Power Agency	Electric Utility	Richmond Solar Site 2	IN	61729	SRIC2	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2018	11	61373	MERIT SI	IPP	Rotor Clip	NJ	61751	RCLIP	2.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.8
2018	11	61458	Minco Wind IV, LLC	IPP	Minco Wind IV, LLC	OK	61836	MIV	130.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	130.0
2018	11	61682	Minisink Solar 2 LLC	IPP	Minisink Solar 2 LLC	NY	62146	MINI2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	61487	Montevideo Solar LLC	IPP	Montevideo Solar LLC	MN	61870	MONTE	5.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	56990	NJR Clean Energy Ventures Corporation	IPP	Quakertown Solar Farm, LLC	NJ	61965	QKRTN	8.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	8.8
2018	11	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
2018	11	58489	OCI Solar Power	IPP	Ivory Solar	TX	61697	IVORY	50.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	50.0
2018	11	34691	Ormat Nevada Inc	Commercial	McGinness Hills 3	NV	61912	OEC31	17.0	Geothermal	GEO	BT	(V) Under construction, more than 50 percent complete	37.0
2018	11	34691	Ormat Nevada Inc	Commercial	McGinness Hills 3	NV	61912	OEC32	20.0	Geothermal	GEO	BT	(V) Under construction, more than 50 percent complete	37.0
2018	11	61353	Philadelphia Authority for Industrial Development	IPP	Navy Yard Peaker Station	PA	61737	GEN4	2.0	Natural Gas Internal Combustion Engine	NG	IC	(V) Under construction, more than 50 percent complete	2.0
2018	11	15248	Portland General Electric Co	Electric Utility	Timothy Lake Powerhouse	OR	60868	1	1.2	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	1.2
2018	11	61414	Rattlesnake Creek Wind Project, LLC	IPP	Rattlesnake Creek Wind Project	NE	59292	RCWP	318.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	318.1
2018	11	60520	SoCore Energy LLC	IPP	Athens MN CONX	MN	62062	PV1	6.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	6.6
2018	11	61677	Sol Systems	IPP	Red Toad 4451 Buffalo Road, LLC	NC	62131	G4451	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	17633	Southern Indiana Gas & Elec Co	Electric Utility	Oak Hill Solar Array	IN	61333	OHSA1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	11	60910	Sun Farm V, LLC	IPP	Sun Farm V, LLC	NC	61287	SF5PV	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	61441	Sun Farm VI, LLC	IPP	Sun Farm VI, LLC	NC	61842	PV1	4.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	5.0
2018	11	60403	TRS Fuel Cell, LLC	Electric CHP	TRS Fuel Cell	CT	60683	MMH1	3.7	Other Natural Gas	NG	FC	(TS) Construction complete, but not yet in commercial operation	3.7
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind II	CA	61582	VYGR2	128.7	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	128.7
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind III	CA	61583	VYGR3	43.2	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	43.2
2018	11	2770	Terra-Gen Operating Co LLC	IPP	Voyager Wind IV	CA	61584	VYGR4	21.6	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	21.6
2018	11	61626	USS Dubhe Solar LLC	IPP	USS Dubhe Solar CSG	MN	62048	USSDB	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61628	USS Nillie Corn Solar LLC	IPP	USS Nillie Corn Solar CSG	MN	62046	USSNC	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61629	USS Norelius Solar LLC	IPP	USS Norelius Solar CSG	MN	62045	USSNO	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	11	61630	USS Solar Dawn LLC	IPP	USS Solar Dawn CSG	MN	62044	USSSD	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	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
2018	12	61482	AES ES GILBERT, LLC	IPP	AES ES GILBERT	AZ	61861	SRP	10.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	12	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	12	60691	AES LAWAI SOLAR, LLC	IPP	AES LAWAI SOLAR	HI	61068	LAWA2	20.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	12	60248	Agilon Energy LLC	IPP	Victoria City Power LLC	TX	61241	VC-1	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	60248	Agilon Energy LLC	IPP	Victoria City Power LLC	TX	61241	VC-2	43.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	201	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	202	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	203	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	204	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60281	Altus Power America Management, LLC	IPP	Corcoran	MN	61971	205	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	60876	Antelope Expansion 2, LLC	IPP	Antelope Expansion 2	CA	61264	ANTX2	105.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	105.0
2018	12	61327	Arcturus Community Solar Garden, LLC	IPP	Arcturus Community Solar	MN	61705	ARCT	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	57003	Arlington Valley Solar Energy LLC	IPP	Arlington Valley Solar Energy I	AZ	57679	AVSE1	125.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	127.0
2018	12	61530	Armadillo Flats Wind Project, LLC	IPP	Armadillo Flats Wind Project, LLC	OK	61926	ARM	250.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	250.0
2018	12	61328	Auriga Community Solar Garden, LLC	IPP	Auriga Community Solar	MN	61706	AURI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	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
2018	12	59359	BHE Renewables, LLC	IPP	Walnut Ridge Wind Farm	IL	58694	1	212.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	212.0
2018	12	59474	BQ Energy LLC	IPP	Kings Park Solar I	NY	59880	KIPS1	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	59474	BQ Energy LLC	IPP	Kings Park Solar II	NY	59881	KIPS2	2.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	2.0
2018	12	60366	BRE NC Solar 2, LLC	IPP	BRE NC Solar 2	NC	60626	BEAM2	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	60367	BRE NC Solar 3, LLC	IPP	BRE NC Solar 3	NC	60627	BEAM3	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	60368	BRE NC Solar 4, LLC	IPP	BRE NC Solar 4	NC	60628	BEAM4	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	61545	Blacktip Solar, LLC	IPP	Blacktip Solar	SC	61939	5	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	61563	Blue Summit II Wind, LLC	IPP	Blue Summit II Wind, LLC	TX	61970	BSII	99.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	99.4
2018	12	61230	CD Arevon USA, Inc.	IPP	CA Flats Solar 150, LLC	CA	60034	GEN01	150.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	150.0
2018	12	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG5	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2018	12	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	CTG6	216.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	234.9
2018	12	56608	Calpine Mid-Merit LLC	IPP	York Energy Center	PA	55524	STG2	395.1	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	419.6
2018	12	59365	Capital Power Corporation	IPP	New Frontier Wind	ND	59903	GEN	100.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	100.0
2018	12	61568	Chisago Holdco LLC	IPP	Chisago Holdco LLC	MN	61968	CHIS	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2018	12	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	7	4.4	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	4.4
2018	12	16873	City of Sebewaing - (MI)	Electric Utility	Pine Street	MI	7806	8	3.3	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	3.3
2018	12	61571	Clara City CSG I, LLC	IPP	Syncarpha Clara City CSG I (Stamer)	MN	61980	SCSG1	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	12	56769	Consolidated Edison Development Inc.	IPP	Blackwell Solar Park	CA	59524	FRBSP	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	12	56769	Consolidated Edison Development Inc.	IPP	Wistaria Ranch Solar	CA	61750	WICA	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	106.7
2018	12	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYN	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	12	61419	Constellation Solar MC, LLC	IPP	Gateway Solar	MD	61794	GTWYS	2.6	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.6
2018	12	61540	Coolridge Solar I, LLC	IPP	Coolridge Solar 1, LLC	VT	61959	COLS	19.6	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	19.6
2018	12	58695	Coronal Development Services	IPP	Latitude Solar Center	TN	61412	LATSC	15.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	15.0
2018	12	61528	Cumberland Land Holdings, LLC	IPP	Cumblerland Land Holdings, LLC	AL	61924	CUMB	14.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	14.7
2018	12	61060	Cypress Creek Renewables	IPP	Atood II	SC	61960	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	61060	Cypress Creek Renewables	IPP	Bovine	TX	61867	GEN1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Bronson	TX	61868	GEN1	10.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Cascade Solar (TX)	TX	61875	GEN1	10.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	10.0
2018	12	61060	Cypress Creek Renewables	IPP	Copperfield	NC	61882	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	61060	Cypress Creek Renewables	IPP	Gaston II	SC	61961	GEN1	7.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	7.5
2018	12	61060	Cypress Creek Renewables	IPP	Morning View	NC	61881	GEN1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	60370	DG AMP Solar, LLC	IPP	DG AMP Solar Brewster	OH	61818	AMPBR	1.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.9
2018	12	61567	DP-C2 Episode 1 LLC	IPP	Diamond Solar II	SC	61974	C2BV	8.2	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	8.2
2018	12	61567	DP-C2 Episode 1 LLC	IPP	Edison Solar II	SC	61975	C2BV	4.8	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.8
2018	12	5109	DTE Electric Company	Electric Utility	Pine River Wind Park	MI	61106	1	161.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	161.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2GTA	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2GTB	251.7	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	310.3
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	CC2ST	316.7	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	364.7
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Hamilton Solar Power Plant	FL	61807	PV1	74.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.9

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)
2018	12	56215	E ON Climate Renewables N America LLC	IPP	Stella Wind Farm	TX	59063	WT1	201.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	201.0
2018	12	61688	ENGIE Generation North America LLC	IPP	Goose Lake MN DPC-GM	MN	62148	PV1	1.5	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.5
2018	12	61420	ENGIE Storage Services NA LLC	Commercial	Pacific Union College BESS	CA	61795	12649	1.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	58970	Ecoplexus, Inc	IPP	Boykin PV1	NC	59996	BOYK1	17.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	17.0
2018	12	58970	Ecoplexus, Inc	IPP	Folsom SP and CSP Sacramento	CA	61698	FOLSM	1.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.3
2018	12	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
2018	12	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	(U) Under construction, less than or equal to 50 percent complete	299.3
2018	12	56201	Engie North America	IPP	Live Oak Wind Project	TX	61782	WTGS	199.5	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	199.5
2018	12	6035	Exelon Power	IPP	Exelon West Medway II LLC	MA	59882	4	97.4	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	100.0
2018	12	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
2018	12	61579	FL Solar 5, LLC	IPP	Citrus Ridge Solar	FL	61988	FL501	52.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	52.0
2018	12	59745	First Solar Asset Management	IPP	North Rosamond Solar LLC	CA	59879	GEN01	150.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	150.0
2018	12	59745	First Solar Asset Management	IPP	Willow Spring Solar, LLC	CA	60324	GEN01	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2018	12	61070	Foundation CA Fund IX Manager, LLC	IPP	Foundation Mann Packing	CA	61443	WTG1	1.8	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	1.8
2018	12	61548	Gary Solar, LLC	IPP	Gary Solar	SC	61942	8	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	60878	Green Beanworks B, LLC	IPP	Green Beanworks B PV	CA	61339	GBWXB	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	61214	Heartland Divide Wind Project, LLC	IPP	Heartland Divide Wind Project, LLC	IA	61609	1	103.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	103.5
2018	12	59462	Heelstone Energy Holdings, LLC	IPP	Innovative Solar 54	NC	59669	IS054	50.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	59462	Heelstone Energy Holdings, LLC	IPP	Innovative Solar 67	NC	59678	IS067	33.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	33.3
2018	12	60356	Hexagon Energy	IPP	Bay Branch Solar	NC	60601	BBSOL	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	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
2018	12	49893	Invenergy Services LLC	IPP	Upstream Wind Energy LLC	NE	61784	UWE	202.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	202.5
2018	12	61342	Leo Community Solar, LLC	IPP	Leo Community Solar	MN	61713	LEO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	61133	Lorenzo Wind, LLC	IPP	Lorenzo Wind	TX	59244	FIBE1	80.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	80.0
2018	12	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
2018	12	61381	Meadow Lake Wind Farm VI LLC	IPP	Meadow Lake Wind Farm VI LLC	IN	61756	MWLVI	200.4	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.4
2018	12	12341	MidAmerican Energy Co	Electric Utility	Arbor Hill Wind Farm	IA	62132	WT1	250.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	250.0
2018	12	12341	MidAmerican Energy Co	Electric Utility	Beaver Creek II Wind	IA	62134	GT1	170.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	170.0
2018	12	12341	MidAmerican Energy Co	Electric Utility	Ivester Wind Farm	IA	61911	WT1	90.8	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	90.8
2018	12	12341	MidAmerican Energy Co	Electric Utility	North English	IA	62133	GT1	200.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	200.0
2018	12	61004	Midway Solar LLC	IPP	Midway Solar - TX	TX	61368	PV1	182.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	182.0
2018	12	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
2018	12	61459	Minco Wind V, LLC	IPP	Minco Wind V, LLC	OK	61837	MV	220.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.0
2018	12	12199	Montana-Dakota Utilities Co	Electric Utility	Thunder Spirit Wind, LLC	ND	58965	2	48.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	48.0
2018	12	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	CTG1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	5.6
2018	12	61292	NC State University, Energy Systems	Commercial	NCSU CCUP Cogeneration Plant	NC	61675	STG	1.0	Natural Gas Steam Turbine	NG	ST	(V) Under construction, more than 50 percent complete	1.0
2018	12	60018	NET Power, LLC	IPP	NET Power La Porte Station	TX	60910	NPLPS	25.5	Other Natural Gas	NG	OT	(V) Under construction, more than 50 percent complete	25.5
2018	12	54913	NSTAR Electric Company	Electric Utility	Greenfield Solar PV	MA	62063	LG400	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Hinsdale Solar PV	MA	62064	LG400	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Savoy Solar PV	MA	62065	LG400	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Southampton Solar PV	MA	62066	LG400	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Springfield Solar PV	MA	62072	LG395	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2018	12	54913	NSTAR Electric Company	Electric Utility	Wareham Solar PV	MA	62055	LG395	3.3	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.3
2018	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
2018	12	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	8A	122.0	Conventional Hydroelectric	WAT	HY	(V) Under construction, more than 50 percent complete	122.0
2018	12	61603	Page Solar Farm, LLC	IPP	Page Solar	NC	62018	PGRI1	1.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.6
2018	12	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
2018	12	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
2018	12	61521	Pegasus Wind, LLC	IPP	Pegasus Wind	MI	61916	PWEC	141.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	141.1
2018	12	61566	Peony Solar, LLC	IPP	Peony Solar	SC	61976	PGRG1	39.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	39.0
2018	12	61537	Pratt Wind, LLC	IPP	Pratt Wind, LLC	KS	61957	PW	220.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	243.0
2018	12	61573	Prinsburg CSG I, LLC	IPP	Syncarpha Prinsburg CSG (Ledeboer)	MN	61979	SYPRN	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2018	12	61605	Riverhead Solar Farm LLC	IPP	Riverhead Solar Farm	NY	62017	RIV1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2018	12	60466	Rowan Solar NC LLC	IPP	Rowan Solar NC LLC	NC	60780	PV1	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2018	12	60975	SR Innovation, LLC	IPP	SR Innovation - NIKE PV	TN	61332	NIKE2	1.7	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.7
2018	12	60334	SR Millington, LLC	IPP	Millington Solar Farm	TN	60560	MILL	53.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	53.0
2018	12	61675	SS PA II PSU LLC	IPP	University Park Solar	PA	62119	PSUPV	1.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	1.5
2018	12	61333	Sagitta Community Solar Garden, LLC	IPP	Sagitta Community Solar	MN	61708	SAGI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	60693	Saratoga Wind Energy LLC	IPP	Saratoga Wind Farm	IA	61070	SWE	66.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	66.0
2018	12	61591	Solar University, LLC	IPP	UC Merced Solar	CA	61995	UCMBA	0.5	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	0.5
2018	12	61591	Solar University, LLC	IPP	UC Merced Solar	CA	61995	UCMPV	4.2	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	4.3
2018	12	61556	South Solar, LLC	IPP	South Solar	SC	61949	13	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2018	12	17633	Southern Indiana Gas & Elec Co	Electric Utility	Volkman Road Solar Array	IN	61334	VRSA2	1.0	Batteries	MWH	BA	(V) Under construction, more than 50 percent complete	1.0
2018	12	58658	Sunlight Partners	IPP	Alexis Solar	NC	60139	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Blue Bird Solar	NC	60177	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2018	12	58658	Sunlight Partners	IPP	Brooke Solar	NC	60140	PV1	4.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.5
2018	12	58658	Sunlight Partners	IPP	Cash Solar	NC	60178	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	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
2018	12	58658	Sunlight Partners	IPP	Grove Solar	NC	60181	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Higgins Solar	NC	60166	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Icarus Solar	NC	60169	PV1	3.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.0
2018	12	58658	Sunlight Partners	IPP	Iga Solar	NC	60170	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Izia Solar	NC	60141	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	June Solar	NC	60158	PV1	4.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	4.0
2018	12	58658	Sunlight Partners	IPP	Kathleen Solar	NC	60180	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	12	58658	Sunlight Partners	IPP	Longleaf Solar	NC	60173	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Robin Solar	NC	60165	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Roman Solar	NC	60159	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	58658	Sunlight Partners	IPP	Shelter Solar	NC	60156	PV1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2018	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
2018	12	58658	Sunlight Partners	IPP	Wilfork Solar	NC	60162	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2018	12	60495	Sunpin Holdings, LLC	IPP	Colgreen North Shore Solar Farm	CA	60825	CNS1	74.8	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.8
2018	12	61005	Sweetwater Solar LLC	IPP	Sweetwater Solar	WY	61369	PV1	92.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	92.0
2018	12	61685	Syncarpha Eagle Nest I, LLC	IPP	Syncarpha Eagle Nest	NM	62149	SYEN1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2018	12	61527	Tahoka Wind, LLC	IPP	Tahoka Wind	TX	61921	TAH	300.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	300.0
2018	12	18454	Tampa Electric Co	Electric Utility	Bonnie Mine Solar	FL	61655	PV1	35.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	35.0
2018	12	18454	Tampa Electric Co	Electric Utility	Grange Hall Solar	FL	61656	PV1	61.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	61.0
2018	12	18454	Tampa Electric Co	Electric Utility	Lithia Solar	FL	61663	GEN1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2018	12	18454	Tampa Electric Co	Electric Utility	Mountain View Solar (FL)	FL	61664	GEN1	55.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	55.0
2018	12	18454	Tampa Electric Co	Electric Utility	Peace Creek Solar	FL	61666	GEN	56.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	56.6

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)
2018	12	61532	Techren Solar I LLC	IPP	Techren	NV	61611	TECH1	100.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	100.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG1	276.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	CTG2	276.0	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	370.0
2018	12	60249	Tenaska Pennsylvania Partners, LLC	IPP	Tenaska Westmoreland Generating Station	PA	60464	STG1	374.0	Natural Gas Fired Combined Cycle	NG	CA	(V) Under construction, more than 50 percent complete	394.0
2018	12	60947	Tesla Inc.	IPP	Blue Shld Of Cal- El Dorado Hlls Mtr B	CA	62077	PV1	2.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.1
2018	12	60947	Tesla Inc.	IPP	Pima Community College	AZ	62075	PV1	1.1	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.1
2018	12	61436	Titan Solar, LLC	IPP	Titan Solar	CO	61811	PCEC	50.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	50.0
2018	12	61562	Torrecillas Wind Energy, LLC	IPP	Torrecillas Wind Energy, LLC	TX	61969	TWE	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2018	12	59056	Tri Global Energy, LLC	IPP	Blue Cloud Renewable Energy Project, LLC	TX	60270	WT1	350.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	350.0
2018	12	61625	USS Brockway Solar LLC	IPP	USS Brockway Solar CSG	MN	62049	USSBR	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61627	USS JJ Solar LLC	IPP	USS JJ Solar CSG	MN	62047	USSJJ	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	61631	USS Solar Rapids LLC	IPP	USS Solar Rapids CSG	MN	62042	USSSR	1.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	1.0
2018	12	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
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT01	324.4	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT02	324.4	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	CT03	324.4	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	369.8
2018	12	19876	Virginia Electric & Power Co	Electric Utility	Greensville County Power Station	VA	59913	ST01	611.8	Natural Gas Fired Combined Cycle	NG	CC	(V) Under construction, more than 50 percent complete	663.9
2018	12	61666	WED GW Solar, LLC	IPP	WED GW Solar, LLC	RI	62118	GWSOL	3.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	3.0
2018	12	61648	WED Green Hill, LLC	IPP	WED Green Hill, LLC	RI	62106	GHILL	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61649	WED Plainfield II, LLC	IPP	WED Plainfield II, LLC	RI	62107	PLAI2	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61650	WED Plainfield III, LLC	IPP	WED Plainfield III, LLC	RI	62108	PLAI3	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61651	WED Plainfield, LLC	IPP	WED Plainfield, LLC	RI	62109	PLAI1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61652	WED Shun I, LLC	IPP	WED Shun I, LLC	RI	62110	SHUN1	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61653	WED Shun II, LLC	IPP	WED Shun II, LLC	RI	62111	SHUN2	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61654	WED Shun III, LLC	IPP	WED Shun III, LLC	RI	62112	SHUN3	3.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	3.0
2018	12	61645	Warrenton Solar I LLC	IPP	Warrenton I Solar	NC	62100	PGRI4	4.9	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.9
2018	12	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSLFG	1.6	Landfill Gas	LFG	IC	(T) Regulatory approvals received. Not under construction	1.6
2018	12	60154	White Street Renewables LLC	IPP	White Street Renewables	NC	60364	WSPV	3.4	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	3.4
2018	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
2018	12	61291	Wildcat Ranch Wind Project, LLC	IPP	Wildcat Ranch Wind Project	TX	61674	WT	150.0	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	150.0
2018	12	61366	Woods Hill Solar, LLC	IPP	Woods Hill Solar	CT	61736	PV1	20.0	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	20.0
2019	1	61541	1634 Solar, LLC	IPP	1634 Solar	SC	61935	3	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	1	61543	ACE Solar, LLC	IPP	Ace Solar	SC	61937	18	1.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.0
2019	1	61542	Abbot Solar, LLC	IPP	Abbot Solar	SC	61936	2	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	60248	Agilon Energy LLC	IPP	Victoria Port Power LLC	TX	61242	VP-1	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	1	60248	Agilon Energy LLC	IPP	Victoria Port Power LLC	TX	61242	VP-2	50.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	50.0
2019	1	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT7	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	1	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	1	61546	Bloom Solar, LLC	IPP	Bloom Solar	SC	61940	6	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61547	Bond Solar, LLC	IPP	Bond Solar	SC	61941	7	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC1	18.5	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC2	18.5	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC3	18.5	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	18.8
2019	1	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	IC4	18.5	Natural Gas Internal Combustion Engine	NG	IC	(U) Under construction, less than or equal to 50 percent complete	18.8
2019	1	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	1	5701	El Paso Electric Co	Electric Utility	New Mexico Community Solar Facility	NM	61783	NMCSF	2.0	Solar Photovoltaic	SUN	PV	(OT) Other	2.0
2019	1	59735	Enerparc CA2, LLC	IPP	Cloverdale Solar Center	CA	60813	ECA02	1.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	1.0
2019	1	6452	Florida Power & Light Co	Electric Utility	Interstate Solar Energy Center	FL	61768	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Miami Dade Solar Energy Center	FL	61766	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Pioneer Trail Solar Energy Center	FL	61767	1	74.5	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	74.5
2019	1	6452	Florida Power & Light Co	Electric Utility	Sunshine Gateway Solar Energy Center	FL	61763	1	74.5	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	74.5
2019	1	61518	Frontenac Holdco LLC	IPP	Frontenac Holdco LLC	MN	61919	FRONT	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	1	61549	Goldenrod Solar, LLC	IPP	Goldenrod Solar	SC	61943	9	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61365	Hilltopper Wind Project, LLC	IPP	Hilltopper Wind Project	IL	61735	WT1	185.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	185.0
2019	1	49893	Invenergy Services LLC	IPP	Lackawanna Energy Center	PA	60357	GEN3	465.0	Natural Gas Fired Combined Cycle	NG	CS	(V) Under construction, more than 50 percent complete	555.0
2019	1	61550	Jessamine Solar, LLC	IPP	Jessamine Solar	SC	61944	10	1.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.9
2019	1	61687	KCE NY 1, LLC	IPP	KCE NY 1	NY	62147	KNY1	20.0	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	20.0
2019	1	61289	Kaus Community Solar Garden, LLC	IPP	Kaus Community Solar	MN	61716	KAUS	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	59458	Landfill Energy Systems Florida	IPP	Sarasota County LFGTE Facility	FL	59686	LESF4	1.6	Landfill Gas	LFG	IC	(L) Regulatory approvals pending. Not under construction	1.6
2019	1	61679	MSC-GreyCloud01 LLC	IPP	MSC-GreyCloud01	MN	62143	52785	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	61680	MSC-Scandia01 LLC	IPP	MSC-Scandia01	MN	62144	52741	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	54913	NSTAR Electric Company	Electric Utility	East Longmeadow Solar PV	MA	62059	LG400	5.0	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	5.0
2019	1	54913	NSTAR Electric Company	Electric Utility	Hampden Solar PV	MA	62073	LG390	3.5	Solar Photovoltaic	SUN	PV	(TS) Construction complete, but not yet in commercial operation	3.5
2019	1	61552	Pelzer Solar I, LLC	IPP	Pelzer Solar I	SC	61945	19	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	1	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	1	61553	Redwing Solar, LLC	Industrial	Redwing Solar	SC	61946	11	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	1	61554	River Solar, LLC	IPP	River Solar	SC	61947	12	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61614	Rollingstone Holdco LLC	IPP	Rollingstone Holdco CSG	MN	62037	ROLLI	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	1	61555	Sapphire Solar, LLC	IPP	Sapphire Solar	SC	61948	17	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	1	61123	Upton County Solar 2 LLC	IPP	Castle Gap Solar	TX	60123	BAT1	9.9	Batteries	MWH	BA	(U) Under construction, less than or equal to 50 percent complete	9.9
2019	1	61557	Vincent Solar, LLC	IPP	Vincent Solar	SC	61950	14	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61558	Watauga Solar, LLC	IPP	Watauga Solar	SC	61951	15	2.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	2.0
2019	1	61559	Whitt Solar, LLC	IPP	Whitt Solar	SC	61952	20	2.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	2.0
2019	1	61560	Willis Solar, LLC	IPP	Willis Solar	SC	61953	16	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	2	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	2	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	2	61344	Advanced Microgrid Solutions	IPP	HEBT WLA 1	CA	61721	WLA1C	11.8	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	11.8
2019	2	61259	Altair Community Solar Garden, LLC	IPP	Altair Community Solar Garden	MN	61645	ALTA	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61325	Aquarius Community Solar Gardens, LLC	IPP	Aquarius Community Solar	MN	61710	AQUA	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	2	61326	Aquila Community Solar Gardens, LLC	IPP	Aquila Community Solar	MN	61704	AQUI	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT6	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	2	61329	Canopus Community Solar Garden, LLC	IPP	Canopus Community Solar	MN	61707	CANO	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61337	Cassiopeia Community Solar Garden, LLC	IPP	Cassiopeia Community Solar	MN	61711	CASS	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	2	61467	Central CA Fuel Cell 2, LLC	IPP	Tulare WWTP BioMat Fuel Cell	CA	61846	MM27	2.8	Other Natural Gas	NG	FC	(U) Under construction, less than or equal to 50 percent complete	2.8
2019	2	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	2	61567	DP-C2 Episode 1 LLC	IPP	Blackville Solar II	SC	61973	C2BV	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2019	2	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	2	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	2	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
2019	2	61613	Sartell Holdco LLC	IPP	Sartell Holdco CSG	MN	62036	SARTE	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2019	2	60947	Tesla Inc.	IPP	Bd of Educ of Queen Anne's Cnty, Cnty HS	MD	62074	PV1	1.7	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.7
2019	3	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT5	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	161.9
2019	3	61006	Bearkat TE Partnership LLC	IPP	Bearkat	TX	59972	BRKA2	103.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	103.4
2019	3	61260	Capricornus Community Solar Garden, LLC	IPP	Capricornus Community Solar Garden	MN	61651	CAPR	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	61338	Crux Community Solar Gardens, LLC	IPP	Crux Community Solar	MN	61712	CRUX	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	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
2019	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
2019	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
2019	3	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	3	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	3	61456	Hope Farm Solar, LLC	IPP	Hope Farm Solar, LLC	RI	61840	HOPE	10.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	3	9417	Interstate Power and Light Co	Electric Utility	English Farms	IA	61565	1	169.9	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	169.9
2019	3	9417	Interstate Power and Light Co	Electric Utility	Upland Prairie	IA	61564	1	299.3	Onshore Wind Turbine	WND	WT	(V) Under construction, more than 50 percent complete	299.3
2019	3	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	3	60987	Lanikuhana Solar LLC	IPP	Lanikuhana Solar LLC	HI	58281	1	14.7	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	14.7
2019	3	61606	Lindstrom Solar LLC	IPP	Nautilus Lindstrom Solar CSG	MN	62030	LI	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	3	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	3	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	3	59967	Phoenix Energy	Electric CHP	North Fork Community Power	CA	60192	NFCP1	2.0	Other Waste Biomass	OBG	IC	(U) Under construction, less than or equal to 50 percent complete	2.0
2019	3	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
2019	3	61607	Saint Cloud Solar, LLC	IPP	Nautilus Saint Cloud Solar CSG	MN	62031	SC	4.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	4.0
2019	3	61616	Solar Provider Group MN I LLC	IPP	Syncarpha Dodge 1	MN	62053	SPGD1	1.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	1.0
2019	3	60117	SunShare	IPP	Becker Solar 2 CSG	MN	62084	BCKR2	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 3 CSG	MN	62085	BCKR3	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 4 CSG	MN	62086	BCKR4	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar 5 CSG	MN	62087	BCKR5	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	60117	SunShare	IPP	Becker Solar CSG	MN	62040	BCKR1	1.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	1.0
2019	3	59764	Waipio PV, LLC	IPP	Waipio Solar	HI	60024	WPO	45.9	Solar Photovoltaic	SUN	PV	(V) Under construction, more than 50 percent complete	45.9
2019	3	61609	Winsted Solar LLC	IPP	Nautilus Winsted Solar CSG	MN	62032	WS	3.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.0
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	3	60875	Wolf Run Energy LLC	IPP	Wolf Run Energy	PA	61263	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	4.4
2019	4	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT4	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
2019	4	58519	Clean Energy Collective LLC	IPP	SCE&G Curie CSG	SC	61432	SCCU1	2.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 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	(T) Regulatory approvals received. Not under construction	80.0
2019	4	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	4	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	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	60195	Groton Station Fuel Cell, LLC	IPP	Naval Sub Base New London Fuel Cell	CT	61743	MMH2	3.7	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	3.7
2019	4	19547	Hawaiian Electric Co Inc	Electric Utility	West Loch Solar One	HI	61987	WLS1	20.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	20.0
2019	4	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	4	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	4	58849	Mariah del Este LLC	IPP	Mariah East	TX	59006	MARN	152.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	152.5
2019	4	13902	NorthWestern Energy	Electric Utility	Hauser	MT	2185	HAU7	3.4	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 50 percent complete	3.5
2019	4	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	4	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	4	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	4	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	4	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	4	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	4	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	4	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	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
2019	4	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	4	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	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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	(V) Under construction, more than 50 percent complete	18.8
2019	4	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
2019	5	60292	Advanced Solar Power Holdings, Inc	IPP	Two Mile Desert Project	NC	60510	PV1	16.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	16.2
2019	5	803	Arizona Public Service Co	Electric Utility	Ocotillo	AZ	116	GT3	104.7	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	161.9
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	61519	Blackville Solar Farm, LLC	IPP	Blackville Solar Farm, LLC	SC	61918	1	7.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	7.2
2019	5	61060	Cypress Creek Renewables	IPP	West Moore Solar	TX	61624	GEN1	5.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	5.0
2019	5	61567	DP-C2 Episode 1 LLC	IPP	Richardson Solar II	SC	61972	C2BV	3.6	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	3.6
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	(P) Planned for installation, but regulatory approvals not initiated	3.7
2019	5	56545	Pattern Operators LP	IPP	Grady Wind Energy Center, LLC	NM	60317	1	220.5	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	220.5
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	19564	University of Notre Dame	Commercial	University of Notre Dame	IN	50366	GT1	5.6	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 50 percent complete	5.4
2019	6	60248	Agilon Energy 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	6	60248	Agilon Energy 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	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	60096	Calvert Energy LLC	IPP	Pine Valley Solar Farm, LLC	NC	60298	PV1	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	6	61615	Citizens Imperial Solar LLC	IPP	Citizens Imperial Solar	CA	62052	CIS1	30.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	30.0
2019	6	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
2019	6	39347	East Texas Electric Coop, Inc	Electric Utility	RC Thomas Hydroelectric Project	TX	58645	RCT1	8.7	Conventional Hydroelectric	WAT	HY	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	(U) Under construction, less than or equal to 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	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

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	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	6	58135	Ecos Energy LLC	IPP	San Jacinto Solar	CA	60972	SJAC	1.5	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	1.5
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	56625	Flat Water Wind Farm LLC	IPP	Flat Water Wind Farm LLC	NE	57283	WTG2	10.5	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	10.5
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1A	376.6	Natural Gas Fired Combined Cycle	NG	CT	(V) Under construction, more than 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1B	376.6	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1C	376.6	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	376.6
2019	6	6452	Florida Power & Light Co	Electric Utility	Okeechobee Clean Energy Center	FL	60345	1ST	593.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	593.3
2019	6	61054	Fluvanna Wind Energy 2 LLC	IPP	Gopher Creek Wind Farm	TX	61417	GCWF	158.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	158.0
2019	6	61037	Foard City Wind, LLC	IPP	Foard City Wind	TX	61402	FOARD	352.8	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	352.8
2019	6	49893	Invenergy Services LLC	IPP	Santa Rita East	TX	62038	STRAE	300.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	302.4
2019	6	59678	KDC Solar PR1, LLC	IPP	KDC Solar PR1, LLC	NJ	59910	SF	22.0	Solar Photovoltaic	SUN	PV	(U) Under construction, less than or equal to 50 percent complete	22.0
2019	6	11664	Mark Technologies Corp	IPP	Alta Mesa Project Phase IV	CA	55352	GEN1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	6	21461	NRG Canal LLC	IPP	Canal	MA	1599	3	330.0	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	330.0
2019	6	61401	North 301 Solar	IPP	North 301 Solar	NC	61778	N301	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
2019	6	58477	O2energies, Inc.	IPP	Five Forks Solar	NC	59951	5FRK	20.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	20.0
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	61485	Rio Bravo Windpower, LLC	IPP	Rio Bravo Windpower, LLC	TX	61865	1	237.6	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	237.6
2019	6	61588	San Pablo Raceway, LLC	IPP	San Pablo Raceway	CA	62004	SPRWY	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	6	17650	Southern Power Co	IPP	Mankato Energy Center	MN	56104	CTG1	200.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	210.0
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	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	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	6	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
2019	7	61466	Bakersfield Fuel Cell 1, LLC	IPP	Bolthouse Farms Fuel Cell	CA	61845	MM28	2.5	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	7	61466	Bakersfield Fuel Cell 1, LLC	IPP	Bolthouse Farms Fuel Cell	CA	61845	MM29	2.5	Other Natural Gas	NG	FC	(P) Planned for installation, but regulatory approvals not initiated	2.5
2019	7	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	7	60147	Enerparc Solar Development, LLC	IPP	Hilly Branch	NC	60358	28941	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
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	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	7	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	7	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	7	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	8	60877	Antelope DSR 3, LLC	IPP	Antelope DSR 3	CA	61265	ADSR3	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2019	8	59714	Antrim Wind Energy LLC	IPP	Antrim Wind	NH	59953	AWND1	28.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	28.8
2019	8	59550	Croda Inc.	Industrial	Croda Atlas Point CHP	DE	59783	91199	2.0	Landfill Gas	LFG	IC	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	8	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	60328	Big Level Wind LLC	IPP	Big Level Wind	PA	60551	BLW01	90.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	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	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	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	9	58606	Mauka Fit One LLC	IPP	Mauka FIT One	HI	58662	3501	3.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	3.5
2019	9	61515	Phoebe Energy Project, LLC	IPP	Phoebe Solar	TX	61906	PHOEB	250.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	250.0
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	10	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
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	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
2019	10	58850	Mariah del Sur LLC	IPP	Mariah South	TX	59007	MAR S	210.4	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	210.4
2019	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
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	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
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG4	3.5	Other Waste Biomass	OBG	IC	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	3.5
2019	10	61637	TUUSSO Energy, LLC	IPP	Camas Solar Project	WA	62071	CAMAS	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Fumaria Solar Project	WA	62070	FUMAR	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Penstemon Solar Project	WA	62069	PENST	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Typha Solar Project	WA	62068	TYPHA	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	10	61637	TUUSSO Energy, LLC	IPP	Urtica Solar Project	WA	62067	URTIC	5.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	5.0
2019	10	61330	Turtle Creek Wind Farm LLC	IPP	Turtle Creek Wind Farm LLC	IA	61638	TC1	200.1	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.1
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	59260	Wright Solar Park LLC	IPP	Wright Solar Park	CA	59525	FRWSP	200.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	200.0
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	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT5	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	CT7	191.2	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	191.2
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST6	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	11	3046	Duke Energy Progress - (NC)	Electric Utility	Asheville	NC	2706	ST8	102.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	102.0
2019	11	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
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 LLC	IPP	Voyager Wind I	CA	60594	VYGR1	131.1	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	131.1
2019	12	60600	Adams Solar, LLC	IPP	Adams Solar	NC	60949	PV1	2.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	2.0
2019	12	61617	Alpha Value Solar, LLC	IPP	Alpha Value Solar	NC	62054	AVS01	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	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	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
2019	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
2019	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
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60927	Anchor Energy LLC	IPP	Anchor Energy	PA	61304	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
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	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

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	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	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	58687	Bayles Energy LLC	IPP	Bayles	PA	58816	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(L) Regulatory approvals pending. Not under construction	7.0
2019	12	60289	Blazing Star Wind Farm, LLC	IPP	Blazing Star Wind Farm 1	MN	60504	BLZG1	200.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	200.0
2019	12	60714	Burke Wind LLC	IPP	Burke Wind, LLC	ND	61100	GE23	199.4	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	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	59365	Capital Power Corporation	IPP	Poplars Ranch Solar LLC	OR	59890	GEN	16.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	16.0
2019	12	58508	Carolina Solar Energy II LLC	IPP	Cabaniss Solar	NC	60430	PV1	4.2	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	4.2
2019	12	58508	Carolina Solar Energy II 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 II LLC	IPP	Sellers Farm Solar	NC	60439	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	58508	Carolina Solar Energy II 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	61416	Cattle Ridge Wind Holdings, LLC	IPP	Cattle Ridge Wind Farm 1	SD	60503	CTTL1	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	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
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	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
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	59464	Current Energy Group	IPP	Hickory	NC	59829	5515	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2019	12	61060	Cypress Creek Renewables	IPP	Willard Solar	NC	60287	PV1	4.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	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
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	56215	E ON Climate Renewables N America LLC	IPP	Vici Wind Farm	OK	59062	VICI	180.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	180.0
2019	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
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	High Shoals PV1	NC	59997	HISHO	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	58970	Ecoplexus, Inc	IPP	Underwood PV2	NC	60998	UNWD2	16.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	16.0
2019	12	58970	Ecoplexus, Inc	IPP	Willoughby PV1	NC	60003	WILL1	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	12	58135	Ecos Energy LLC	IPP	Weybridge 1 Solar	VT	61038	WEY1	3.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	3.0
2019	12	60147	Enerparc Solar Development, LLC	IPP	Pike Road Solar	NC	60360	51116	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Baron Winds Farm	NY	60596	1	272.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	272.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Buckeye Wind Farm	OH	58776	1	99.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	99.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Cassadaga Wind Farm	NY	58777	1	126.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	126.0
2019	12	58672	Everpower Wind Holdings Inc	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
2019	12	58672	Everpower Wind Holdings Inc	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	58672	Everpower Wind Holdings Inc	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
2019	12	58672	Everpower Wind Holdings Inc	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
2019	12	58672	Everpower Wind Holdings Inc	IPP	Sand Creek Wind Farm	MT	60595	WT1	75.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	75.0
2019	12	58672	Everpower Wind Holdings Inc	IPP	Scioto Ridge Wind Farm	OH	58780	1	189.2	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	189.2
2019	12	58672	Everpower Wind Holdings Inc	IPP	Terrapin Hills Wind Farm	MD	60211	1	50.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	50.0
2019	12	59745	First Solar Asset Management	IPP	Twiggs Solar	GA	61696	TWIGG	200.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	200.0
2019	12	56615	First Solar Project Development	IPP	Sunshine Valley Solar	NV	59826	GEN01	102.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2019	12	56615	First Solar Project Development	IPP	Windhub Solar A LLC	CA	59878	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2019	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
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58692	Florey Knob LLC	IPP	Florey Knobb	PA	58821	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
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	(P) Planned for installation, but regulatory approvals not initiated	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	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
2019	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
2019	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
2019	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
2019	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
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	60040	Hale Wind Energy	IPP	Hale Community Wind Farm	TX	59247	HALE1	478.0	Onshore Wind Turbine	WND	WT	(T) Regulatory approvals received. Not under construction	478.0
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60928	Holdridge Energy LLC	IPP	Holdridge Energy	PA	61305	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	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
2019	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
2019	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
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	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
2019	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
2019	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
2019	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
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	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	200.0
2019	12	55983	Luminant Generation Company LLC	IPP	Horseshoe Bend	TX	59806	SOLAR	140.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	140.0
2019	12	60340	M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642	1	11.7	All Other	WH	OT	(U) Under construction, less than or equal to 50 percent complete	14.3
2019	12	60340	M&G Resins USA, LLC	Industrial	M&G Resins USA	TX	60642	2	11.7	All Other	WH	OT	(U) Under construction, less than or equal to 50 percent complete	14.3
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT1	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT2	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT3	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	12	58783	Marseilles Land and Water Company	IPP	Marseilles Lock and Dam Hydro	IL	58903	UNIT4	2.6	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	2.6
2019	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
2019	12	12341	MidAmerican Energy Co	Electric Utility	Orient Wind Farm	IA	61077	1	482.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	482.0
2019	12	12341	MidAmerican Energy Co	Electric Utility	Plum Creek Wind	IA	61078	1	500.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	500.0
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN4	4.4	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)
2019	12	60929	Mineral Point Energy LLC	IPP	Mineral Point Energy	PA	61300	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	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
2019	12	60442	New Colony Wind LLC	IPP	New Colony Wind Project	MT	60718	WT1	23.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	23.1
2019	12	56622	NextEra Energy Resources	IPP	Shaw Creek Solar, LLC	SC	61790	SHAWC	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN1	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN2	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN3	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN4	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60874	Niles Valley Energy LLC	IPP	Niles Valley Energy LLC	PA	61286	GEN5	4.2	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
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	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	1	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	2	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	58653	Oxbow Creek Energy LLC	IPP	Oxbow Creek	PA	58714	3	6.8	Natural Gas Internal Combustion Engine	NG	IC	(T) Regulatory approvals received. Not under construction	7.0
2019	12	14354	PacifiCorp	Electric Utility	Blundell	UT	299	3	35.0	Geothermal	GEO	ST	(P) Planned for installation, but regulatory approvals not initiated	30.0
2019	12	56545	Pattern Operators LP	IPP	Crazy Mountain Wind LLC	MT	61859	WT	80.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	80.0
2019	12	59771	Pecan Solar LLC	IPP	Pecan Solar	NC	60030	PECAN	74.9	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	74.9
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV1	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV2	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV3	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	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
2019	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
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	60646	Reading Wind Energy, LLC	IPP	Reading Wind Project	KS	60999	READW	200.1	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.1
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60930	Red Glen Energy LLC	IPP	Red Glen Energy	PA	61306	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
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	10.0	Batteries	MWH	BA	(P) Planned for installation, but regulatory approvals not initiated	10.0
2019	12	61455	Scituate RI Solar, LLC	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	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	60387	Skylar Resources, LP	IPP	Townsite Solar Project	NV	60654	GEN01	160.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	180.0
2019	12	17650	Southern Power Co	IPP	Wildhorse Mountain Wind Facility	OK	61866	1	100.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	100.0
2019	12	17718	Southwestern Public Service Co	Electric Utility	Gaines County	TX	60697	GC-1	186.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	225.0
2019	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
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60931	Stourbridge Energy LLC	IPP	Stourbridge Energy	PA	61301	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
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	18454	Tampa Electric Co	Electric Utility	Wimauma Solar	FL	61667	1	74.5	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	74.5
2019	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
2019	12	59056	Tri Global Energy, LLC	IPP	Easter	TX	59971	ESTR1	300.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	300.0
2019	12	58796	Trishe Wind Colorado	IPP	Trishe Wind Colorado	CO	58928	1	30.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	30.0
2019	12	56633	Trishe Wind Minnesota	IPP	Trishe Wind Minnesota	MN	57255	1	40.0	Onshore Wind Turbine	WND	WT	(U) Under construction, less than or equal to 50 percent complete	40.0
2019	12	59098	Trishe Wind Ohio LLC	IPP	Trishe Wind Ohio LLC	OH	59296	NWOH2	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2019	12	58153	US Magnesium	Industrial	US Magnesium	UT	58191	GT4	24.0	Natural Gas Fired Combustion Turbine	NG	GT	(V) Under construction, more than 50 percent complete	30.0
2019	12	60597	Violet Solar, LLC	IPP	Violet Solar	NC	60961	PV1	5.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	5.0
2019	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
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	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN1	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN2	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN3	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN4	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2019	12	60932	Wrighter Energy LLC	IPP	Wrighter Energy	PA	61302	GEN5	4.4	Natural Gas Internal Combustion Engine	NG	IC	(P) Planned for installation, but regulatory approvals not initiated	4.4
2020	1	60278	64KT 8me LLC	IPP	Springbok 3 Solar Farm	CA	60491	SB3SF	90.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	90.0
2020	1	55918	Acciona Wind Energy USA LLC	IPP	Palmas Wind, LLC	TX	61773	PW	142.6	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	144.9
2020	1	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
2020	1	59365	Capital Power Corporation	IPP	Salt Springs Wind Farm	KS	60807	WT	200.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	200.0
2020	1	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U001	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	1	61060	Cypress Creek Renewables	IPP	Thigpen Farms Solar, LLC	NC	60850	PV1	5.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	5.0
2020	1	13478	Entergy New Orleans, LLC	Electric Utility	New Orleans Power	LA	60928	1	250.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	250.0
2020	1	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
2020	1	61429	Harvest Wind Energy, LLC	IPP	Harvest Wind Energy Project	IN	61823	1	600.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	600.0
2020	1	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	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	61430	Summit Lake Wind, LLC	IPP	Summit Lake Wind Energy Project	MI	61812	1	120.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	120.0
2020	1	18454	Tampa Electric Co	Electric Utility	Alafia Solar	FL	61653	PV1	50.3	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	1	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	1	20323	Wellhead Energy, LLC	IPP	Stanton Energy Reliability Center	CA	60698	GT1	45.9	Natural Gas Fired Combustion Turbine	NG	GT	(P) Planned for installation, but regulatory approvals not initiated	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	(P) Planned for installation, but regulatory approvals not initiated	60.5
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG3	225.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	232.9
2020	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	CTG4	225.0	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	232.9
2020	1	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	1	20856	Wisconsin Power & Light Co	Electric Utility	Riverside Energy Center	WI	55641	STG2	250.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	260.1
2020	2	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U002	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	3	61670	AES Huntington Beach Energy, LLC	IPP	AES Huntington Beach Energy Project	CA	62116	1A	226.0	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	226.0	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	192.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	231.0
2020	3	60350	CPV Fairview, LLC	IPP	CPV Fairview Energy Center	PA	60589	GEN1	1,100.0	Natural Gas Fired Combined Cycle	NG	CC	(U) Under construction, less than or equal to 50 percent complete	1,100.0
2020	3	59365	Capital Power Corporation	IPP	Cardinal Point LLC	IL	59902	GEN	150.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	150.0
2020	3	56534	Cricket Valley Energy Center LLC	IPP	Cricket Valley Energy	NY	57185	U003	345.0	Natural Gas Fired Combined Cycle	NG	CC	(T) Regulatory approvals received. Not under construction	390.0
2020	3	6455	Duke Energy Florida, LLC	Electric Utility	Columbia Solar Power Plant	FL	61982	PV	74.9	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	74.9
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	61251	LA3 West Baton Rouge, L.L.C.	IPP	LA3 West Baton Rouge Solar Facility	LA	61646	LA3WB	50.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	50.0
2020	3	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
2020	3	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
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	(L) Regulatory approvals pending. Not under construction	25.0

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	3	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	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	4	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
2020	4	61669	AES Alamitos Energy, LLC	IPP	AES Alamitos Energy Center	CA	62115	1A	226.0	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	226.0	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	192.0	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	231.0
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	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	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	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	60383	Henrietta D Energy Storage LLC	IPP	Henrietta D Energy Storage LLC	CA	60641	HDES1	10.0	Batteries	MWH	BA	(L) Regulatory approvals pending. Not under construction	10.0
2020	5	55768	RC Cape May Holdings LLC	IPP	B L England	NJ	2378	4	282.0	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	321.0
2020	5	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	5	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	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	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
2020	6	59272	41MB 8me, LLC	IPP	Borden Solar Farm	CA	59531	BRDN	50.0	Solar Photovoltaic	SUN	PV	(T) Regulatory approvals received. Not under construction	50.0
2020	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
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	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
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	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	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
2020	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
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	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	60050	Halyard Energy Henderson, LLC	IPP	Halyard Henderson Energy Center	TX	60268	TBN1	210.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	232.0
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	TBN1	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	177.0
2020	6	60002	Halyard Energy Wharton, LLC	IPP	Halyard Wharton Energy Center	TX	60221	TBN2	162.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	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	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	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT5	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	DeCordova Steam Electric Station	TX	8063	CT6	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Lake Creek	TX	3502	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Tradinghouse	TX	3506	CT1	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
2020	6	55983	Luminant Generation Company LLC	IPP	Tradinghouse	TX	3506	CT2	207.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	235.5
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	60958	Ohio River Partners Shareholder 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
2020	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
2020	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
2020	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
2020	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
2020	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	1,025.0
2020	6	18414	TES Filer City Station LP	Electric CHP	TES Filer City Station	MI	50835	GEN2	228.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	253.0
2020	6	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	6	54863	U S Power Generating Company LLC	IPP	Gowanus Gas Turbines Generating	NY	2494	SS	90.0	Natural Gas Fired Combustion Turbine	NG	GT	(T) Regulatory approvals received. Not under construction	93.0
2020	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG1	172.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	200.0
2020	6	20159	Washington Parish Engy Ctr LLC	IPP	Washington Parish Energy Center	LA	55486	CTG2	172.0	Natural Gas Fired Combustion Turbine	NG	GT	(U) Under construction, less than or equal to 50 percent complete	200.0
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	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	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	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	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	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	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	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	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	56615	First Solar Project Development	IPP	Little Bear Solar 1, LLC	CA	59870	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
2020	9	56615	First Solar Project Development	IPP	Little Bear Solar 2, LLC	CA	59885	GEN01	20.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	20.0
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	60388	Mission Rock Energy Center, LLC	IPP	Mission Rock Energy Center	CA	60650	GT1	275.0	Natural Gas Fired Combustion Turbine	NG	GT	(L) Regulatory approvals pending. Not under construction	275.0
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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2020	10	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	58901	Hydro Green Energy	IPP	Braddock Lock and Dam	PA	59091	GEN1	5.3	Conventional Hydroelectric	WAT	HY	(OT) Other	5.3
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	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG1	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG2	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG3	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG4	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG5	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
2020	11	58804	Lake Erie Energy Development Corp	IPP	Icebreaker Offshore Wind Farm	OH	58941	WTG6	3.0	Offshore Wind Turbine	WND	WS	(L) Regulatory approvals pending. Not under construction	3.0
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	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	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	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 Wind Farm, LLC (TX)	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	61030	Bluegrove Wind, LLC	IPP	Bluegrove Wind	TX	61400	BLUGR	100.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	100.0
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	61031	Byers Wind, LLC	IPP	Byers Wind	TX	61401	BYERS	200.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	200.0
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	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	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT1	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2020	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	CT2	197.3	Natural Gas Fired Combined Cycle	NG	CT	(U) Under construction, less than or equal to 50 percent complete	222.3
2020	12	56872	Contra Costa Generating Station LLC	IPP	Oakley Generating Station	CA	57552	ST	191.3	Natural Gas Fired Combined Cycle	NG	CA	(U) Under construction, less than or equal to 50 percent complete	227.7
2020	12	58672	Everpower Wind Holdings Inc	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	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
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	Snow Mountain Solar, LLC	NV	59935	GEN01	101.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	100.0
2020	12	56615	First Solar Project Development	IPP	Willow Spring Solar 3, LLC	CA	60325	GEN01	50.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	50.0
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	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	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	8	218.0	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	230.0
2020	12	11208	Los Angeles Department of Water & Power	Electric Utility	Scattergood	CA	404	9	110.0	Natural Gas Fired Combined Cycle	NG	CA	(P) Planned for installation, but regulatory approvals not initiated	116.0
2020	12	61010	Ord Mountain Solar, LLC	IPP	Ord Mountain Solar	CA	61372	ORDMT	60.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	60.0
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	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-A	687.0	Onshore Wind Turbine	WND	WT	(P) Planned for installation, but regulatory approvals not initiated	687.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 2 LLC	CA	61446	PV2	45.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	45.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 3 LLC	CA	61447	PV3	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 4 LLC	CA	61448	PV4	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	61069	RE Gaskell West LLC	IPP	RE Gaskell West 5 LLC	CA	61449	PV5	20.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	20.0
2020	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV4	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	60982	RE Maplewood LLC	IPP	RE Maplewood	TX	61346	PV5	100.0	Solar Photovoltaic	SUN	PV	(P) Planned for installation, but regulatory approvals not initiated	100.0
2020	12	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
2020	12	2782	Terra-Gen Operating Company	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	19316	Two Elk Generation Partners LP	IPP	Two Elk Generating Station	WY	55360	GEN1	275.0	Conventional Steam Coal	WC	ST	(U) Under construction, less than or equal to 50 percent complete	320.0
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
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	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	CA1	249.9	Natural Gas Fired Combined Cycle	NG	CA	(T) Regulatory approvals received. Not under construction	265.2
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT1	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	58765	FGE Texas I LLC	IPP	FGE Texas I	TX	58931	GT2	226.7	Natural Gas Fired Combined Cycle	NG	CT	(T) Regulatory approvals received. Not under construction	238.9
2021	1	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	(T) Regulatory approvals received. Not under construction	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	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	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	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	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	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	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	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	59677	Middlesex Energy Center LLC	IPP	Middlesex Energy Center LLC	NJ	59909	CT001	560.0	Natural Gas Fired Combined Cycle	NG	CC	(P) Planned for installation, but regulatory approvals not initiated	560.0
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	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	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code	Status	Nameplate Capacity (MW)
2021	6	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	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	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
2021	6	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
2021	6	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
2021	6	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC	338.9	Natural Gas Fired Combined Cycle	NG	CT	(P) Planned for installation, but regulatory approvals not initiated	406.0
2021	6	60836	NTE Connecticut, LLC	IPP	Killingly Energy Center	CT	61239	KEC2	249.4	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	297.5
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	56615	First Solar Project Development	IPP	Sun Streams, LLC	AZ	60827	GEN01	150.0	Solar Photovoltaic	SUN	PV	(L) Regulatory approvals pending. Not under construction	150.0
2021	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
2021	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
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	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
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	60711	Battle Mountain SP, LLC	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	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	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
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	60405	FDS Coke Plant, LLC	Electric CHP	FDS Co-Generation Facility	OH	60693	1	110.0	Other Gases	OG	ST	(P) Planned for installation, but regulatory approvals not initiated	135.0
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	LEFT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
2021	12	58378	Jordan Hydroelectric LTD PTP	IPP	Flannagan Hydroelectric Project	VA	58827	RGHT	0.9	Conventional Hydroelectric	WAT	HY	(L) Regulatory approvals pending. Not under construction	0.9
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	58842	Power Company of Wyoming LLC	IPP	Chokecherry and Sierra Madre Wind	WY	58987	I-B	813.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	813.0
2022	1	60687	Alpine Pacific Utilities Hydro	IPP	Fresno Dam Site Water Power Project	MT	61061	1	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	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	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	1	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	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	4	61596	Lincoln Land Energy Center LLC	Commercial	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	Commercial	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	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCA1	319.0	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	321.6
2022	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT1	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2022	4	59487	Moundsville Power, LLC	IPP	Moundsville Power	WV	59720	MPCT2	177.3	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	195.5
2022	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
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	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	CT1	224.9	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.5
2022	6	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	CT2	224.9	Natural Gas Fired Combined Cycle	NG	CT	(L) Regulatory approvals pending. Not under construction	235.5
2022	6	55983	Luminant Generation Company LLC	IPP	Eagle Mountain	TX	3489	ST1	344.4	Natural Gas Fired Combined Cycle	NG	CA	(L) Regulatory approvals pending. Not under construction	382.5
2022	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
2022	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
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	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
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	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
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	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	II-A	750.0	Onshore Wind Turbine	WND	WT	(L) Regulatory approvals pending. Not under construction	750.0
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	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	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
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
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	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

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)

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
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C1	0.8	Petroleum Liquids	DFO	IC
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C2	0.8	Petroleum Liquids	DFO	IC
2018	10	11560	City of Manassas - (VA)	Electric Utility	Church Street Plant	VA	7438	C4	1.0	Petroleum Liquids	DFO	IC
2018	10	18445	City of Tallahassee - (FL)	Electric Utility	S O Purdom	FL	689	GT2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	10	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	2LOT7	0.5	Solar Photovoltaic	SUN	PV
2018	10	20860	Wisconsin Public Service Corp	Electric Utility	Pulliam	WI	4072	7	76.1	Conventional Steam Coal	SUB	ST
2018	10	20860	Wisconsin Public Service Corp	Electric Utility	Pulliam	WI	4072	8	133.8	Conventional Steam Coal	SUB	ST
2018	11	6306	Benson Power, LLC.	IPP	Benson Power Biomass Plant	MN	55867	G1	55.0	Wood/Wood Waste Biomass	WDS	ST
2018	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC2	0.9	Natural Gas Internal Combustion Engine	NG	IC
2018	11	11713	City of Marshall - (MI)	Electric Utility	Marshall (MI)	MI	1844	IC4	0.7	Petroleum Liquids	DFO	IC
2018	11	18445	City of Tallahassee - (FL)	Electric Utility	Arvah B Hopkins	FL	688	1	76.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	2	104.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	3	110.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	4	300.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	5	330.0	Natural Gas Steam Turbine	NG	ST
2018	11	13960	NRG Cabrillo Power Ops Inc	IPP	Encina	CA	302	GT1	14.0	Natural Gas Fired Combustion Turbine	NG	GT
2018	11	13833	Northeastern Power Co	Electric CHP	Kline Township Cogen Facility	PA	50039	GEN1	51.0	Conventional Steam Coal	WC	ST
2018	12	12647	ALLETE, Inc.	Electric Utility	Clay Boswell	MN	1893	1	67.3	Conventional Steam Coal	SUB	ST
2018	12	12647	ALLETE, Inc.	Electric Utility	Clay Boswell	MN	1893	2	67.4	Conventional Steam Coal	SUB	ST
2018	12	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBA	0.3	Conventional Hydroelectric	WAT	HY
2018	12	8776	City of Holyoke Gas and Electric Dept.	Electric Utility	Harris Energy Realty	MA	54981	ALBD	0.4	Conventional Hydroelectric	WAT	HY
2018	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	1	420.0	Conventional Steam Coal	SUB	ST
2018	12	16604	City of San Antonio - (TX)	Electric Utility	J T Deely	TX	6181	2	420.0	Conventional Steam Coal	SUB	ST
2018	12	59173	City of Tulare Water Pollution Control	Commercial	City of Tulare Water Facility	CA	59395	C2550	0.4	Other Waste Biomass	OBG	IC
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	1	324.0	Conventional Steam Coal	BIT	ST
2018	12	6455	Duke Energy Florida, LLC	Electric Utility	Crystal River	FL	628	2	442.0	Conventional Steam Coal	BIT	ST
2018	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	2	42.1	Conventional Steam Coal	SUB	ST
2018	12	56211	KCP&L Greater Missouri Operations Co	Electric Utility	Sibley	MO	2094	3	364.1	Conventional Steam Coal	SUB	ST
2018	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	2	164.0	Conventional Steam Coal	SUB	ST
2018	12	10000	Kansas City Power & Light Co	Electric Utility	Montrose	MO	2080	3	170.0	Conventional Steam Coal	SUB	ST
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS1	0.9	Conventional Hydroelectric	WAT	HY
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS2	0.9	Conventional Hydroelectric	WAT	HY
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS3	0.9	Conventional Hydroelectric	WAT	HY
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS4	0.9	Conventional Hydroelectric	WAT	HY
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS5	0.9	Conventional Hydroelectric	WAT	HY
2018	12	25835	Portland City of	IPP	Ground Water Pumping Station	OR	50105	GPS6	0.9	Conventional Hydroelectric	WAT	HY
2018	12	17583	South Texas Electric Coop, Inc	Electric Utility	Sam Rayburn	TX	3631	1	10.5	Natural Gas Fired Combustion Turbine	NG	GT
2018	12	17583	South Texas Electric Coop, Inc	Electric Utility	Sam Rayburn	TX	3631	2	11.5	Natural Gas Fired Combustion Turbine	NG	GT
2019	1	19145	DTE Tuscola, LLC	Industrial	Tuscola Station	IL	55245	TG1	3.8	Natural Gas Steam Turbine	NG	ST
2019	1	18715	Texas Municipal Power Agency	Electric Utility	Gibbons Creek	TX	6136	1	470.0	Conventional Steam Coal	SUB	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	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	SAC	0.3	Solar Photovoltaic	SUN	PV
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	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	12	2.8	Petroleum Liquids	DFO	GT
2019	3	13206	Nantucket Electric Co	Electric Utility	Nantucket	MA	1615	13	2.9	Petroleum Liquids	DFO	GT
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	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	4	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	LOT7	0.2	Solar Photovoltaic	SUN	PV
2019	4	56997	Marina Energy LLC	Commercial	Stockton Athletic Center	NJ	57864	LOT7B	0.2	Solar Photovoltaic	SUN	PV
2019	5	29926	Entergy Nuclear Generation Co	IPP	Pilgrim Nuclear Power Station	MA	1590	1	677.2	Nuclear	NUC	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	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN1	3.3	Landfill Gas	LFG	GT
2019	5	12773	Monmouth Energy Inc	IPP	Monmouth Landfill Gas to Energy	NJ	55618	GEN2	3.3	Landfill Gas	LFG	GT
2019	5	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	1	159.0	Conventional Steam Coal	BIT	ST
2019	5	19876	Virginia Electric & Power Co	Electric Utility	Yorktown	VA	3809	2	164.0	Conventional Steam Coal	BIT	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	5	55.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	6	55.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	7	83.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	8	83.0	Conventional Steam Coal	SUB	ST
2019	5	20847	Wisconsin Electric Power Co	Electric Utility	Presque Isle	MI	1769	9	83.0	Conventional Steam Coal	SUB	ST
2019	8	14624	PUD No 2 of Grant County	Electric Utility	Wanapum	WA	3888	4	103.8	Conventional Hydroelectric	WAT	HY
2019	9	55951	Exelon Nuclear	IPP	Three Mile Island	PA	8011	1	802.8	Nuclear	NUC	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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2019	10	16073	Riverview Energy Systems	IPP	Riverview Energy Systems	MI	54057	GEN1	2.8	Landfill Gas	LFG	GT
2019	10	16073	Riverview Energy Systems	IPP	Riverview Energy Systems	MI	54057	GEN2	2.8	Landfill Gas	LFG	GT
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG1	2.8	Natural Gas Internal Combustion Engine	NG	IC
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG2	2.8	Natural Gas Internal Combustion Engine	NG	IC
2019	10	16657	San Jose/Santa Clara Water P C	Commercial	SJ/SC WPCP	CA	56080	EG3	2.8	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	195	Alabama Power Co	Electric Utility	Barry	AL	3	1	55.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Barry	AL	3	2	55.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Gadsden	AL	7	1	64.0	Natural Gas Steam Turbine	NG	ST
2019	12	195	Alabama Power Co	Electric Utility	Gadsden	AL	7	2	66.0	Natural Gas Steam Turbine	NG	ST
2019	12	56706	Chevron Technology Ventures	IPP	Questa Solar Facility	NM	57369	QST	1.0	Solar Photovoltaic	SUN	PV
2019	12	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN1	46.3	Conventional Steam Coal	BIT	ST
2019	12	61138	City Point Energy Center	Electric CHP	James River Genco LLC	VA	10377	GEN2	46.3	Conventional Steam Coal	BIT	ST
2019	12	228	City of Albany - (MO)	Electric Utility	Albany	MO	2113	1	2.1	Petroleum Liquids	DFO	IC
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	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	1	16.6	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Fitchburg	WI	3991	2	15.8	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Nine Springs	WI	9674	GT1	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	1	11.2	Natural Gas Fired Combustion Turbine	NG	GT
2019	12	11479	Madison Gas & Electric Co	Electric Utility	Sycamore (WI)	WI	3993	2	16.6	Natural Gas Fired Combustion Turbine	NG	GT
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	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
2020	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	1	1.6	Conventional Hydroelectric	WAT	HY
2020	1	14328	Pacific Gas & Electric Co.	Electric Utility	Kilarc	CA	253	2	1.6	Conventional Hydroelectric	WAT	HY
2020	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
2020	4	6027	Entergy Nuclear Indian Point 2	IPP	Indian Point 2	NY	2497	2	1,000.4	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	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	P1	20.0	Natural Gas Fired Combustion Turbine	NG	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	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	60422	H.A. Wagner LLC	IPP	Herbert A Wagner	MD	1554	2	118.0	Conventional Steam Coal	RC	ST
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	1	0.9	Conventional Hydroelectric	WAT	HY
2020	7	14328	Pacific Gas & Electric Co.	Electric Utility	Cow Creek	CA	229	2	0.9	Conventional Hydroelectric	WAT	HY
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN1	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN2	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN3	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN4	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN5	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN6	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	9	14173	Oroville Cogeneration LP	Industrial	Oroville Cogeneration LP	CA	54477	GEN7	1.1	Natural Gas Internal Combustion Engine	NG	IC
2020	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

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	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	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	15908	NRG California South LP	IPP	Ellwood	CA	8076	01	54.0	Natural Gas Fired Combustion Turbine	NG	GT
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	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D1	0.2	Petroleum Liquids	DFO	IC
2020	12	14232	Otter Tail Power Co	Electric Utility	Hoot Lake	MN	1943	D2	0.1	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	21.2	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	49.8	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Rock River	WI	4057	6	46.7	Natural Gas Fired Combustion Turbine	NG	GT
2020	12	20856	Wisconsin Power & Light Co	Electric Utility	Sheepskin	WI	4059	1	34.3	Natural Gas Fired Combustion Turbine	NG	GT
2021	1	15908	NRG California South LP	IPP	Ormond Beach	CA	350	1	741.0	Natural Gas Steam Turbine	NG	ST
2021	1	15908	NRG California South LP	IPP	Ormond Beach	CA	350	2	750.0	Natural Gas Steam Turbine	NG	ST
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	1,041.3	Nuclear	NUC	ST
2021	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	1	10.0	Natural Gas Fired Combustion Turbine	NG	GT
2021	4	17633	Southern Indiana Gas & Elec Co	Electric Utility	Northeast (IN)	IN	1013	2	10.0	Natural Gas Fired Combustion Turbine	NG	GT
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	15452	PSEG Power Connecticut LLC	IPP	Bridgeport Station	CT	568	3	383.4	Conventional Steam Coal	SUB	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	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	801.8	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	9	177	AES Hawaii Inc	Electric CHP	AES Hawaii	HI	10673	GEN1	180.0	Conventional Steam Coal	SUB	ST
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	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN1	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN2	55.0	Petroleum Liquids	JF	GT
2022	12	54803	Dynegy Oakland, LLC	IPP	Dynegy Oakland Power Plant	CA	6211	GEN3	55.0	Petroleum Liquids	JF	GT
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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2022	12	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
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	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	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	12	5860	Empire District Electric Co	Electric Utility	Empire Energy Center	MO	6223	1	82.0	Natural Gas Fired Combustion Turbine	NG	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	1	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	2	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	3	36.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Blue Lake	MN	8027	4	39.0	Petroleum Liquids	DFO	GT
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	1	9.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	French Island	WI	4005	2	7.0	Wood/Wood Waste Biomass	WDS	ST
2023	12	13781	Northern States Power Co - Minnesota	Electric Utility	Laverne Battery	MN	58579	1	1.0	Batteries	MWH	BA
2023	12	14063	Oklahoma Gas & Electric Co	Electric Utility	Horseshoe Lake	OK	2951	6	167.0	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	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	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	17633	Southern Indiana Gas & Elec Co	Electric Utility	F B Culley	IN	1012	2	90.0	Conventional Steam Coal	BIT	ST
2024	12	17718	Southwestern Public Service Co	Electric Utility	Plant X	TX	3485	3	93.0	Natural Gas Steam Turbine	NG	ST
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

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

Year	Month	Entity ID	Entity Name	Plant Producer Type	Plant Name	Plant State	Plant ID	Generator ID	Net Summer Capacity (MW)	Technology	Energy Source Code	Prime Mover Code
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	1	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	Angus Anson	SD	7237	2	90.0	Natural Gas Fired Combustion Turbine	NG	GT
2025	12	13781	Northern States Power Co - Minnesota	Electric Utility	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	428.0	Conventional Steam Coal	SUB	ST
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT1	15.2	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT2	13.4	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT3	14.2	Natural Gas Fired Combustion Turbine	NG	GT
2026	6	9417	Interstate Power and Light Co	Electric Utility	Burlington (IA)	IA	1104	GT4	16.1	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	102.0	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	Industrial	L'Oreal Piscataway	NJ	57868	UNIT1	1.1	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
2029	10	56667	Loraine Windpower Project	IPP	Loraine Windpark Project LLC	TX	57303	LWG1	75.0	Onshore Wind Turbine	WND	WT
2031	1	803	Arizona Public Service Co	Electric Utility	Four Corners	NM	2442	4	770.0	Conventional Steam Coal	SUB	ST
2031	1	803	Arizona Public Service Co	Electric Utility	Four Corners	NM	2442	5	770.0	Conventional Steam Coal	SUB	ST
2047	1	60304	Innovative Solar 31, LLC	IPP	Innovative Solar 31	NC	60540	IS031	35.0	Solar Photovoltaic	SUN	PV
2047	7	60455	PVN Milliken, LLC	IPP	PVN Milliken, LLC	CA	60790	PV	3.0	Solar Photovoltaic	SUN	PV
2047	9	60734	Elizabeth Mines Solar 1, LLC	IPP	Elizabeth Mines Solar 1	VT	61124	EMS1	5.0	Solar Photovoltaic	SUN	PV
2052	1	60471	Mt. Tom Solar, LLC	IPP	Mt. Tom Solar Project	MA	60906	BA1	3.1	Batteries	MWH	BA

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-September 2018

	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%
Year 2016								
January	56.4%	56.4%	5.0%	7.1%	9.5%	10.1%	0.6%	3.1%
February	49.1%	53.6%	5.0%	7.4%	8.6%	10.6%	0.7%	2.8%
March	36.0%	50.2%	7.1%	10.2%	8.9%	8.9%	1.1%	2.2%
April	37.8%	47.6%	8.3%	11.7%	9.2%	9.7%	0.8%	2.1%
May	41.6%	52.5%	7.6%	12.3%	9.3%	11.4%	1.1%	2.5%
June	61.2%	63.9%	9.9%	17.5%	10.3%	13.3%	1.3%	2.1%
July	69.8%	68.2%	13.7%	23.1%	11.7%	16.9%	2.1%	2.1%
August	69.3%	70.8%	13.8%	21.1%	12.7%	15.1%	2.6%	2.3%
Sept	60.4%	60.7%	9.5%	14.6%	10.3%	12.9%	1.2%	2.3%
October	50.8%	47.8%	7.8%	11.4%	8.0%	8.8%	0.9%	2.4%
November	46.2%	46.3%	6.8%	6.5%	7.9%	9.9%	0.7%	2.8%
December	61.2%	47.5%	5.1%	5.4%	8.3%	10.1%	0.5%	4.0%
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	64.2%	54.0%	11.9%	13.1%	NA	19.0%	5.0%	NA
February	49.3%	55.1%	6.9%	6.5%	NA	11.8%	0.9%	NA
March	43.9%	51.5%	9.3%	8.4%	NA	10.9%	1.4%	NA
April	41.7%	48.0%	11.4%	8.5%	NA	12.7%	1.9%	NA
May	47.0%	52.3%	11.8%	16.7%	NA	9.2%	2.3%	NA
June	58.4%	61.9%	12.0%	17.7%	NA	15.2%	3.0%	NA
July	64.3%	73.0%	18.9%	25.5%	NA	14.3%	3.6%	NA
August	64.3%	72.2%	18.9%	22.3%	NA	15.8%	2.6%	NA
Sept	56.0%	66.3%	14.5%	16.5%	NA	17.8%	3.1%	NA

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

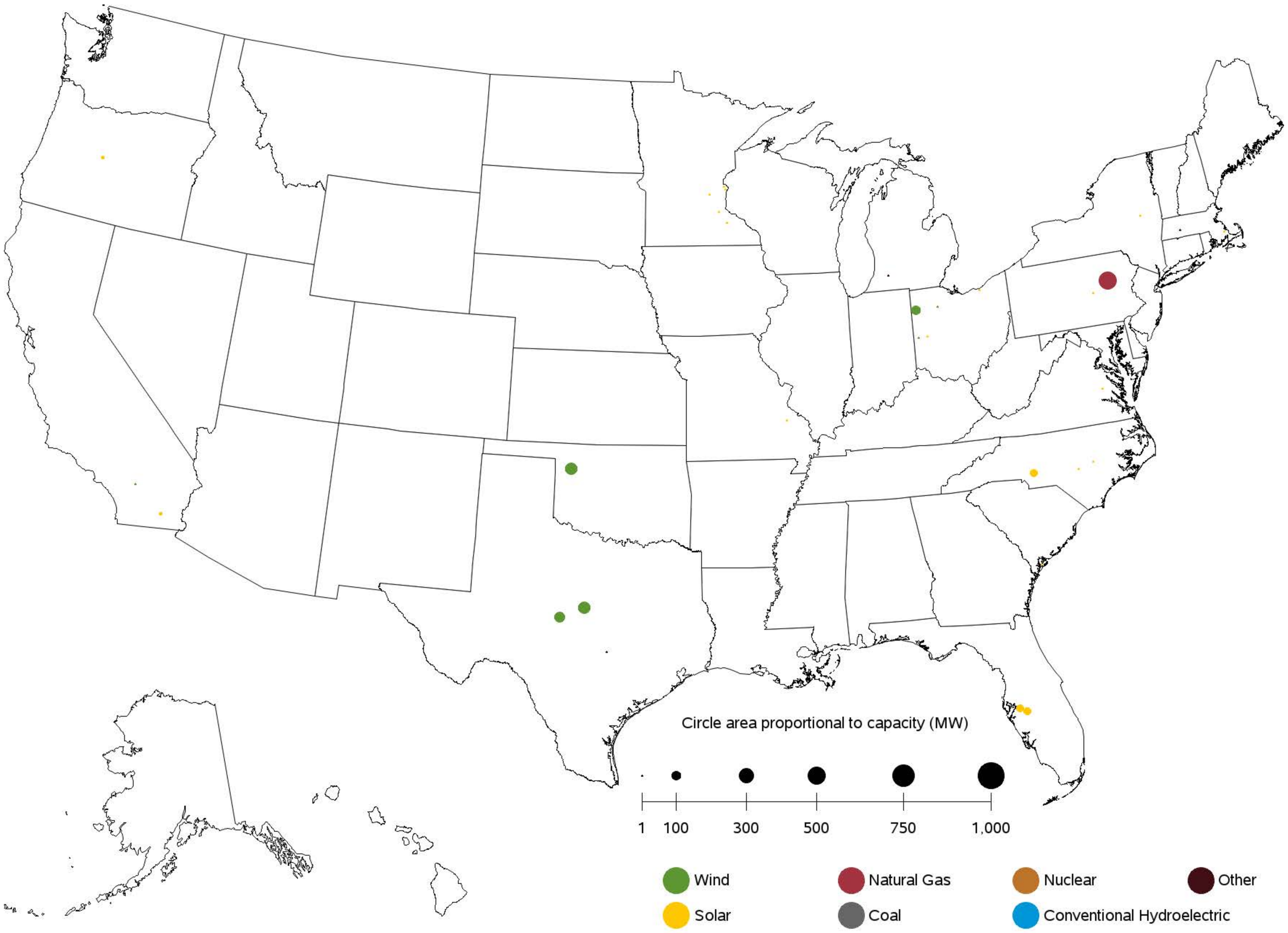
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report; U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Table 6.7.B. Capacity Factors for Utility Scale Generators Not Primarily Using Fossil Fuels, January 2013-September 2018

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%
Year 2016								
January	98.5%	43.6%	33.9%	15.2%	6.8%	68.3%	58.5%	73.4%
February	95.3%	43.8%	39.6%	22.9%	19.5%	67.6%	61.2%	73.2%
March	89.9%	45.9%	40.2%	24.9%	19.6%	67.2%	55.8%	72.5%
April	88.1%	44.6%	39.3%	27.2%	20.9%	69.3%	45.8%	68.8%
May	90.5%	42.8%	34.2%	30.2%	28.9%	72.9%	47.0%	73.9%
June	94.2%	40.6%	30.5%	30.3%	33.5%	72.0%	54.7%	71.2%
July	94.5%	36.1%	31.9%	31.7%	36.9%	70.9%	59.3%	72.2%
August	96.1%	33.0%	24.5%	31.7%	29.2%	70.3%	63.5%	73.0%
Sept	90.9%	28.6%	30.4%	28.5%	30.2%	67.9%	58.5%	75.5%
October	81.7%	29.3%	36.4%	24.0%	19.1%	63.8%	48.9%	74.6%
November	90.9%	32.8%	35.3%	20.4%	14.4%	72.6%	54.9%	77.7%
December	96.7%	37.9%	38.8%	16.2%	7.0%	73.4%	59.6%	80.1%
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%	45.0%	42.5%	18.7%	10.0%	72.1%	58.7%	76.6%
February	96.8%	49.2%	41.9%	22.9%	16.1%	76.7%	57.4%	80.5%
March	90.4%	45.0%	44.0%	26.3%	19.3%	73.2%	52.2%	78.2%
April	82.4%	49.9%	44.9%	31.2%	24.4%	71.6%	43.9%	70.3%
May	90.8%	54.1%	38.8%	31.9%	33.0%	68.9%	48.7%	78.8%
June	97.1%	51.6%	42.1%	34.5%	41.7%	76.5%	54.6%	76.2%
July	97.7%	43.3%	25.4%	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%	29.9%	27.7%	34.8%	70.2%	43.8%	78.4%

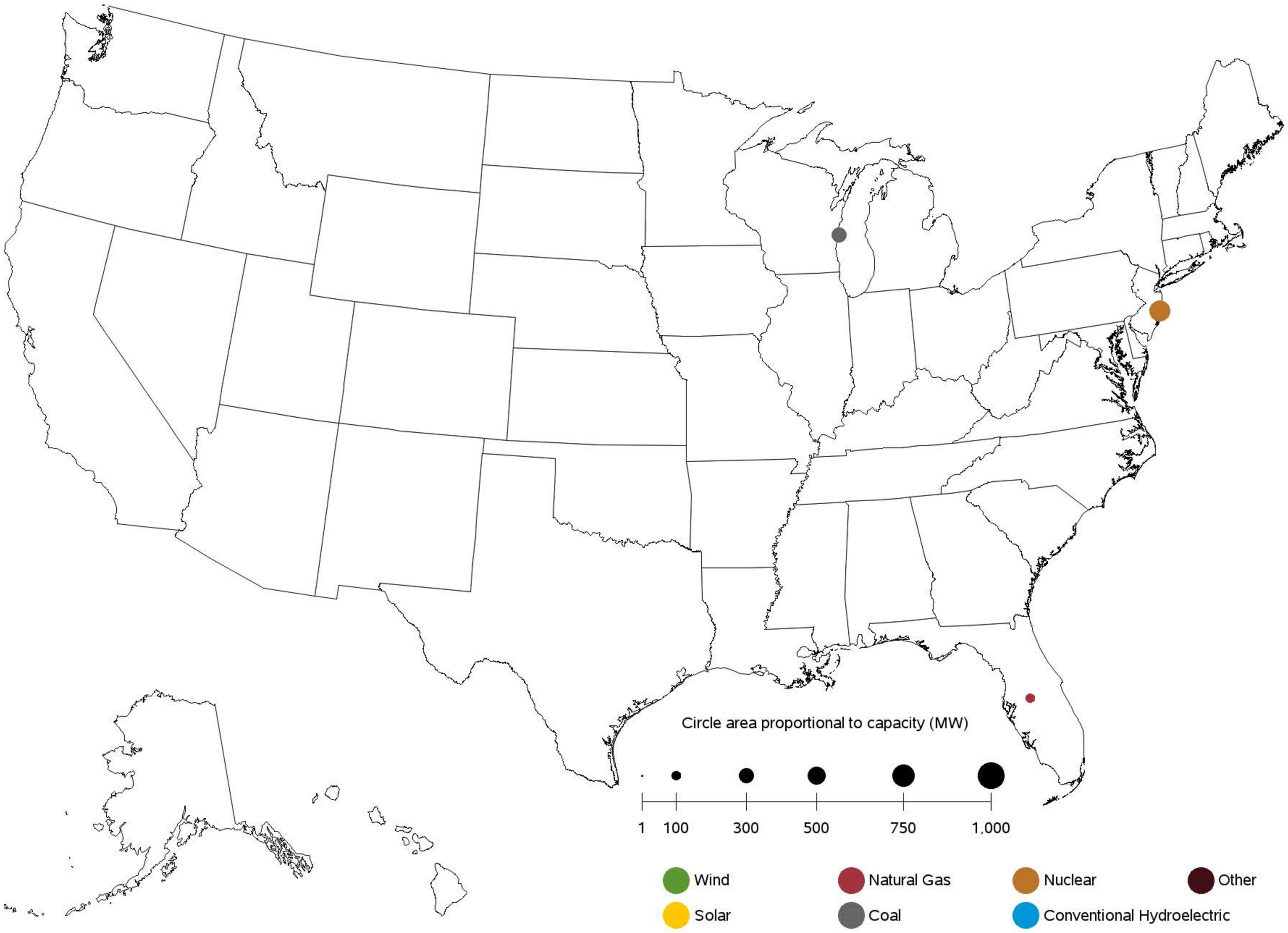
Values for 2017 and prior years are final. Values for 2018 are preliminary. NA = Not Available
Notes: Solar Thermal Capacity Factors include generation from plants using concentrated solar power energy storage.
Sources: U.S. Energy Information Administration, Form EIA-923, Power Plant Operations Report;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



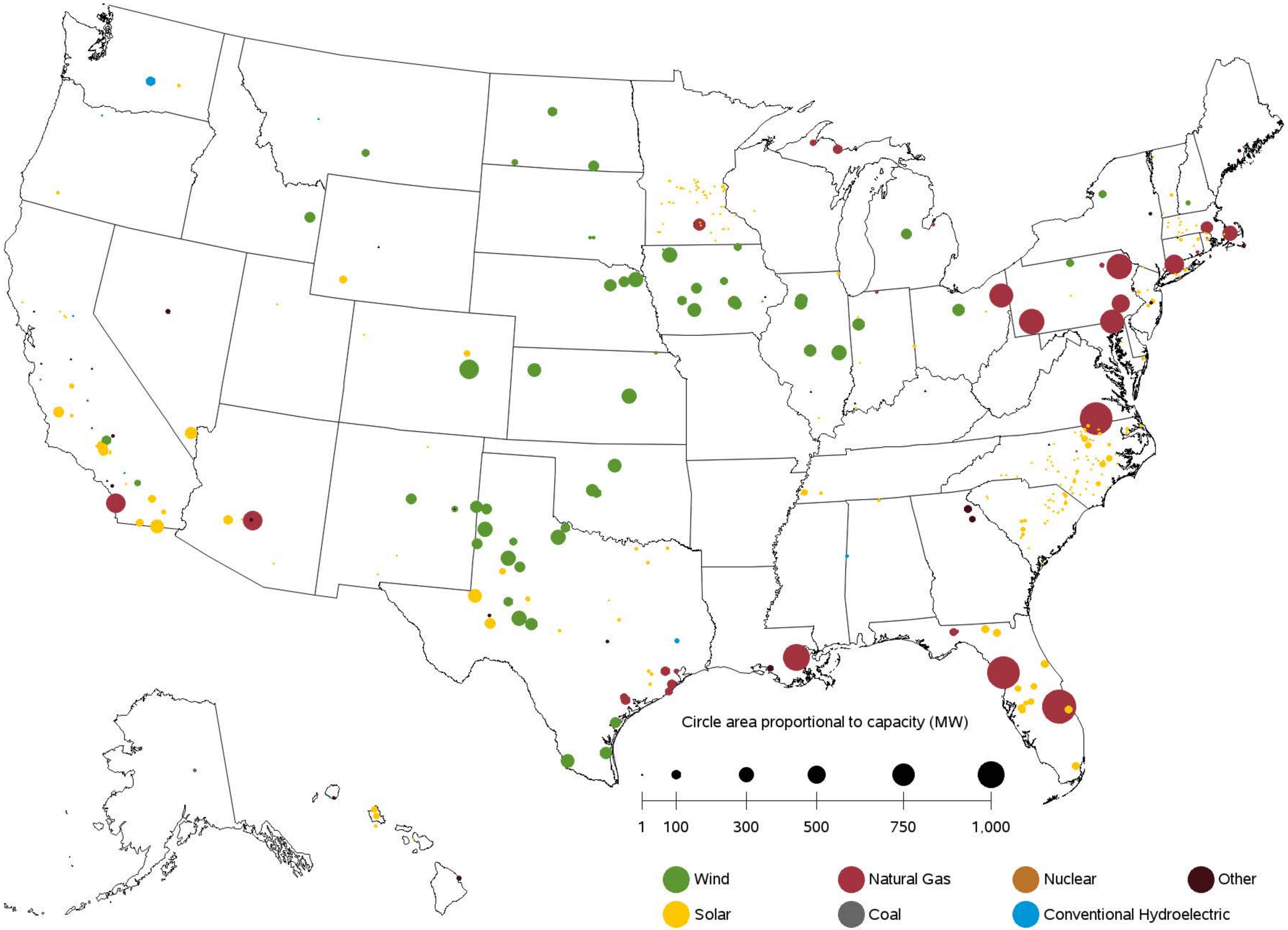
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.B. Utility-Scale Generating Units Retired in September 2018



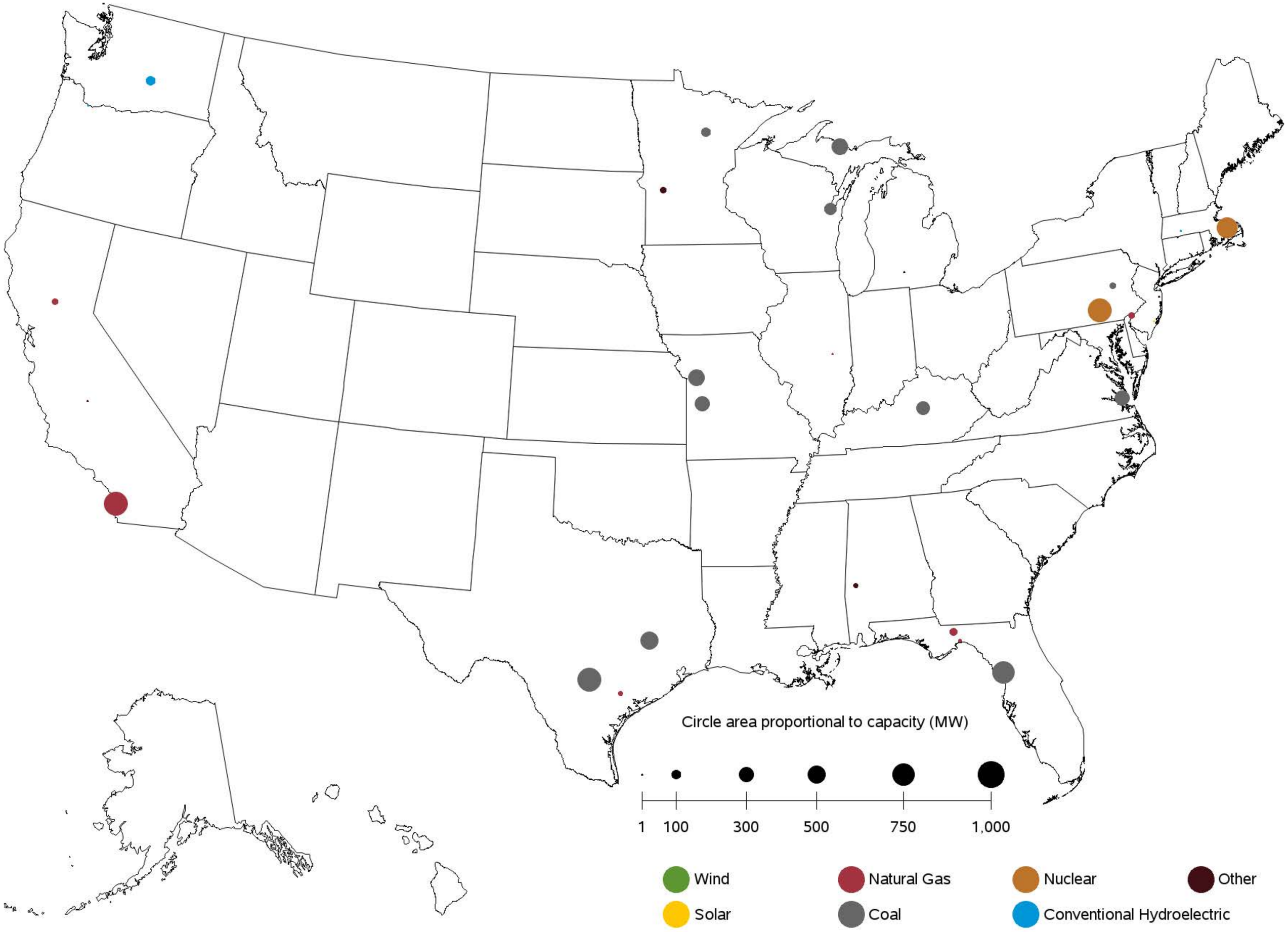
Sources: U.S. Energy Information Administration, Form EIA-860, 'Annual Electric Generator Report' and Form EIA-860M, 'Monthly Update to the Annual Electric Generator Report.'

Figure 6.1.C. Utility-Scale Generating Units Planned to Come Online from October 2018 to September 2019



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

Figure 6.1.D. Utility-Scale Generating Units Planned to Retire from October 2018 to September 2019



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

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
Year 2016							
January	5,886,417	227,589	636,613	161,007	6,523,030	388,596	6,134,434
February	4,927,541	384,301	505,252	167,788	5,432,793	552,089	4,880,704
March	5,210,412	410,645	598,334	260,086	5,808,746	670,731	5,138,015
April	4,092,342	358,746	610,099	91,608	4,702,441	450,354	4,252,087
May	4,977,621	142,398	583,132	227,227	5,560,753	369,625	5,191,128
June	6,162,812	94,538	585,652	515,952	6,748,464	610,490	6,137,974
July	6,969,110	78,459	704,978	496,360	7,674,088	574,819	7,099,269
August	6,577,610	149,565	771,285	437,154	7,348,895	586,719	6,762,176
Sept	4,631,320	161,183	666,113	425,652	5,297,433	586,835	4,710,598
October	4,989,801	320,694	761,195	111,790	5,750,996	432,484	5,318,512
November	5,809,773	109,219	611,189	307,814	6,420,962	417,033	6,003,929
December	4,939,059	245,044	508,603	329,198	5,447,662	574,242	4,873,420
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

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, 2008 - September 2018 (Thousand Megawatthours)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	6,473	9,023	3,544	0	19,040
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 2016					
January	515	648	158	0	1,321
February	447	647	176	0	1,270
March	499	738	208	0	1,445
April	506	665	176	0	1,346
May	556	746	202	0	1,504
June	594	742	201	0	1,537
July	621	773	193	0	1,587
August	604	722	205	0	1,530
Sept	594	751	187	0	1,532
October	540	704	180	0	1,424
November	541	723	190	0	1,454
December	509	709	176	0	1,394
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
Year to Date					
2016	4,935	6,432	1,705	0	13,072
2017	4,750	5,720	1,569	0	12,039
2018	4,454	6,117	1,603	0	12,175
Rolling 12 Months Ending in September					
2017	6,340	7,857	2,115	0	16,311
2018	4,749	7,217	1,781	0	13,747

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, 2008 - September 2018 (Million Dollars)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	1,574	2,285	734	0	4,593
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 2016					
January	86	120	23	0	229
February	75	118	25	0	218
March	79	131	29	0	239
April	86	124	26	0	235
May	91	139	29	0	259
June	103	141	30	0	274
July	110	150	30	0	291
August	118	154	36	0	308
Sept	111	146	31	0	288
October	108	155	33	0	296
November	102	147	32	0	282
December	101	152	31	0	284
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	161	34	0	303
Year to Date					
2016	859	1,223	259	0	2,341
2017	1,048	1,290	290	0	2,629
2018	913	1,414	304	0	2,631
Rolling 12 Months Ending in September					
2017	1,359	1,745	387	0	3,491
2018	988	1,673	358	0	3,019

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, 2008 - September 2018

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	1,318,498	133,223	1,225	0	1,452,946
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 2016					
January	1,327,936	127,058	640	0	1,455,634
February	1,328,227	127,040	637	0	1,455,904
March	1,329,387	127,155	636	0	1,457,178
April	1,331,140	127,236	635	0	1,459,011
May	1,332,103	127,264	636	0	1,460,003
June	1,332,712	127,158	635	0	1,460,505
July	1,333,672	127,327	633	0	1,461,632
August	1,333,858	127,218	631	0	1,461,707
Sept	1,331,317	126,967	627	0	1,458,911
October	1,334,555	127,221	626	0	1,462,402
November	1,335,163	127,237	629	0	1,463,029
December	1,335,753	127,265	627	0	1,463,645
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
Rolling 12 Months Ending in September					
2017	1,337,048	127,145	621	0	1,464,814
2018	1,339,392	126,387	610	0	1,466,390

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, 2008 - September 2018 (Cents per Kilowatthour)

Period	Residential	Commercial	Industrial	Transportation	All Sectors
Annual Totals					
2008	24.32	25.32	20.72	--	24.12
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 2016					
January	16.78	18.54	14.39	--	17.36
February	16.74	18.31	14.23	--	17.19
March	15.90	17.70	14.02	--	16.55
April	16.91	18.58	14.52	--	17.42
May	16.33	18.63	14.61	--	17.24
June	17.32	19.01	15.12	--	17.85
July	17.78	19.39	15.74	--	18.31
August	19.50	21.38	17.42	--	20.11
Sept	18.66	19.42	16.61	--	18.78
October	20.07	22.02	18.35	--	20.82
November	18.88	20.34	17.04	--	19.37
December	19.79	21.45	17.90	--	20.40
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	20.59	22.33	18.04	--	21.13
Year to Date					
2016	17.40	19.01	15.21	--	17.91
2017	22.06	22.56	18.51	--	21.83
2018	20.50	23.11	18.98	--	21.61
Rolling 12 Months Ending in September					
2017	21.43	22.21	18.32	--	21.40
2018	20.81	23.18	20.09	--	21.96

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

Table 8.5. Net Summer Capacity (MW) of Existing Utility Scale Units by Technology for Puerto Rico, 2007-September 2018

Period	Coal	Hydroelectric Conventional	Natural Gas	Other	Petroleum	Solar	Wind	Total
Annual Totals								
2007	454	98	1,335	0	2,792	0	0	4,679
2008	454	98	1,335	0	3,104	0	0	4,991
2009	454	98	1,335	0	3,169	0	0	5,056
2010	454	98	1,335	0	3,169	0	0	5,056
2011	454	98	1,335	0	3,169	5	0	5,061
2012	454	98	1,335	0	3,169	23	98	5,177
2013	454	98	1,335	0	3,169	26	98	5,180
2014	454	98	1,335	0	3,169	38	99	5,192
2015	454	98	1,335	9	3,173	70	99	5,237
2016	454	98	1,335	33	3,173	145	99	5,336
2017	454	98	1,335	33	3,173	145	99	5,336
Year 2018								
January	454	0	558	33	728	145	99	2,017
February	454	0	558	33	728	145	99	2,017
March	454	0	558	33	728	145	99	2,017
April	454	0	558	33	728	145	99	2,017
May	454	0	558	33	728	145	99	2,017
June	454	0	558	33	728	145	99	2,017
July	454	0	558	33	728	145	99	2,017
August	454	0	569	33	728	145	99	2,028
Sept	454	0	569	33	728	145	99	2,028

Capacity from facilities with a total generator nameplate capacity less than 1 MW are excluded from this report.

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

Appendices

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

Total (All Sectors) by Census Division and State, September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**8**	**28**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	41	0	2	0	0	25
Maine	46	83	0	14	0	0	9
Massachusetts	0	44	0	3	0	0	15
New Hampshire	0	52	0	0	0	0	15
Rhode Island	0	70	0	6	0	0	0
Vermont	0	136	0	0	0	0	14
Middle Atlantic	**7**	**17**	**48**	**1**	**21**	**0**	**2**
New Jersey	0	68	0	2	0	0	0
New York	0	20	0	2	0	0	1
Pennsylvania	7	23	76	1	30	0	9
East North Central	**0**	**9**	**7**	**1**	**7**	**0**	**12**
Illinois	0	30	0	6	0	0	25
Indiana	0	6	0	2	13	0	28
Michigan	2	7	0	3	0	0	22
Ohio	0	20	15	2	18	0	37
Wisconsin	0	79	0	4	0	0	17
West North Central	**1**	**17**	**0**	**6**	**0**	**0**	**8**
Iowa	0	37	0	6	0	0	31
Kansas	2	13	0	24	0	0	0
Minnesota	3	61	0	8	0	0	26
Missouri	0	15	0	8	0	0	14
Nebraska	3	221	0	32	0	0	24
North Dakota	0	11	0	31	0	0	18
South Dakota	0	101	0	28	0	0	12
South Atlantic	**1**	**3**	**7**	**1**	**0**	**0**	**6**
Delaware	0	47	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	33
Georgia	0	34	70	3	0	0	11
Maryland	0	12	0	2	0	0	1
North Carolina	0	11	0	2	0	0	8
South Carolina	0	11	0	2	0	0	14
Virginia	4	8	0	2	0	0	13
West Virginia	3	0	0	7	0	0	12
East South Central	**0**	**5**	**0**	**1**	**0**	**0**	**4**
Alabama	0	54	0	2	0	0	5
Kentucky	0	2	0	2	0	0	7
Mississippi	0	2	0	2	0	0	0
Tennessee	0	9	0	2	0	0	6
West South Central	**0**	**12**	**1**	**1**	**4**	**0**	**7**
Arkansas	0	9	0	5	0	0	9
Louisiana	0	37	0	2	6	0	16
Oklahoma	0	6	0	2	0	0	11
Texas	0	21	51	1	3	0	15
Mountain	**1**	**11**	**0**	**1**	**0**	**0**	**4**
Arizona	0	19	0	1	0	0	3
Colorado	0	125	0	4	0	0	19
Idaho	155	0	0	10	0	0	9
Montana	3	85	0	31	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	41	0	5	0	0	57
Utah	0	1	0	4	0	0	26
Wyoming	3	1	0	14	0	0	26
Pacific Contiguous	**0**	**29**	**0**	**2**	**1**	**0**	**2**
California	0	39	0	2	2	0	7
Oregon	0	13	0	3	0	0	3
Washington	0	55	0	4	0	0	1
Pacific Noncontiguous	**12**	**1**	**0**	**15**	**0**	**0**	**20**
Alaska	29	6	0	15	0	0	22
Hawaii	0	1	0	0	0	0	37
U.S. Total	**0**	**2**	**3**	**1**	**3**	**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, September 2018 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	31	13	0	0	1
Maine	0	0	0	113	8	0	0	5
Massachusetts	0	0	0	8	6	0	1	2
New Hampshire	0	0	0	0	17	0	0	2
Rhode Island	0	0	0	53	8	0	0	6
Vermont	0	0	0	23	15	0	0	10
Middle Atlantic	**0**	**0**	**0**	**7**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	8	5	0	0	1
New York	0	0	0	15	5	0	2	1
Pennsylvania	0	0	0	25	5	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**2**	**0**
Illinois	0	0	0	26	4	0	0	1
Indiana	0	0	0	15	6	0	0	1
Michigan	0	0	0	24	6	0	8	1
Ohio	0	0	0	25	6	0	0	1
Wisconsin	0	0	0	55	8	0	42	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**4**	**1**
Iowa	0	0	0	88	4	0	0	2
Kansas	0	0	0	121	3	0	0	2
Minnesota	0	0	0	9	5	0	3	2
Missouri	0	0	0	29	5	0	0	1
Nebraska	0	0	0	61	6	0	0	3
North Dakota	0	0	0	0	5	0	28	1
South Dakota	0	0	0	188	11	0	0	8
South Atlantic	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**
Delaware	0	0	0	34	27	0	0	4
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	3	3	0	1	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	11	8	0	0	1
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	16	6	0	0	1
Virginia	0	0	0	11	7	0	0	1
West Virginia	0	0	0	0	12	0	0	3
East South Central	**0**	**0**	**0**	**8**	**3**	**0**	**7**	**0**
Alabama	0	0	0	12	4	0	0	1
Kentucky	0	0	0	48	15	0	0	1
Mississippi	0	0	0	4	4	0	0	1
Tennessee	0	0	0	22	6	0	71	1
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**1**	**1**
Arkansas	0	0	0	8	6	0	0	2
Louisiana	0	0	0	178	5	0	2	1
Oklahoma	0	0	0	49	3	0	0	2
Texas	0	0	0	3	2	0	2	1
Mountain	**0**	**2**	**0**	**2**	**2**	**0**	**2**	**1**
Arizona	0	0	0	3	4	0	0	1
Colorado	0	0	0	9	4	0	0	1
Idaho	0	10	0	13	8	0	0	6
Montana	0	0	0	65	12	0	0	3
Nevada	0	3	0	3	2	0	0	1
New Mexico	0	0	0	8	4	0	0	2
Utah	0	4	0	6	5	0	10	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**1**	**1**
California	0	1	0	2	2	0	2	1
Oregon	0	6	0	12	5	0	0	2
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**6**	**0**	**17**	**10**	**0**	**0**	**4**
Alaska	0	0	0	0	33	0	0	10
Hawaii	0	6	0	17	11	0	0	1
U.S. Total	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**

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

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

Total (All Sectors) by Census Division and State, Year-to-Date through September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**8**	**28**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	41	0	2	0	0	25
Maine	46	83	0	14	0	0	9
Massachusetts	0	44	0	3	0	0	15
New Hampshire	0	52	0	0	0	0	15
Rhode Island	0	70	0	6	0	0	0
Vermont	0	136	0	0	0	0	14
Middle Atlantic	**7**	**17**	**48**	**1**	**21**	**0**	**2**
New Jersey	0	68	0	2	0	0	0
New York	0	20	0	2	0	0	1
Pennsylvania	7	23	76	1	30	0	9
East North Central	**0**	**9**	**7**	**1**	**7**	**0**	**12**
Illinois	0	30	0	6	0	0	25
Indiana	0	6	0	2	13	0	28
Michigan	2	7	0	3	0	0	22
Ohio	0	20	15	2	18	0	37
Wisconsin	0	79	0	4	0	0	17
West North Central	**1**	**17**	**0**	**6**	**0**	**0**	**8**
Iowa	0	37	0	6	0	0	31
Kansas	2	13	0	24	0	0	0
Minnesota	3	61	0	8	0	0	26
Missouri	0	15	0	8	0	0	14
Nebraska	3	221	0	32	0	0	24
North Dakota	0	11	0	31	0	0	18
South Dakota	0	101	0	28	0	0	12
South Atlantic	**1**	**3**	**7**	**1**	**0**	**0**	**6**
Delaware	0	47	0	4	0	0	0
District of Columbia	0	0	0	0	0	0	0
Florida	0	2	0	1	0	0	33
Georgia	0	34	70	3	0	0	11
Maryland	0	12	0	2	0	0	1
North Carolina	0	11	0	2	0	0	8
South Carolina	0	11	0	2	0	0	14
Virginia	4	8	0	2	0	0	13
West Virginia	3	0	0	7	0	0	12
East South Central	**0**	**5**	**0**	**1**	**0**	**0**	**4**
Alabama	0	54	0	2	0	0	5
Kentucky	0	2	0	2	0	0	7
Mississippi	0	2	0	2	0	0	0
Tennessee	0	9	0	2	0	0	6
West South Central	**0**	**12**	**1**	**1**	**4**	**0**	**7**
Arkansas	0	9	0	5	0	0	9
Louisiana	0	37	0	2	6	0	16
Oklahoma	0	6	0	2	0	0	11
Texas	0	21	51	1	3	0	15
Mountain	**1**	**11**	**0**	**1**	**0**	**0**	**4**
Arizona	0	19	0	1	0	0	3
Colorado	0	125	0	4	0	0	19
Idaho	155	0	0	10	0	0	9
Montana	3	85	0	31	0	0	9
Nevada	0	0	0	1	0	0	2
New Mexico	0	41	0	5	0	0	57
Utah	0	1	0	4	0	0	26
Wyoming	3	1	0	14	0	0	26
Pacific Contiguous	**0**	**29**	**0**	**2**	**1**	**0**	**2**
California	0	39	0	2	2	0	7
Oregon	0	13	0	3	0	0	3
Washington	0	55	0	4	0	0	1
Pacific Noncontiguous	**12**	**1**	**0**	**15**	**0**	**0**	**20**
Alaska	29	6	0	15	0	0	22
Hawaii	0	1	0	0	0	0	37
U.S. Total	**0**	**2**	**3**	**1**	**3**	**0**	**2**

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

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

Total (All Sectors) by Census Division and State, Year-to-Date through September 2018 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**8**	**6**	**0**	**1**	**1**
Connecticut	0	0	0	31	13	0	0	1
Maine	0	0	0	113	8	0	0	5
Massachusetts	0	0	0	8	6	0	1	2
New Hampshire	0	0	0	0	17	0	0	2
Rhode Island	0	0	0	53	8	0	0	6
Vermont	0	0	0	23	15	0	0	10
Middle Atlantic	**0**	**0**	**0**	**7**	**3**	**0**	**1**	**1**
New Jersey	0	0	0	8	5	0	0	1
New York	0	0	0	15	5	0	2	1
Pennsylvania	0	0	0	25	5	0	0	1
East North Central	**0**	**0**	**0**	**11**	**3**	**0**	**2**	**0**
Illinois	0	0	0	26	4	0	0	1
Indiana	0	0	0	15	6	0	0	1
Michigan	0	0	0	24	6	0	8	1
Ohio	0	0	0	25	6	0	0	1
Wisconsin	0	0	0	55	8	0	42	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**4**	**1**
Iowa	0	0	0	88	4	0	0	2
Kansas	0	0	0	121	3	0	0	2
Minnesota	0	0	0	9	5	0	3	2
Missouri	0	0	0	29	5	0	0	1
Nebraska	0	0	0	61	6	0	0	3
North Dakota	0	0	0	0	5	0	28	1
South Dakota	0	0	0	188	11	0	0	8
South Atlantic	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**0**
Delaware	0	0	0	34	27	0	0	4
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	3	3	0	1	1
Georgia	0	0	0	5	3	0	0	1
Maryland	0	0	0	11	8	0	0	1
North Carolina	0	0	0	4	3	0	0	1
South Carolina	0	0	0	16	6	0	0	1
Virginia	0	0	0	11	7	0	0	1
West Virginia	0	0	0	0	12	0	0	3
East South Central	**0**	**0**	**0**	**8**	**3**	**0**	**7**	**0**
Alabama	0	0	0	12	4	0	0	1
Kentucky	0	0	0	48	15	0	0	1
Mississippi	0	0	0	4	4	0	0	1
Tennessee	0	0	0	22	6	0	71	1
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**1**	**1**
Arkansas	0	0	0	8	6	0	0	2
Louisiana	0	0	0	178	5	0	2	1
Oklahoma	0	0	0	49	3	0	0	2
Texas	0	0	0	3	2	0	2	1
Mountain	**0**	**2**	**0**	**2**	**2**	**0**	**2**	**1**
Arizona	0	0	0	3	4	0	0	1
Colorado	0	0	0	9	4	0	0	1
Idaho	0	10	0	13	8	0	0	6
Montana	0	0	0	65	12	0	0	3
Nevada	0	3	0	3	2	0	0	1
New Mexico	0	0	0	8	4	0	0	2
Utah	0	4	0	6	5	0	10	1
Wyoming	0	0	0	0	9	0	0	3
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**1**	**1**
California	0	1	0	2	2	0	2	1
Oregon	0	6	0	12	5	0	0	2
Washington	0	0	0	0	5	0	0	1
Pacific Noncontiguous	**0**	**6**	**0**	**17**	**10**	**0**	**0**	**4**
Alaska	0	0	0	0	33	0	0	10
Hawaii	0	6	0	17	11	0	0	1
U.S. Total	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**

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Table A.1.C. Relative Standard Error (Percent) for Small Scale Solar Generation and Capacity by Sector, Census Division and State, September 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**0**	**1**	**.**	**0**
Connecticut	0	0	0	.	0
Maine	1	1	0	.	1
Massachusetts	0	0	1	.	0
New Hampshire	0	0	0	.	0
Rhode Island	0	0	0	.	0
Vermont	1	4	55	.	2
Middle Atlantic	**0**	**0**	**1**	**.**	**0**
New Jersey	0	0	2	.	0
New York	0	0	1	.	0
Pennsylvania	0	2	0	.	1
East North Central	**1**	**2**	**0**	**.**	**1**
Illinois	3	7	0	.	4
Indiana	3	1	0	.	1
Michigan	2	13	3	.	4
Ohio	2	3	1	.	2
Wisconsin	4	8	0	.	3
West North Central	**2**	**1**	**3**	**.**	**1**
Iowa	5	2	21	.	2
Kansas	8	5	0	.	5
Minnesota	4	6	2	.	3
Missouri	2	1	0	.	1
Nebraska	11	23	21	.	10
North Dakota	0	0	0	.	0
South Dakota	0	0	0	.	0
South Atlantic	**1**	**1**	**1**	**.**	**1**
Delaware	2	2	11	.	2
District of Columbia	0	0	0	.	0
Florida	3	4	2	.	2
Georgia	67	69	0	.	49
Maryland	0	1	2	.	0
North Carolina	5	1	0	.	3
South Carolina	2	2	0	.	2
Virginia	6	5	4	.	4
West Virginia	0	0	0	.	0
East South Central	**7**	**4**	**0**	**.**	**5**
Alabama	0	0	0	.	0
Kentucky	9	4	0	.	6
Mississippi	11	9	0	.	8
Tennessee	0	0	0	.	0
West South Central	**1**	**3**	**0**	**.**	**1**
Arkansas	8	11	0	.	6
Louisiana	1	5	0	.	1
Oklahoma	7	9	0	.	6
Texas	2	4	0	.	2
Mountain	**0**	**1**	**4**	**.**	**0**
Arizona	0	1	10	.	0
Colorado	1	2	70	.	1
Idaho	2	8	0	.	2
Montana	6	11	0	.	5
Nevada	0	0	0	.	0
New Mexico	2	4	0	.	2
Utah	1	4	0	.	1
Wyoming	12	37	0	.	13
Pacific Contiguous	**0**	**1**	**0**	**.**	**0**
California	0	1	0	.	0
Oregon	1	6	5	.	2
Washington	1	22	43	.	3
Pacific Noncontiguous	**0**	**0**	**0**	**.**	**0**
Alaska	7	7	0	.	5
Hawaii	0	0	0	.	0
U.S. Total	**0**	**0**	**0**	**.**	**0**

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

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

Electric Utilities by Census Division and State, September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**38**	**0**	**49**	**0**	**0**	**15**
Connecticut	0	71	0	0	0	0	27
Maine	0	0	0	0	0	0	0
Massachusetts	0	47	0	67	0	0	32
New Hampshire	0	78	0	0	0	0	26
Rhode Island	0	0	0	0	0	0	0
Vermont	0	136	0	0	0	0	24
Middle Atlantic	**0**	**34**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	55	0	0	0
New York	0	34	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**9**	**0**	**3**	**0**	**0**	**12**
Illinois	0	119	0	20	0	0	36
Indiana	0	4	0	9	0	0	28
Michigan	2	7	0	6	0	0	24
Ohio	4	79	0	6	0	0	29
Wisconsin	0	82	0	5	0	0	19
West North Central	**1**	**17**	**0**	**6**	**0**	**0**	**8**
Iowa	0	37	0	6	0	0	32
Kansas	2	13	0	24	0	0	0
Minnesota	3	69	0	9	0	0	33
Missouri	0	15	0	11	0	0	14
Nebraska	3	221	0	32	0	0	24
North Dakota	0	11	0	31	0	0	18
South Dakota	0	101	0	28	0	0	12
South Atlantic	**0**	**2**	**0**	**1**	**0**	**0**	**7**
Delaware	0	0	0	0	0	0	0
Florida	0	1	0	1	0	0	33
Georgia	0	9	0	3	0	0	11
Maryland	0	11	0	0	0	0	0
North Carolina	0	7	0	2	0	0	8
South Carolina	0	12	0	3	0	0	13
Virginia	4	23	0	3	0	0	12
West Virginia	0	0	0	0	0	0	18
East South Central	**0**	**4**	**0**	**1**	**0**	**0**	**4**
Alabama	0	3	0	5	0	0	5
Kentucky	0	2	0	2	0	0	7
Mississippi	0	2	0	2	0	0	0
Tennessee	0	9	0	2	0	0	6
West South Central	**0**	**15**	**0**	**2**	**0**	**0**	**7**
Arkansas	0	11	0	6	0	0	9
Louisiana	0	37	0	3	0	0	0
Oklahoma	0	7	0	4	0	0	11
Texas	0	35	0	4	0	0	16
Mountain	**1**	**12**	**0**	**1**	**0**	**0**	**4**
Arizona	0	19	0	2	0	0	3
Colorado	0	126	0	3	0	0	20
Idaho	0	0	0	10	0	0	9
Montana	0	1,912	0	44	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	41	0	7	0	0	57
Utah	0	1	0	5	0	0	27
Wyoming	3	1	0	44	0	0	27
Pacific Contiguous	**0**	**40**	**0**	**3**	**0**	**0**	**2**
California	0	42	0	4	0	0	7
Oregon	0	0	0	5	0	0	3
Washington	0	1,238	0	5	0	0	1
Pacific Noncontiguous	**39**	**1**	**0**	**15**	**0**	**0**	**23**
Alaska	39	7	0	15	0	0	23
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**0**	**1**	**0**	**0**	**2**

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

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

Electric Utilities by Census Division and State, September 2018 (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**	**31**	**9**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	12
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	56	49	0	0	30
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	38	14	0	0	14
Middle Atlantic	**0**	**0**	**0**	**26**	**26**	**0**	**0**	**2**
New Jersey	0	0	0	26	26	0	0	27
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**	**19**	**9**	**0**	**3**	**1**
Illinois	0	0	0	86	34	0	0	6
Indiana	0	0	0	27	18	0	0	1
Michigan	0	0	0	27	12	0	0	1
Ohio	0	0	0	72	62	0	0	4
Wisconsin	0	0	0	0	18	0	32	2
West North Central	**0**	**0**	**0**	**61**	**4**	**0**	**5**	**1**
Iowa	0	0	0	94	4	0	0	1
Kansas	0	0	0	268	10	0	0	3
Minnesota	0	0	0	123	9	0	0	2
Missouri	0	0	0	0	56	0	0	1
Nebraska	0	0	0	0	30	0	0	3
North Dakota	0	0	0	0	8	0	28	1
South Dakota	0	0	0	0	19	0	0	9
South Atlantic	**0**	**0**	**0**	**3**	**6**	**0**	**0**	**0**
Delaware	0	0	0	94	94	0	0	15
Florida	0	0	0	2	2	0	0	1
Georgia	0	0	0	11	11	0	0	1
Maryland	0	0	0	80	80	0	0	0
North Carolina	0	0	0	12	12	0	0	1
South Carolina	0	0	0	0	11	0	0	1
Virginia	0	0	0	22	24	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**39**	**29**	**0**	**0**	**1**
Alabama	0	0	0	63	63	0	0	1
Kentucky	0	0	0	49	32	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	0	0	0	0	1
West South Central	**0**	**0**	**0**	**44**	**12**	**0**	**0**	**1**
Arkansas	0	0	0	188	188	0	0	2
Louisiana	0	0	0	178	178	0	0	2
Oklahoma	0	0	0	49	11	0	0	3
Texas	0	0	0	155	52	0	0	2
Mountain	**0**	**6**	**0**	**9**	**7**	**0**	**17**	**1**
Arizona	0	0	0	10	10	0	0	1
Colorado	0	0	0	160	42	0	0	1
Idaho	0	0	0	0	39	0	0	7
Montana	0	0	0	0	37	0	0	8
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	18	18	0	0	2
Utah	0	6	0	0	6	0	27	1
Wyoming	0	0	0	0	13	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**12**	**4**	**0**	**0**	**1**
California	0	0	0	12	4	0	0	3
Oregon	0	0	0	98	8	0	0	2
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**6**
Alaska	0	0	0	0	55	0	0	11
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**1**	**0**	**3**	**3**	**0**	**2**	**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 September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**38**	**0**	**49**	**0**	**0**	**15**
Connecticut	0	71	0	0	0	0	27
Maine	0	0	0	0	0	0	0
Massachusetts	0	47	0	67	0	0	32
New Hampshire	0	78	0	0	0	0	26
Rhode Island	0	0	0	0	0	0	0
Vermont	0	136	0	0	0	0	24
Middle Atlantic	**0**	**34**	**0**	**5**	**0**	**0**	**1**
New Jersey	0	0	0	55	0	0	0
New York	0	34	0	5	0	0	1
Pennsylvania	0	0	0	0	0	0	0
East North Central	**1**	**9**	**0**	**3**	**0**	**0**	**12**
Illinois	0	119	0	20	0	0	36
Indiana	0	4	0	9	0	0	28
Michigan	2	7	0	6	0	0	24
Ohio	4	79	0	6	0	0	29
Wisconsin	0	82	0	5	0	0	19
West North Central	**1**	**17**	**0**	**6**	**0**	**0**	**8**
Iowa	0	37	0	6	0	0	32
Kansas	2	13	0	24	0	0	0
Minnesota	3	69	0	9	0	0	33
Missouri	0	15	0	11	0	0	14
Nebraska	3	221	0	32	0	0	24
North Dakota	0	11	0	31	0	0	18
South Dakota	0	101	0	28	0	0	12
South Atlantic	**0**	**2**	**0**	**1**	**0**	**0**	**7**
Delaware	0	0	0	0	0	0	0
Florida	0	1	0	1	0	0	33
Georgia	0	9	0	3	0	0	11
Maryland	0	11	0	0	0	0	0
North Carolina	0	7	0	2	0	0	8
South Carolina	0	12	0	3	0	0	13
Virginia	4	23	0	3	0	0	12
West Virginia	0	0	0	0	0	0	18
East South Central	**0**	**4**	**0**	**1**	**0**	**0**	**4**
Alabama	0	3	0	5	0	0	5
Kentucky	0	2	0	2	0	0	7
Mississippi	0	2	0	2	0	0	0
Tennessee	0	9	0	2	0	0	6
West South Central	**0**	**15**	**0**	**2**	**0**	**0**	**7**
Arkansas	0	11	0	6	0	0	9
Louisiana	0	37	0	3	0	0	0
Oklahoma	0	7	0	4	0	0	11
Texas	0	35	0	4	0	0	16
Mountain	**1**	**12**	**0**	**1**	**0**	**0**	**4**
Arizona	0	19	0	2	0	0	3
Colorado	0	126	0	3	0	0	20
Idaho	0	0	0	10	0	0	9
Montana	0	1,912	0	44	0	0	9
Nevada	0	0	0	1	0	0	0
New Mexico	0	41	0	7	0	0	57
Utah	0	1	0	5	0	0	27
Wyoming	3	1	0	44	0	0	27
Pacific Contiguous	**0**	**40**	**0**	**3**	**0**	**0**	**2**
California	0	42	0	4	0	0	7
Oregon	0	0	0	5	0	0	3
Washington	0	1,238	0	5	0	0	1
Pacific Noncontiguous	**39**	**1**	**0**	**15**	**0**	**0**	**23**
Alaska	39	7	0	15	0	0	23
Hawaii	0	1	0	0	0	0	0
U.S. Total	**0**	**1**	**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 September 2018 (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**	**31**	**9**	**0**	**0**	**10**
Connecticut	0	0	0	0	0	0	0	12
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	56	49	0	0	30
New Hampshire	0	0	0	0	0	0	0	10
Rhode Island	0	0	0	0	0	0	0	0
Vermont	0	0	0	38	14	0	0	14
Middle Atlantic	**0**	**0**	**0**	**26**	**26**	**0**	**0**	**2**
New Jersey	0	0	0	26	26	0	0	27
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**	**19**	**9**	**0**	**3**	**1**
Illinois	0	0	0	86	34	0	0	6
Indiana	0	0	0	27	18	0	0	1
Michigan	0	0	0	27	12	0	0	1
Ohio	0	0	0	72	62	0	0	4
Wisconsin	0	0	0	0	18	0	32	2
West North Central	**0**	**0**	**0**	**61**	**4**	**0**	**5**	**1**
Iowa	0	0	0	94	4	0	0	1
Kansas	0	0	0	268	10	0	0	3
Minnesota	0	0	0	123	9	0	0	2
Missouri	0	0	0	0	56	0	0	1
Nebraska	0	0	0	0	30	0	0	3
North Dakota	0	0	0	0	8	0	28	1
South Dakota	0	0	0	0	19	0	0	9
South Atlantic	**0**	**0**	**0**	**3**	**6**	**0**	**0**	**0**
Delaware	0	0	0	94	94	0	0	15
Florida	0	0	0	2	2	0	0	1
Georgia	0	0	0	11	11	0	0	1
Maryland	0	0	0	80	80	0	0	0
North Carolina	0	0	0	12	12	0	0	1
South Carolina	0	0	0	0	11	0	0	1
Virginia	0	0	0	22	24	0	0	2
West Virginia	0	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**39**	**29**	**0**	**0**	**1**
Alabama	0	0	0	63	63	0	0	1
Kentucky	0	0	0	49	32	0	0	1
Mississippi	0	0	0	0	0	0	0	2
Tennessee	0	0	0	0	0	0	0	1
West South Central	**0**	**0**	**0**	**44**	**12**	**0**	**0**	**1**
Arkansas	0	0	0	188	188	0	0	2
Louisiana	0	0	0	178	178	0	0	2
Oklahoma	0	0	0	49	11	0	0	3
Texas	0	0	0	155	52	0	0	2
Mountain	**0**	**6**	**0**	**9**	**7**	**0**	**17**	**1**
Arizona	0	0	0	10	10	0	0	1
Colorado	0	0	0	160	42	0	0	1
Idaho	0	0	0	0	39	0	0	7
Montana	0	0	0	0	37	0	0	8
Nevada	0	0	0	0	0	0	0	1
New Mexico	0	0	0	18	18	0	0	2
Utah	0	6	0	0	6	0	27	1
Wyoming	0	0	0	0	13	0	0	3
Pacific Contiguous	**0**	**0**	**0**	**12**	**4**	**0**	**0**	**1**
California	0	0	0	12	4	0	0	3
Oregon	0	0	0	98	8	0	0	2
Washington	0	0	0	0	8	0	0	1
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**23**	**0**	**0**	**6**
Alaska	0	0	0	0	55	0	0	11
Hawaii	0	0	0	0	0	0	0	1
U.S. Total	**0**	**1**	**0**	**3**	**3**	**0**	**2**	**0**

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

Independent Power Producers by Census Division and State, September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**37**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	43	0	2	0	0	28
Maine	0	111	0	15	0	0	9
Massachusetts	0	108	0	3	0	0	18
New Hampshire	0	929	0	0	0	0	17
Rhode Island	0	70	0	7	0	0	0
Vermont	0	0	0	0	0	0	17
Middle Atlantic	**7**	**18**	**0**	**1**	**0**	**0**	**7**
New Jersey	0	79	0	2	0	0	0
New York	0	22	0	2	0	0	7
Pennsylvania	7	24	0	1	0	0	10
East North Central	**0**	**17**	**15**	**1**	**7**	**0**	**43**
Illinois	0	29	0	6	0	0	35
Indiana	0	523	0	1	0	0	0
Michigan	0	0	0	2	0	0	86
Ohio	0	19	15	2	25	0	74
Wisconsin	0	0	0	0	0	0	87
West North Central	**0**	**126**	**0**	**10**	**0**	**0**	**49**
Iowa	0	47	0	1,553	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	247	0	18	0	0	66
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**9**	**7**	**0**	**2**	**0**	**0**	**4**
Delaware	0	47	0	5	0	0	0
Florida	0	31	0	6	0	0	0
Georgia	0	249	0	7	0	0	336
Maryland	0	12	0	3	0	0	1
North Carolina	0	71	0	7	0	0	63
South Carolina	0	0	0	1	0	0	68
Virginia	3	3	0	2	0	0	44
West Virginia	16	0	0	10	0	0	25
East South Central	**0**	**138**	**0**	**0**	**0**	**0**	**149**
Alabama	0	138	0	0	0	0	0
Kentucky	0	0	0	0	0	0	149
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**9**	**0**	**1**	**0**	**0**	**15**
Arkansas	0	0	0	0	0	0	63
Louisiana	0	0	0	9	0	0	16
Oklahoma	0	0	0	0	0	0	0
Texas	0	10	0	1	0	0	0
Mountain	**3**	**15**	**0**	**2**	**0**	**0**	**23**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	12	0	0	57
Idaho	0	0	0	21	0	0	29
Montana	3	29	0	9	0	0	74
Nevada	0	0	0	0	0	0	56
New Mexico	0	0	0	8	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**15**	**0**	**2**	**0**	**0**	**33**
California	0	0	0	3	0	0	42
Oregon	0	0	0	1	0	0	51
Washington	0	20	0	5	0	0	45
Pacific Noncontiguous	**7**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	52	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**10**	**1**	**4**	**0**	**5**

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

Independent Power Producers by Census Division and State, September 2018 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**8**	**7**	**0**	**1**	**1**
Connecticut	0	0	0	32	13	0	0	1
Maine	0	0	0	113	10	0	0	6
Massachusetts	0	0	0	8	6	0	1	2
New Hampshire	0	0	0	0	21	0	0	2
Rhode Island	0	0	0	53	8	0	0	6
Vermont	0	0	0	29	25	0	0	14
Middle Atlantic	**0**	**0**	**0**	**8**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	9	6	0	0	1
New York	0	0	0	16	5	0	0	1
Pennsylvania	0	0	0	29	6	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**12**	**0**
Illinois	0	0	0	25	4	0	0	1
Indiana	0	0	0	17	6	0	0	1
Michigan	0	0	0	45	8	0	18	1
Ohio	0	0	0	27	6	0	0	1
Wisconsin	0	0	0	57	10	0	0	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**2**
Iowa	0	0	0	235	6	0	0	5
Kansas	0	0	0	133	3	0	0	3
Minnesota	0	0	0	9	5	0	0	5
Missouri	0	0	0	31	6	0	0	3
Nebraska	0	0	0	61	6	0	0	6
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	188	13	0	0	13
South Atlantic	**0**	**0**	**0**	**3**	**3**	**0**	**1**	**2**
Delaware	0	0	0	37	33	0	0	4
Florida	0	0	0	13	6	0	1	5
Georgia	0	0	0	6	5	0	0	6
Maryland	0	0	0	12	9	0	0	1
North Carolina	0	0	0	4	3	0	0	4
South Carolina	0	0	0	16	16	0	0	2
Virginia	0	0	0	12	10	0	0	2
West Virginia	0	0	0	0	12	0	0	12
East South Central	**0**	**0**	**0**	**7**	**7**	**0**	**0**	**0**
Alabama	0	0	0	12	11	0	0	0
Kentucky	0	0	0	255	72	0	0	2
Mississippi	0	0	0	4	6	0	0	0
Tennessee	0	0	0	22	20	0	0	20
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	8	14	0	0	1
Louisiana	0	0	0	0	45	0	0	5
Oklahoma	0	0	0	0	3	0	0	1
Texas	0	0	0	3	2	0	0	1
Mountain	**0**	**2**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	3	4	0	0	1
Colorado	0	0	0	9	4	0	0	4
Idaho	0	10	0	13	9	0	0	9
Montana	0	0	0	65	12	0	0	3
Nevada	0	3	0	3	2	0	0	2
New Mexico	0	0	0	9	4	0	0	4
Utah	0	6	0	6	5	0	0	5
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	1	0	2	2	0	0	2
Oregon	0	6	0	12	6	0	0	2
Washington	0	0	0	0	10	0	0	2
Pacific Noncontiguous	**0**	**6**	**0**	**21**	**14**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	45
Hawaii	0	6	0	21	14	0	0	3
U.S. Total	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**

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

Independent Power Producers by Census Division and State, Year-to-Date through September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**37**	**0**	**2**	**0**	**0**	**7**
Connecticut	0	43	0	2	0	0	28
Maine	0	111	0	15	0	0	9
Massachusetts	0	108	0	3	0	0	18
New Hampshire	0	929	0	0	0	0	17
Rhode Island	0	70	0	7	0	0	0
Vermont	0	0	0	0	0	0	17
Middle Atlantic	**7**	**18**	**0**	**1**	**0**	**0**	**7**
New Jersey	0	79	0	2	0	0	0
New York	0	22	0	2	0	0	7
Pennsylvania	7	24	0	1	0	0	10
East North Central	**0**	**17**	**15**	**1**	**7**	**0**	**43**
Illinois	0	29	0	6	0	0	35
Indiana	0	523	0	1	0	0	0
Michigan	0	0	0	2	0	0	86
Ohio	0	19	15	2	25	0	74
Wisconsin	0	0	0	0	0	0	87
West North Central	**0**	**126**	**0**	**10**	**0**	**0**	**49**
Iowa	0	47	0	1,553	0	0	0
Kansas	0	0	0	0	0	0	0
Minnesota	0	247	0	18	0	0	66
Missouri	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0
South Atlantic	**9**	**7**	**0**	**2**	**0**	**0**	**4**
Delaware	0	47	0	5	0	0	0
Florida	0	31	0	6	0	0	0
Georgia	0	249	0	7	0	0	336
Maryland	0	12	0	3	0	0	1
North Carolina	0	71	0	7	0	0	63
South Carolina	0	0	0	1	0	0	68
Virginia	3	3	0	2	0	0	44
West Virginia	16	0	0	10	0	0	25
East South Central	**0**	**138**	**0**	**0**	**0**	**0**	**149**
Alabama	0	138	0	0	0	0	0
Kentucky	0	0	0	0	0	0	149
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	0	0	0	0
West South Central	**0**	**9**	**0**	**1**	**0**	**0**	**15**
Arkansas	0	0	0	0	0	0	63
Louisiana	0	0	0	9	0	0	16
Oklahoma	0	0	0	0	0	0	0
Texas	0	10	0	1	0	0	0
Mountain	**3**	**15**	**0**	**2**	**0**	**0**	**23**
Arizona	0	0	0	0	0	0	0
Colorado	0	0	0	12	0	0	57
Idaho	0	0	0	21	0	0	29
Montana	3	29	0	9	0	0	74
Nevada	0	0	0	0	0	0	56
New Mexico	0	0	0	8	0	0	0
Utah	0	0	0	0	0	0	0
Wyoming	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**15**	**0**	**2**	**0**	**0**	**33**
California	0	0	0	3	0	0	42
Oregon	0	0	0	1	0	0	51
Washington	0	20	0	5	0	0	45
Pacific Noncontiguous	**7**	**0**	**0**	**0**	**0**	**0**	**0**
Alaska	52	0	0	0	0	0	0
Hawaii	0	0	0	0	0	0	0
U.S. Total	**1**	**4**	**10**	**1**	**4**	**0**	**5**

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

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

Independent Power Producers by Census Division and State, Year-to-Date through September 2018 (Continued)

Census Region and State	Wind	Geothermal	Biomass	Solar Thermal and Photovoltaic	Other Renewables	Hydroelectric Pumped Storage	Other Energy Sources	All Energy Sources
New England	**0**	**0**	**0**	**8**	**7**	**0**	**1**	**1**
Connecticut	0	0	0	32	13	0	0	1
Maine	0	0	0	113	10	0	0	6
Massachusetts	0	0	0	8	6	0	1	2
New Hampshire	0	0	0	0	21	0	0	2
Rhode Island	0	0	0	53	8	0	0	6
Vermont	0	0	0	29	25	0	0	14
Middle Atlantic	**0**	**0**	**0**	**8**	**4**	**0**	**0**	**1**
New Jersey	0	0	0	9	6	0	0	1
New York	0	0	0	16	5	0	0	1
Pennsylvania	0	0	0	29	6	0	0	1
East North Central	**0**	**0**	**0**	**13**	**3**	**0**	**12**	**0**
Illinois	0	0	0	25	4	0	0	1
Indiana	0	0	0	17	6	0	0	1
Michigan	0	0	0	45	8	0	18	1
Ohio	0	0	0	27	6	0	0	1
Wisconsin	0	0	0	57	10	0	0	1
West North Central	**0**	**0**	**0**	**8**	**3**	**0**	**0**	**2**
Iowa	0	0	0	235	6	0	0	5
Kansas	0	0	0	133	3	0	0	3
Minnesota	0	0	0	9	5	0	0	5
Missouri	0	0	0	31	6	0	0	3
Nebraska	0	0	0	61	6	0	0	6
North Dakota	0	0	0	0	5	0	0	5
South Dakota	0	0	0	188	13	0	0	13
South Atlantic	**0**	**0**	**0**	**3**	**3**	**0**	**1**	**2**
Delaware	0	0	0	37	33	0	0	4
Florida	0	0	0	13	6	0	1	5
Georgia	0	0	0	6	5	0	0	6
Maryland	0	0	0	12	9	0	0	1
North Carolina	0	0	0	4	3	0	0	4
South Carolina	0	0	0	16	16	0	0	2
Virginia	0	0	0	12	10	0	0	2
West Virginia	0	0	0	0	12	0	0	12
East South Central	**0**	**0**	**0**	**7**	**7**	**0**	**0**	**0**
Alabama	0	0	0	12	11	0	0	0
Kentucky	0	0	0	255	72	0	0	2
Mississippi	0	0	0	4	6	0	0	0
Tennessee	0	0	0	22	20	0	0	20
West South Central	**0**	**0**	**0**	**3**	**2**	**0**	**0**	**1**
Arkansas	0	0	0	8	14	0	0	1
Louisiana	0	0	0	0	45	0	0	5
Oklahoma	0	0	0	0	3	0	0	1
Texas	0	0	0	3	2	0	0	1
Mountain	**0**	**2**	**0**	**2**	**2**	**0**	**0**	**1**
Arizona	0	0	0	3	4	0	0	1
Colorado	0	0	0	9	4	0	0	4
Idaho	0	10	0	13	9	0	0	9
Montana	0	0	0	65	12	0	0	3
Nevada	0	3	0	3	2	0	0	2
New Mexico	0	0	0	9	4	0	0	4
Utah	0	6	0	6	5	0	0	5
Wyoming	0	0	0	0	11	0	0	8
Pacific Contiguous	**0**	**1**	**0**	**2**	**2**	**0**	**0**	**1**
California	0	1	0	2	2	0	0	2
Oregon	0	6	0	12	6	0	0	2
Washington	0	0	0	0	10	0	0	2
Pacific Noncontiguous	**0**	**6**	**0**	**21**	**14**	**0**	**0**	**4**
Alaska	0	0	0	0	76	0	0	45
Hawaii	0	6	0	21	14	0	0	3
U.S. Total	**0**	**1**	**0**	**2**	**1**	**0**	**0**	**0**

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

Table A.4.A. Relative Standard Error for Net Generation by Fuel Type: Commercial Sector by Census Division and State, September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**75**	**0**	**15**	**0**	**0**	**0**
Connecticut	0	211	0	21	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	131	0	24	0	0	0
New Hampshire	0	3	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**	**56**	**0**	**14**	**0**	**0**	**0**
New Jersey	0	0	0	24	0	0	0
New York	0	110	0	18	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**63**	**1**	**0**	**8**	**0**	**0**	**0**
Illinois	141	0	0	22	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	9	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	15	0	0	0
West North Central	**0**	**12**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	12	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	5,923	0	0	0	0	0
South Atlantic	**0**	**9**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	28	0	0	0	0	0
Maryland	0	636	0	4	0	0	0
North Carolina	0	206	0	61	0	0	0
South Carolina	0	60	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**26**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	26	0	0	0
West South Central	**0**	**0**	**0**	**15**	**0**	**0**	**363**
Arkansas	0	0	0	105	0	0	0
Louisiana	0	0	0	23	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	18	0	0	363
Mountain	**0**	**0**	**0**	**8**	**0**	**0**	**0**
Arizona	0	0	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	32	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**88**	**0**	**3**	**0**	**0**	**606**
California	0	54	0	2	0	0	606
Oregon	0	1,090	0	43	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**68**	**3**	**0**	**0**	**0**	**0**	**66**
Alaska	68	20	0	0	0	0	66
Hawaii	0	0	0	0	0	0	0
U.S. Total	**30**	**16**	**0**	**4**	**0**	**0**	**48**

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

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

Commercial Sector by Census Division and State, September 2018 (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**	**77**	**8**	**0**	**0**	**12**
Connecticut	0	0	0	208	208	0	0	21
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	80	26	0	0	21
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**	**6**	**0**	**3**	**7**
New Jersey	0	0	0	19	11	0	0	8
New York	0	0	0	101	7	0	7	12
Pennsylvania	0	0	0	71	8	0	0	4
East North Central	**0**	**0**	**0**	**106**	**8**	**0**	**0**	**7**
Illinois	0	0	0	189	151	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	7
Ohio	0	0	0	133	47	0	0	2
Wisconsin	0	0	0	245	22	0	0	12
West North Central	**0**	**0**	**0**	**0**	**17**	**0**	**40**	**5**
Iowa	0	0	0	0	16	0	0	3
Kansas	0	0	0	0	190	0	0	190
Minnesota	0	0	0	0	54	0	40	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	5,923
South Atlantic	**0**	**0**	**0**	**23**	**8**	**0**	**0**	**4**
Delaware	0	0	0	164	64	0	0	64
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	119	26	0	0	19
Georgia	0	0	0	126	126	0	0	96
Maryland	0	0	0	98	34	0	0	4
North Carolina	0	0	0	24	23	0	0	21
South Carolina	0	0	0	0	0	0	0	10
Virginia	0	0	0	0	3	0	0	1
East South Central	**0**	**0**	**0**	**105**	**105**	**0**	**0**	**25**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	105	105	0	0	25
West South Central	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**14**
Arkansas	0	0	0	0	0	0	0	92
Louisiana	0	0	0	0	0	0	0	23
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	29	0	0	17
Mountain	**0**	**0**	**0**	**26**	**22**	**0**	**0**	**8**
Arizona	0	0	0	61	61	0	0	10
Colorado	0	0	0	62	62	0	0	35
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	32	32	0	0	18
New Mexico	0	0	0	0	481	0	0	32
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**23**	**6**	**0**	**0**	**3**
California	0	0	0	23	6	0	0	3
Oregon	0	0	0	0	22	0	0	29
Washington	0	0	0	0	59	0	0	19
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	41
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**11**	**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 September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**0**	**75**	**0**	**15**	**0**	**0**	**0**
Connecticut	0	211	0	21	0	0	0
Maine	0	0	0	0	0	0	0
Massachusetts	0	131	0	24	0	0	0
New Hampshire	0	3	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**	**56**	**0**	**14**	**0**	**0**	**0**
New Jersey	0	0	0	24	0	0	0
New York	0	110	0	18	0	0	0
Pennsylvania	0	0	0	0	0	0	0
East North Central	**63**	**1**	**0**	**8**	**0**	**0**	**0**
Illinois	141	0	0	22	0	0	0
Indiana	0	0	0	0	0	0	0
Michigan	0	2	0	9	0	0	0
Ohio	0	0	0	0	0	0	0
Wisconsin	0	0	0	15	0	0	0
West North Central	**0**	**12**	**0**	**0**	**0**	**0**	**0**
Iowa	0	0	0	0	0	0	0
Minnesota	0	12	0	0	0	0	0
Missouri	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0
South Dakota	0	5,923	0	0	0	0	0
South Atlantic	**0**	**9**	**0**	**6**	**0**	**0**	**0**
District of Columbia	0	0	0	0	0	0	0
Florida	0	0	0	0	0	0	0
Georgia	0	28	0	0	0	0	0
Maryland	0	636	0	4	0	0	0
North Carolina	0	206	0	61	0	0	0
South Carolina	0	60	0	0	0	0	0
Virginia	0	0	0	0	0	0	0
East South Central	**0**	**0**	**0**	**26**	**0**	**0**	**0**
Mississippi	0	0	0	0	0	0	0
Tennessee	0	0	0	26	0	0	0
West South Central	**0**	**0**	**0**	**15**	**0**	**0**	**363**
Arkansas	0	0	0	105	0	0	0
Louisiana	0	0	0	23	0	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	0	18	0	0	363
Mountain	**0**	**0**	**0**	**8**	**0**	**0**	**0**
Arizona	0	0	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	32	0	0	0
Utah	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**88**	**0**	**3**	**0**	**0**	**606**
California	0	54	0	2	0	0	606
Oregon	0	1,090	0	43	0	0	0
Washington	0	0	0	0	0	0	0
Pacific Noncontiguous	**68**	**3**	**0**	**0**	**0**	**0**	**66**
Alaska	68	20	0	0	0	0	66
Hawaii	0	0	0	0	0	0	0
U.S. Total	**30**	**16**	**0**	**4**	**0**	**0**	**48**

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

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

Commercial Sector by Census Division and State, Year-to-Date through September 2018 (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**	**77**	**8**	**0**	**0**	**12**
Connecticut	0	0	0	208	208	0	0	21
Maine	0	0	0	0	0	0	0	0
Massachusetts	0	0	0	80	26	0	0	21
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**	**6**	**0**	**3**	**7**
New Jersey	0	0	0	19	11	0	0	8
New York	0	0	0	101	7	0	7	12
Pennsylvania	0	0	0	71	8	0	0	4
East North Central	**0**	**0**	**0**	**106**	**8**	**0**	**0**	**7**
Illinois	0	0	0	189	151	0	0	23
Indiana	0	0	0	0	0	0	0	0
Michigan	0	0	0	0	0	0	0	7
Ohio	0	0	0	133	47	0	0	2
Wisconsin	0	0	0	245	22	0	0	12
West North Central	**0**	**0**	**0**	**0**	**17**	**0**	**40**	**5**
Iowa	0	0	0	0	16	0	0	3
Kansas	0	0	0	0	190	0	0	190
Minnesota	0	0	0	0	54	0	40	15
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	0
North Dakota	0	0	0	0	0	0	0	0
South Dakota	0	0	0	0	0	0	0	5,923
South Atlantic	**0**	**0**	**0**	**23**	**8**	**0**	**0**	**4**
Delaware	0	0	0	164	64	0	0	64
District of Columbia	0	0	0	0	0	0	0	0
Florida	0	0	0	119	26	0	0	19
Georgia	0	0	0	126	126	0	0	96
Maryland	0	0	0	98	34	0	0	4
North Carolina	0	0	0	24	23	0	0	21
South Carolina	0	0	0	0	0	0	0	10
Virginia	0	0	0	0	3	0	0	1
East South Central	**0**	**0**	**0**	**105**	**105**	**0**	**0**	**25**
Mississippi	0	0	0	0	0	0	0	0
Tennessee	0	0	0	105	105	0	0	25
West South Central	**0**	**0**	**0**	**0**	**28**	**0**	**0**	**14**
Arkansas	0	0	0	0	0	0	0	92
Louisiana	0	0	0	0	0	0	0	23
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	29	0	0	17
Mountain	**0**	**0**	**0**	**26**	**22**	**0**	**0**	**8**
Arizona	0	0	0	61	61	0	0	10
Colorado	0	0	0	62	62	0	0	35
Idaho	0	0	0	0	0	0	0	0
Nevada	0	0	0	32	32	0	0	18
New Mexico	0	0	0	0	481	0	0	32
Utah	0	0	0	0	0	0	0	0
Pacific Contiguous	**0**	**0**	**0**	**23**	**6**	**0**	**0**	**3**
California	0	0	0	23	6	0	0	3
Oregon	0	0	0	0	22	0	0	29
Washington	0	0	0	0	59	0	0	19
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**16**
Alaska	0	0	0	0	0	0	0	41
Hawaii	0	0	0	0	0	0	0	0
U.S. Total	**0**	**0**	**0**	**11**	**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, September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**269**	**118**	**0**	**12**	**0**	**0**	**25**
Connecticut	0	0	0	13	0	0	0
Maine	269	128	0	31	0	0	25
Massachusetts	0	0	0	9	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	43	0	0	0
Middle Atlantic	**45**	**14**	**48**	**8**	**21**	**0**	**43**
New Jersey	0	0	0	10	0	0	0
New York	0	2	0	6	0	0	43
Pennsylvania	45	45	76	13	30	0	0
East North Central	**9**	**8**	**0**	**8**	**11**	**0**	**29**
Illinois	9	0	0	23	0	0	0
Indiana	0	1	0	10	13	0	0
Michigan	101	63	0	22	0	0	65
Ohio	0	0	0	20	0	0	0
Wisconsin	36	174	0	23	0	0	32
West North Central	**5**	**0**	**0**	**8**	**0**	**0**	**38**
Iowa	3	0	0	10	0	0	0
Kansas	0	0	0	40	0	0	0
Minnesota	26	0	0	0	0	0	38
Missouri	0	0	0	0	0	0	0
Nebraska	12	0	0	0	0	0	0
North Dakota	72	0	0	0	0	0	0
South Atlantic	**11**	**45**	**70**	**5**	**0**	**0**	**21**
Delaware	0	0	0	0	0	0	0
Florida	27	107	0	11	0	0	0
Georgia	31	62	70	17	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	2	100	0	36	0	0	405
South Carolina	0	0	0	0	0	0	0
Virginia	11	775	0	10	0	0	0
West Virginia	0	0	0	0	0	0	21
East South Central	**0**	**111**	**0**	**8**	**0**	**0**	**0**
Alabama	0	166	0	15	0	0	0
Kentucky	0	0	0	15	0	0	0
Mississippi	0	0	0	20	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**0**	**22**	**1**	**5**	**0**	**0**
Arkansas	0	0	0	17	0	0	0
Louisiana	0	0	0	2	6	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	51	2	6	0	0
Mountain	**27**	**0**	**0**	**6**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	155	0	0	58	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	9	0	0	0
Pacific Contiguous	**0**	**59**	**0**	**1**	**2**	**0**	**0**
California	0	52	0	1	2	0	0
Oregon	0	0	0	64	0	0	0
Washington	0	65	0	49	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**77**
Alaska	0	9	0	0	0	0	0
Hawaii	0	0	0	0	0	0	77
U.S. Total	**4**	**15**	**24**	**1**	**4**	**0**	**13**

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

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

Industrial Sector by Census Division and State, September 2018 (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**	**53**	**8**	**0**	**0**	**7**
Connecticut	0	0	0	591	591	0	0	13
Maine	0	0	0	0	8	0	0	9
Massachusetts	0	0	0	0	0	0	0	9
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	43
Middle Atlantic	**0**	**0**	**0**	**54**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	76	76	0	0	6
New York	0	0	0	0	16	0	0	6
Pennsylvania	0	0	0	77	8	0	0	10
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	8
Indiana	0	0	0	0	18	0	0	8
Michigan	0	0	0	0	9	0	0	10
Ohio	0	0	0	0	17	0	0	9
Wisconsin	0	0	0	0	9	0	130	12
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	37
Minnesota	0	0	0	0	0	0	0	8
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	12
North Dakota	0	0	0	0	0	0	0	46
South Atlantic	**0**	**0**	**0**	**194**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	45	0	0	0
Florida	0	0	0	194	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	6
South Carolina	0	0	0	0	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	13
East South Central	**0**	**0**	**0**	**155**	**3**	**0**	**71**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	17	0	0	12
Mississippi	0	0	0	0	5	0	0	7
Tennessee	0	0	0	155	5	0	71	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	7	0	0	6
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	5	2
Mountain	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	17
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**	**46**	**7**	**0**	**2**	**1**
California	0	0	0	46	10	0	2	1
Oregon	0	0	0	0	13	0	0	14
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**174**	**0**	**0**	**8**
Alaska	0	0	0	0	174	0	0	4
Hawaii	0	0	0	0	0	0	0	10
U.S. Total	**0**	**0**	**0**	**33**	**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 September 2018

Census Region and State	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gases	Nuclear	Hydroelectric Conventional
New England	**269**	**118**	**0**	**12**	**0**	**0**	**25**
Connecticut	0	0	0	13	0	0	0
Maine	269	128	0	31	0	0	25
Massachusetts	0	0	0	9	0	0	0
New Hampshire	0	0	0	0	0	0	0
Rhode Island	0	0	0	43	0	0	0
Middle Atlantic	**45**	**14**	**48**	**8**	**21**	**0**	**43**
New Jersey	0	0	0	10	0	0	0
New York	0	2	0	6	0	0	43
Pennsylvania	45	45	76	13	30	0	0
East North Central	**9**	**8**	**0**	**8**	**11**	**0**	**29**
Illinois	9	0	0	23	0	0	0
Indiana	0	1	0	10	13	0	0
Michigan	101	63	0	22	0	0	65
Ohio	0	0	0	20	0	0	0
Wisconsin	36	174	0	23	0	0	32
West North Central	**5**	**0**	**0**	**8**	**0**	**0**	**38**
Iowa	3	0	0	10	0	0	0
Kansas	0	0	0	40	0	0	0
Minnesota	26	0	0	0	0	0	38
Missouri	0	0	0	0	0	0	0
Nebraska	12	0	0	0	0	0	0
North Dakota	72	0	0	0	0	0	0
South Atlantic	**11**	**45**	**70**	**5**	**0**	**0**	**21**
Delaware	0	0	0	0	0	0	0
Florida	27	107	0	11	0	0	0
Georgia	31	62	70	17	0	0	0
Maryland	0	0	0	0	0	0	0
North Carolina	2	100	0	36	0	0	405
South Carolina	0	0	0	0	0	0	0
Virginia	11	775	0	10	0	0	0
West Virginia	0	0	0	0	0	0	21
East South Central	**0**	**111**	**0**	**8**	**0**	**0**	**0**
Alabama	0	166	0	15	0	0	0
Kentucky	0	0	0	15	0	0	0
Mississippi	0	0	0	20	0	0	0
Tennessee	0	0	0	5	0	0	0
West South Central	**0**	**0**	**22**	**1**	**5**	**0**	**0**
Arkansas	0	0	0	17	0	0	0
Louisiana	0	0	0	2	6	0	0
Oklahoma	0	0	0	0	0	0	0
Texas	0	0	51	2	6	0	0
Mountain	**27**	**0**	**0**	**6**	**0**	**0**	**0**
Colorado	0	0	0	0	0	0	0
Idaho	155	0	0	58	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	9	0	0	0
Pacific Contiguous	**0**	**59**	**0**	**1**	**2**	**0**	**0**
California	0	52	0	1	2	0	0
Oregon	0	0	0	64	0	0	0
Washington	0	65	0	49	0	0	0
Pacific Noncontiguous	**0**	**2**	**0**	**0**	**0**	**0**	**77**
Alaska	0	9	0	0	0	0	0
Hawaii	0	0	0	0	0	0	77
U.S. Total	**4**	**15**	**24**	**1**	**4**	**0**	**13**

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

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

Industrial Sector by Census Division and State, Year-to-Date through September 2018 (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**	**53**	**8**	**0**	**0**	**7**
Connecticut	0	0	0	591	591	0	0	13
Maine	0	0	0	0	8	0	0	9
Massachusetts	0	0	0	0	0	0	0	9
New Hampshire	0	0	0	0	0	0	0	0
Rhode Island	0	0	0	0	0	0	0	43
Middle Atlantic	**0**	**0**	**0**	**54**	**7**	**0**	**0**	**6**
New Jersey	0	0	0	76	76	0	0	6
New York	0	0	0	0	16	0	0	6
Pennsylvania	0	0	0	77	8	0	0	10
East North Central	**0**	**0**	**0**	**0**	**6**	**0**	**2**	**4**
Illinois	0	0	0	0	0	0	0	8
Indiana	0	0	0	0	18	0	0	8
Michigan	0	0	0	0	9	0	0	10
Ohio	0	0	0	0	17	0	0	9
Wisconsin	0	0	0	0	9	0	130	12
West North Central	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**4**
Iowa	0	0	0	0	0	0	0	3
Kansas	0	0	0	0	0	0	0	37
Minnesota	0	0	0	0	0	0	0	8
Missouri	0	0	0	0	0	0	0	0
Nebraska	0	0	0	0	0	0	0	12
North Dakota	0	0	0	0	0	0	0	46
South Atlantic	**0**	**0**	**0**	**194**	**2**	**0**	**0**	**2**
Delaware	0	0	0	0	45	0	0	0
Florida	0	0	0	194	6	0	0	4
Georgia	0	0	0	0	4	0	0	5
Maryland	0	0	0	0	0	0	0	0
North Carolina	0	0	0	0	6	0	0	6
South Carolina	0	0	0	0	3	0	0	3
Virginia	0	0	0	0	0	0	0	3
West Virginia	0	0	0	0	0	0	0	13
East South Central	**0**	**0**	**0**	**155**	**3**	**0**	**71**	**3**
Alabama	0	0	0	0	4	0	0	5
Kentucky	0	0	0	0	17	0	0	12
Mississippi	0	0	0	0	5	0	0	7
Tennessee	0	0	0	155	5	0	71	3
West South Central	**0**	**0**	**0**	**0**	**4**	**0**	**2**	**1**
Arkansas	0	0	0	0	7	0	0	6
Louisiana	0	0	0	0	5	0	2	2
Oklahoma	0	0	0	0	0	0	0	0
Texas	0	0	0	0	11	0	5	2
Mountain	**0**	**0**	**0**	**0**	**2**	**0**	**0**	**5**
Colorado	0	0	0	0	0	0	0	0
Idaho	0	0	0	0	2	0	0	17
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**	**46**	**7**	**0**	**2**	**1**
California	0	0	0	46	10	0	2	1
Oregon	0	0	0	0	13	0	0	14
Washington	0	0	0	0	9	0	0	8
Pacific Noncontiguous	**0**	**0**	**0**	**0**	**174**	**0**	**0**	**8**
Alaska	0	0	0	0	174	0	0	4
Hawaii	0	0	0	0	0	0	0	10
U.S. Total	**0**	**0**	**0**	**33**	**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, September 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**1**
Connecticut	0	1	3	0	1
Maine	1	1	2	0	1
Massachusetts	1	1	6	0	1
New Hampshire	1	1	3	0	1
Rhode Island	0	0	0	0	0
Vermont	3	9	8	0	4
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	1	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	1	4	2	0	1
Michigan	1	2	3	0	1
Ohio	1	1	1	0	1
Wisconsin	1	4	5	0	2
West North Central	**1**	**2**	**3**	**0**	**1**
Iowa	2	8	5	0	3
Kansas	3	2	8	0	2
Minnesota	2	5	7	0	3
Missouri	1	3	7	0	2
Nebraska	2	8	9	0	4
North Dakota	3	5	9	0	5
South Dakota	3	10	12	0	5
South Atlantic	**1**	**0**	**2**	**0**	**0**
Delaware	1	3	5	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	2	1	4	0	1
South Carolina	2	1	3	0	1
Virginia	1	0	4	0	1
West Virginia	0	1	0	0	0
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	1	3	0	1
Kentucky	2	5	3	0	2
Mississippi	3	2	5	0	2
Tennessee	1	4	5	0	2
West South Central	**2**	**1**	**2**	**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	2	4	0	1
Colorado	2	5	6	0	3
Idaho	2	5	3	0	2
Montana	3	8	5	0	3
Nevada	1	2	1	0	1
New Mexico	4	7	8	0	4
Utah	3	5	3	0	2
Wyoming	4	8	4	0	3
Pacific Contiguous	**1**	**1**	**2**	**0**	**1**
California	1	1	2	0	1
Oregon	2	5	8	0	3
Washington	2	5	7	0	3
Pacific Noncontiguous	**1**	**5**	**4**	**0**	**2**
Alaska	3	11	15	0	6
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.6.B. Relative Standard Error for Sales of Electricity to Ultimate Customers

by End-Use Sector, Census Division, and State, Year-to-Date through September 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**2**	**0**	**0**
Connecticut	0	1	3	0	1
Maine	0	1	2	0	1
Massachusetts	0	1	5	0	1
New Hampshire	0	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	2	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	0	1	1	0	0
Indiana	1	3	2	0	1
Michigan	0	1	2	0	1
Ohio	0	1	1	0	0
Wisconsin	1	3	4	0	2
West North Central	**0**	**1**	**2**	**0**	**1**
Iowa	1	6	4	0	2
Kansas	1	1	5	0	1
Minnesota	1	3	5	0	2
Missouri	1	2	5	0	1
Nebraska	1	6	6	0	3
North Dakota	1	3	6	0	3
South Dakota	1	7	9	0	3
South Atlantic	**0**	**0**	**1**	**0**	**0**
Delaware	1	2	4	0	1
District of Columbia	0	0	0	0	0
Florida	0	0	4	0	0
Georgia	1	1	3	0	1
Maryland	0	0	2	0	0
North Carolina	0	0	2	0	1
South Carolina	1	1	2	0	1
Virginia	0	0	3	0	0
West Virginia	0	1	0	0	0
East South Central	**0**	**1**	**1**	**0**	**1**
Alabama	1	1	2	0	1
Kentucky	1	3	3	0	1
Mississippi	1	1	4	0	1
Tennessee	1	3	4	0	1
West South Central	**1**	**0**	**1**	**0**	**1**
Arkansas	1	1	3	0	1
Louisiana	1	1	1	0	0
Oklahoma	1	1	3	0	1
Texas	1	1	1	0	1
Mountain	**0**	**1**	**1**	**0**	**1**
Arizona	0	2	3	0	1
Colorado	1	4	5	0	2
Idaho	1	4	2	0	1
Montana	1	6	4	0	2
Nevada	0	1	1	0	1
New Mexico	1	6	6	0	3
Utah	1	4	2	0	2
Wyoming	1	6	3	0	2
Pacific Contiguous	**0**	**1**	**2**	**0**	**1**
California	0	1	1	0	0
Oregon	1	3	6	0	2
Washington	1	3	5	0	2
Pacific Noncontiguous	**1**	**4**	**3**	**0**	**2**
Alaska	1	8	11	0	4
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.7.A. Relative Standard Error for Revenue from Sales of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, September 2018

Census Region and State	Residential	Commercial	Industrial	Transportation	Total
New England	**0**	**1**	**1**	**0**	**0**
Connecticut	0	1	1	0	1
Maine	1	1	2	0	1
Massachusetts	0	1	3	0	1
New Hampshire	0	1	2	0	1
Rhode Island	0	0	0	0	0
Vermont	3	8	6	0	3
Middle Atlantic	**0**	**0**	**0**	**0**	**0**
New Jersey	0	0	2	0	0
New York	0	0	1	0	0
Pennsylvania	0	1	0	0	0
East North Central	**0**	**1**	**1**	**0**	**0**
Illinois	1	1	1	0	1
Indiana	1	4	2	0	1
Michigan	1	1	4	0	1
Ohio	1	1	1	0	1
Wisconsin	1	3	6	0	2
West North Central	**1**	**2**	**4**	**0**	**1**
Iowa	2	6	6	0	3
Kansas	3	2	7	0	2
Minnesota	2	3	7	0	2
Missouri	1	4	6	0	2
Nebraska	2	6	11	0	4
North Dakota	3	4	9	0	4
South Dakota	3	7	13	0	4
South Atlantic	**1**	**0**	**1**	**0**	**0**
Delaware	1	4	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	0	0	0
North Carolina	2	1	4	0	1
South Carolina	2	2	3	0	1
Virginia	1	1	4	0	1
West Virginia	1	2	0	0	1
East South Central	**1**	**2**	**2**	**0**	**1**
Alabama	2	2	3	0	1
Kentucky	2	5	3	0	2
Mississippi	3	3	6	0	2
Tennessee	1	4	5	0	2
West South Central	**1**	**1**	**2**	**0**	**1**
Arkansas	3	3	5	0	2
Louisiana	2	2	2	0	1
Oklahoma	3	2	6	0	2
Texas	2	1	3	0	1
Mountain	**1**	**2**	**2**	**0**	**1**
Arizona	1	2	5	0	1
Colorado	4	5	8	0	3
Idaho	2	4	4	0	2
Montana	3	6	9	0	4
Nevada	1	3	1	0	1
New Mexico	6	8	12	0	5
Utah	4	6	4	0	3
Wyoming	4	7	5	0	3
Pacific Contiguous	**1**	**1**	**2**	**0**	**1**
California	1	1	1	0	1
Oregon	2	4	6	0	2
Washington	2	3	8	0	2
Pacific Noncontiguous	**1**	**3**	**3**	**0**	**1**
Alaska	3	8	18	0	5
Hawaii	0	0	0	0	0
U.S. Total	**0**	**0**	**1**	**0**	**0**

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

by End-Use Sector, Census Division, and State, Year-to-Date through September 2018

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

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Table A.8.A. Relative Standard Error for Average Price of Electricity to Ultimate Customers by End-Use Sector, Census Division, and State, September 2018

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

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

by End-Use Sector, Census Division, and State, Year-to-Date through September 2018

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

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

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, 2017

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
2017	1	01/08/2017 9:07 AM	01/13/2017 2:30 PM	125 Hours, 23 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	106000
2017	1	01/08/2017 11:59 PM	. .	. 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
2017	1	01/10/2017 7:30 PM	01/13/2017 2:30 PM	67 Hours, 0 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	87000
2017	1	01/15/2017 6:35 AM	01/15/2017 7:44 AM	1 Hours, 9 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Transmission Disruption	176	126000
2017	1	01/15/2017 9:27 AM	01/17/2017 1:58 AM	40 Hours, 31 Minutes	Oklahoma Municipal Power Authority	SPP	Oklahoma: Harper 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	1	788
2017	1	01/18/2017 6:05 PM	01/19/2017 12:05 AM	6 Hours, 0 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	75000
2017	1	01/22/2017 4:15 AM	01/24/2017 2:00 PM	57 Hours, 45 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	97	64000
2017	1	01/22/2017 6:00 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
2017	1	01/22/2017 4:00 PM	01/23/2017 3:26 AM	11 Hours, 26 Minutes	Southern Company	SERC	Alabama: Georgia: Mississippi: Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	100	29965
2017	2	02/02/2017 1:04 AM	02/02/2017 5:00 AM	3 Hours, 56 Minutes	Public Service Company of New Mexico	WECC	New Mexico: Bernalillo County, Santa Fe County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	396	149223
2017	2	02/02/2017 1:11 AM	. .	. Hours, . Minutes	Peak Reliability	WECC	New Mexico: Bernalillo County;	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	400	Unknown
2017	2	02/13/2017 1:00 PM	02/15/2017 1:35 PM	48 Hours, 35 Minutes	North Carolina Mun Power Agny #1	SERC	North Carolina: Union County;	Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems-Vandalism	0	0
2017	2	02/17/2017 8:09 AM	02/22/2017 7:30 PM	131 Hours, 21 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	254	169250
2017	2	02/17/2017 1:00 PM	02/17/2017 1:15 PM	0 Hours, 15 Minutes	Nevada Power Company d/b/a NV Energy	WECC	Nevada: Clark County;	Physical attack that could potentially impact electric power system adequacy or reliability; or vandalism which targets components of any security systems-Vandalism	0	0
2017	2	02/17/2017 3:00 PM	02/20/2017 11:00 AM	68 Hours, 0 Minutes	LADWP	WECC	California: Los Angeles County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	111591
2017	3	03/01/2017 8:30 AM	03/01/2017 2:00 PM	5 Hours, 30 Minutes	Tennessee Valley Authority	SERC	Tennessee: Kentucky:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	58000
2017	3	03/01/2017 11:49 AM	03/02/2017 9:30 PM	33 Hours, 41 Minutes	American Electric Power	RFC	Kentucky: West Virginia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	98575
2017	3	03/02/2017 12:20 PM	03/02/2017 11:45 PM	11 Hours, 25 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	54316
2017	3	03/06/2017 8:00 PM	03/07/2017 1:00 AM	5 Hours, 0 Minutes	Kansas City Power & Light Co	SERC	Missouri: Jackson County, Platte County, Cass County, Lafayette County, Chariton County, Carroll County, Clay County, Johnson County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	97734
2017	3	03/08/2017 9:30 AM	03/11/2017 5:00 AM	67 Hours, 30 Minutes	Consumers Energy Co	RFC	Michigan: Jackson County, Calhoun County, Ingham County, Hillsdale County, Washtenaw County, Kent County, Ottawa County, Midland County, Saginaw County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	343000
2017	3	03/08/2017 11:30 AM	03/08/2017 7:52 PM	8 Hours, 22 Minutes	Cleveland Electric Illum Co	RFC	Ohio	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	71012
2017	3	03/08/2017 12:00 PM	03/11/2017 11:31 AM	71 Hours, 31 Minutes	Detroit Edison Co	RFC	Michigan	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	800000
2017	3	03/08/2017 1:30 PM	03/08/2017 4:30 PM	3 Hours, 0 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/Transmission Interruption	Unknown	106869
2017	3	03/08/2017 3:33 PM	. .	. Hours, . Minutes	Rochester Gas & Electric Corp	NPCC	New York	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	50000
2017	3	03/14/2017 12:32 PM	. .	. Hours, . Minutes	ISO New England	NPCC	Connecticut: Massachusetts: Rhode Island: New Hampshire: Maine: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	69647
2017	3	03/21/2017 8:00 PM	03/22/2017 9:15 AM	13 Hours, 15 Minutes	Southern Company	SERC	Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	857	257000
2017	3	03/29/2017 3:30 AM	03/31/2017 6:00 AM	50 Hours, 30 Minutes	Oncor Electric Delivery Company LLC	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	175000

Table B.2 Major Disturbances and Unusual Occurrences, 2017

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
2017	4	04/03/2017 11:00 AM	04/03/2017 8:00 PM	9 Hours, 0 Minutes	Southern Company	SERC	Alabama, Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	290	86330
2017	4	04/06/2017 7:00 PM	. .	. Hours, . Minutes	Pacific Gas & Electric Co	WECC	California	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	100000
2017	4	04/07/2017 4:33 AM	04/07/2017 8:20 AM	3 Hours, 47 Minutes	Pacificorp	WECC	Oregon	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	100	64852
2017	4	04/07/2017 8:15 AM	04/08/2017 12:14 AM	15 Hours, 59 Minutes	Portland General Electric Co	WECC	Oregon: Multnomah County, Washington County, Marion County, Clackamas County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	153867
2017	4	04/24/2017 5:32 AM	04/24/2017 6:33 AM	1 Hours, 1 Minutes	Duke Energy Carolinas	SERC	North Carolina: Mecklenburg County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	240	74698
2017	4	04/30/2017 1:00 AM	04/30/2017 5:45 PM	16 Hours, 45 Minutes	Entergy Corp	SERC	Arkansas, Louisiana, Mississippi	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	145174
2017	5	05/01/2017 11:14 PM	05/01/2017 11:34 PM	0 Hours, 20 Minutes	Pennsylvania Electric Co	RFC	Ohio	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	92390
2017	5	05/03/2017 6:58 PM	05/03/2017 9:15 PM	2 Hours, 17 Minutes	Southern California Edison Co	WECC	California	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	572	0
2017	5	05/03/2017 7:05 PM	05/03/2017 9:00 PM	1 Hours, 55 Minutes	California ISO	WECC	California	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Generation Inadequacy	878	Unknown
2017	5	05/04/2017 5:00 AM	05/04/2017 10:00 PM	17 Hours, 0 Minutes	Southern Company	SERC	Alabama: Georgia	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	200	60377
2017	5	05/07/2017 5:15 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
2017	5	05/07/2017 11:30 PM	05/08/2017 5:00 AM	5 Hours, 30 Minutes	Owensboro Municipal Utilities	SERC	Kentucky: Daviess County	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	80	0
2017	5	05/19/2017 5:30 AM	. .	. Hours, . Minutes	Ameren Missouri	SERC	Missouri: St. Louis County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	70696
2017	5	05/27/2017 11:00 PM	. .	. Hours, . Minutes	Tennessee Valley Authority	SERC	Tennessee: Shelby County, Putnam County, Knox County, Davidson County, Hamilton County; Alabama: Madison County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	116000
2017	5	05/27/2017 11:10 PM	. .	. Hours, . Minutes	Memphis Light Gas and Water Division	SERC	Tennessee: Shelby County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	391	188000
2017	5	05/28/2017 7:30 PM	05/29/2017 10:00 PM	26 Hours, 30 Minutes	American Electric Power - (SPP Reliability Region)	TRE	Texas: Louisiana	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
2017	5	05/28/2017 7:30 PM	05/29/2017 10:00 PM	26 Hours, 30 Minutes	Southwest Power Pool, Inc.	SERC	Louisiana: Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	103000
2017	6	06/11/2017 2:39 PM	06/11/2017 5:55 PM	3 Hours, 16 Minutes	MISO	RFC	Michigan	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-Transmission Interruption	63	Unknown
2017	7	07/07/2017 3:30 AM	07/08/2017 7:30 PM	40 Hours, 0 Minutes	Consumers Energy Co	RFC	Michigan: Kent County, Ottawa County, Muskegon County, Barry County, Oceana County, Eaton County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	160000
2017	7	07/08/2017 6:52 PM	07/09/2017 8:00 AM	13 Hours, 8 Minutes	Los Angeles Department of Water & Power	WECC	California: Los Angeles County	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Transmission Interruption	645	176867
2017	7	07/18/2017 4:23 PM	07/18/2017 6:39 PM	2 Hours, 16 Minutes	Western Area Power Administration - Western Area Lower Colorado	WECC	Nevada	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Severe Weather	0	0
2017	7	07/22/2017 10:00 PM	. .	. Hours, . Minutes	Southwest Power Pool, Inc.	SERC	Missouri	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	131000
2017	7	07/22/2017 10:00 PM	. .	. Hours, . Minutes	KCP&L Greater Missouri Operations Company	SERC	Missouri	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	115000
2017	7	07/22/2017 10:00 PM	07/23/2017 12:00 PM	14 Hours, 0 Minutes	Kansas City Power & Light Co	SERC	Missouri: Clay County, Jackson County, Lafayette County, Platte County; Kansas: Johnson County, Miami County, Wyandotte County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	112540
2017	7	07/23/2017 4:00 AM	. .	. Hours, . Minutes	Ameren Missouri	SERC	Missouri: Illinois	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	82000
2017	7	07/27/2017 6:00 AM	07/27/2017 11:29 AM	5 Hours, 29 Minutes	California Department of Water Resources	WECC	California: Butte County	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0

Table B.2 Major Disturbances and Unusual Occurrences, 2017

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
2017	8	08/21/2017 11:41 PM	08/22/2017 12:21 AM	0 Hours, 40 Minutes	Pacific Gas & Electric Co	WECC	California: Plumas 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-System Operations	1	2
2017	8	08/25/2017 6:17 PM	09/02/2017 5:00 PM	190 Hours, 43 Minutes	American Electric Power - Texas	TRE	Texas: Matagorda County, Nueces County, Aransas County, Refugio County, San Patricio County, Calhoun County, Victoria County, Jackson County, Live Oak County, Jim Wells County, Bee County, Lavaca County	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	220400
2017	8	08/25/2017 6:30 PM	09/05/2017 5:00 PM	262 Hours, 30 Minutes	ERCOT	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	330000
2017	8	08/26/2017 12:39 AM	08/26/2017 12:52 AM	0 Hours, 13 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
2017	8	08/26/2017 6:26 AM	09/08/2017 12:00 AM	305 Hours, 34 Minutes	CenterPoint Energy	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	1076868
2017	8	08/27/2017 5:10 AM	09/08/2017 12:00 AM	282 Hours, 50 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	1076868
2017	8	08/30/2017 2:15 AM	. .	. Hours, . Minutes	Entergy Corp	TRE	Texas	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	78500
2017	8	08/31/2017 2:49 PM	08/31/2017 5:14 PM	2 Hours, 25 Minutes	Southern California Edison Co	WECC	California: Los Angeles County	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Severe Weather	100	0
2017	9	09/01/2017 3:41 PM	09/01/2017 8:30 PM	4 Hours, 49 Minutes	Southern California Edison Co	WECC	California:	Load shedding of 100 Megawatts or more implemented under emergency operational policy-Severe Weather	337	0
2017	9	09/09/2017 12:00 AM	. .	. Hours, . Minutes	Tampa Electric Company	FRCC	Florida: Hillsborough County, Pasco County, Polk County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	1275	425000
2017	9	09/09/2017 12:30 PM	. .	. Hours, . Minutes	Florida Power & Light	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	3500000
2017	9	09/10/2017 6:35 PM	09/13/2017 5:00 PM	70 Hours, 25 Minutes	Duke Energy Florida	FRCC	Florida: Alachua County, Bay County, Brevard County, Citrus County, Columbia County, Dixie County, Flagler County, Franklin County, Gilchrist County, Gulf County, Hamilton County, Hardee County, Hernando County, Highlands County, Jefferson County, Lafayette County, Lake County, Leon County, Levy County, Madison County, Marion County, Orange County, Osceola County, Pasco County, Pinellas County, Po	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	4500	1000000
2017	9	09/10/2017 8:37 PM	. .	. Hours, . Minutes	Seminole Electric Cooperative Inc	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	452555
2017	9	09/11/2017 12:30 AM	. .	. Hours, . Minutes	Lakeland Electric	FRCC	Florida:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	200	20000
2017	9	09/11/2017 2:27 AM	09/15/2017 8:44 PM	114 Hours, 17 Minutes	Southern Company	SERC	Georgia:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	132	39659
2017	9	09/11/2017 12:55 PM	09/12/2017 8:00 AM	19 Hours, 5 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	687	154832
2017	9	09/11/2017 5:30 PM	09/13/2017 9:30 AM	40 Hours, 0 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	365	265729
2017	10	10/08/2017 3:00 AM	. .	. Hours, . Minutes	Southern Company	SERC	Alabama: Florida: Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	306	91945
2017	10	10/09/2017 2:03 AM	10/17/2017 1:30 PM	203 Hours, 27 Minutes	Pacific Gas & Electric Co	WECC	California:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather/Transmission Interruption	177	117900
2017	10	10/09/2017 6:44 AM	. .	. Hours, . 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	100	Unknown
2017	10	10/12/2017 9:09 AM	. .	. Hours, . Minutes	Clarksdale Public Utilities	SERC	Mississippi: Coahoma County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-System Operations	Unknown	Unknown
2017	10	10/16/2017 3:45 PM	10/16/2017 4:09 PM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Washington: Montana:	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-Transmission Interruption	0	0

Table B.2 Major Disturbances and Unusual Occurrences, 2017

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
2017	10	10/16/2017 3:55 PM	10/16/2017 4:10 PM	0 Hours, 15 Minutes	Peak Reliability	WECC	Washington:	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-Transmission Interruption	0	0
2017	10	10/20/2017 3:44 AM	10/20/2017 3:45 AM	0 Hours, 1 Minutes	Peak Reliability	WECC	Washington:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Severe Weather	900	Unknown
2017	10	10/22/2017 8:45 AM	10/22/2017 2:00 PM	5 Hours, 15 Minutes	Entergy Corp	SERC	Louisiana: Mississippi: Arkansas: Texas:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	Unknown
2017	10	10/23/2017 5:50 PM	10/24/2017 6:17 PM	24 Hours, 27 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	440	115144
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 Minutes	Peak Reliability	WECC	Washington: Clark 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-Transmission Interruption	0	0
2017	10	10/26/2017 8:17 AM	10/26/2017 8:41 AM	0 Hours, 24 Minutes	Bonneville Power Administration	WECC	Washington: Whatcom County; Montana:	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-Transmission Interruption	0	0
2017	10	10/29/2017 11:40 PM	11/01/2017 6:08 PM	66 Hours, 28 Minutes	ISO New England	NPCC	Connecticut: Massachusetts: New Hampshire: Maine: Rhode Island: Vermont:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	310453
2017	11	11/01/2017 3:40 PM	11/01/2017 10:00 PM	6 Hours, 20 Minutes	Owensboro Municipal Utilities	SERC	Kentucky: Daviess County;	Public appeal to reduce the use of electricity for purposes of maintaining the continuity of the electric power system-Generation Inadequacy	0	0
2017	11	11/05/2017 7:35 PM	11/05/2017 11:09 PM	3 Hours, 34 Minutes	Ohio Edison Co	RF	Ohio:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	89216
2017	11	11/13/2017 2:00 AM	11/15/2017 8:17 AM	54 Hours, 17 Minutes	Puget Sound Energy	WECC	Washington: Island County, King County, Kitsap County, Thurston County, Skagit County, Whatcom County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	236100
2017	11	11/13/2017 4:33 PM	11/16/2017 6:00 AM	61 Hours, 27 Minutes	Seattle City Light, Sytem Control Center	WECC	Washington: King County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	85	68430
2017	12	12/04/2017 9:53 PM	. .	. Hours, . Minutes	Southern California Edison Co	WECC	California:	Uncontrolled loss of 300 Megawatts or more of firm system loads for more than 15 minutes from a single incident-Severe Weather/Transmission Interruption	540	263000
2017	12	12/05/2017 6:30 AM	12/06/2017 10:00 AM	27 Hours, 30 Minutes	Consumers Energy Co	RF	Michigan: Oscoda County, Isabella County, Roscommon County, Ogemaw County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	117500
2017	12	12/07/2017 8:00 PM	12/08/2017 5:00 PM	21 Hours, 0 Minutes	CPS Energy	TRE	Texas: Bexar County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	88000
2017	12	12/08/2017 9:30 AM	12/08/2017 10:30 PM	13 Hours, 0 Minutes	Entergy Corp	SERC	Louisiana: Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	Unknown	79000
2017	12	12/08/2017 10:00 AM	12/10/2017 8:50 PM	58 Hours, 50 Minutes	Southern Company	SERC	Alabama: Georgia: Mississippi:	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather	865	301872
2017	12	12/10/2017 1:25 AM	12/10/2017 2:30 AM	1 Hours, 5 Minutes	Southern California Edison Co	WECC	California: Ventura County, Santa Barbara County;	Loss of electric service to more than 50,000 customers for 1 hour or more-Severe Weather/Transmission Interruption	110	51323
2017	12	12/13/2017 9:55 AM	12/13/2017 2:45 PM	4 Hours, 50 Minutes	Long Island Power Authority	NPCC	New York: Suffolk County;	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	0	0
2017	12	12/29/2017 7:00 AM	. .	. Hours, . Minutes	Upstate New York Power Producers	NPCC	New York: Tompkins County;	Fuel supply emergencies that could impact electric power system adequacy or reliability-Fuel Supply Deficiency	210	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 i[th] utility's 2013 (or the last published year) solar PV capacity

$y_{i_{2015,m}}$ is the i[th] 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

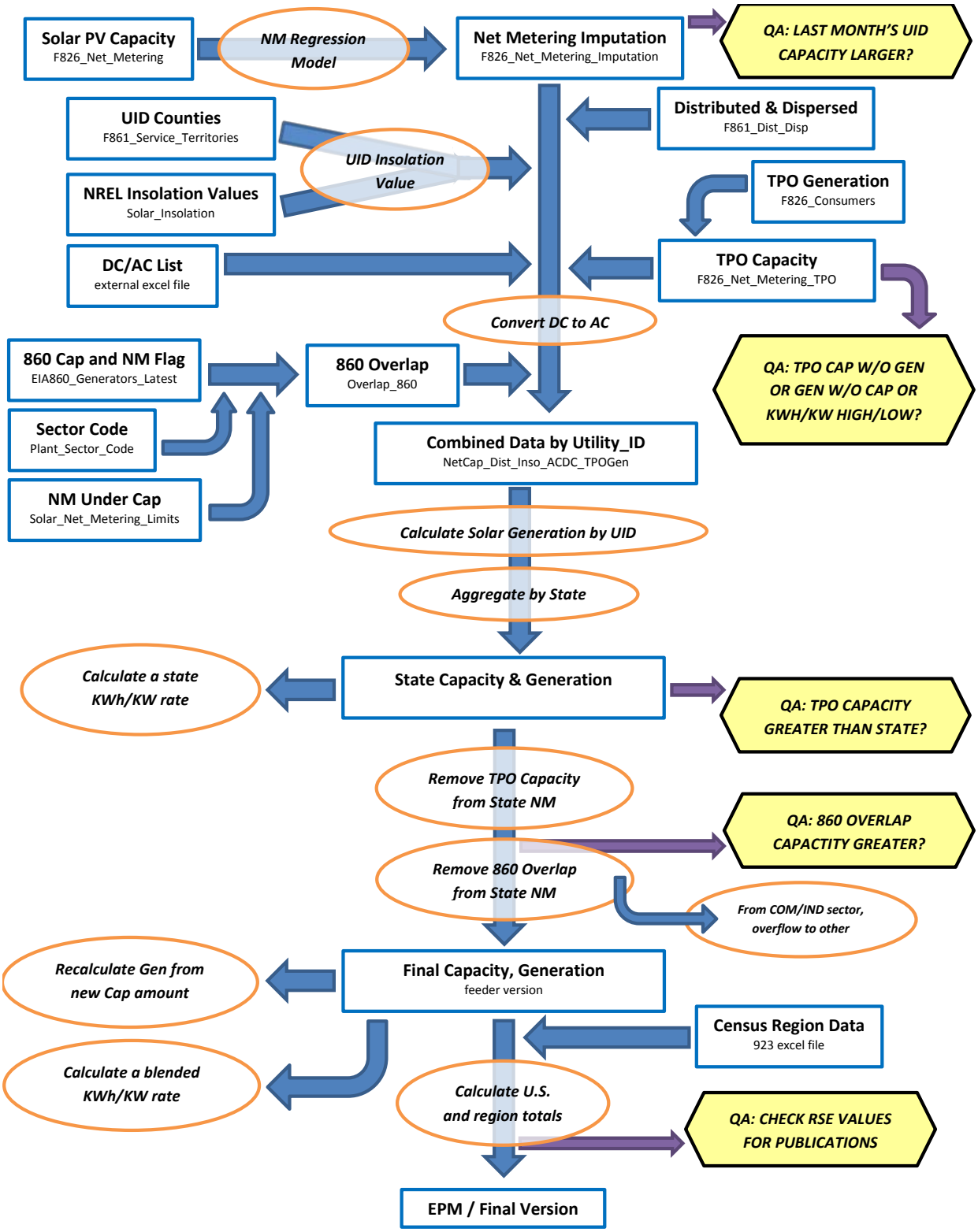
TMY3 (1991-2005) Weather Stations by MSA

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, September 2018

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	25.50	6.03	--	1.03
Connecticut	--	5.80	--	1.03
Maine	25.50	6.25	--	1.06
Massachusetts	--	5.81	--	1.03
New Hampshire	--	5.80	--	1.03
Rhode Island	--	--	--	1.03
Vermont	--	--	--	--
Middle Atlantic	22.08	6.10	--	1.03
New Jersey	25.84	5.77	--	1.03
New York	--	6.09	--	1.03
Pennsylvania	21.96	6.11	--	1.03
East North Central	19.85	5.79	26.87	1.05
Illinois	17.75	5.81	--	1.01
Indiana	21.94	5.76	--	1.06
Michigan	18.88	5.86	27.14	1.05
Ohio	24.60	5.78	--	1.06
Wisconsin	17.65	5.88	26.27	1.03
West North Central	16.49	5.80	26.71	1.07
Iowa	17.48	5.74	26.71	1.09
Kansas	17.20	5.73	--	1.01
Minnesota	17.74	5.80	--	1.09
Missouri	17.74	5.80	--	1.02
Nebraska	17.02	5.75	--	1.07
North Dakota	12.79	5.90	--	1.01
South Dakota	16.47	--	--	--
South Atlantic	23.70	5.87	28.43	1.03
Delaware	--	5.67	--	1.04
District of Columbia	--	--	--	--
Florida	23.74	5.81	28.43	1.02
Georgia	20.21	5.85	--	1.03
Maryland	25.40	5.81	--	1.03
North Carolina	25.09	5.97	--	1.03
South Carolina	24.83	5.99	--	1.03
Virginia	24.10	6.02	--	1.05
West Virginia	24.94	5.74	--	1.09
East South Central	20.92	5.73	--	1.03
Alabama	18.75	5.66	--	1.03
Kentucky	21.97	5.84	--	1.03
Mississippi	15.91	5.80	--	1.03
Tennessee	22.86	5.70	--	1.00
West South Central	16.15	5.89	28.65	1.03
Arkansas	17.39	5.90	--	1.02
Louisiana	16.61	--	28.65	1.03
Oklahoma	17.24	--	--	1.03
Texas	15.67	5.86	--	1.03
Mountain	18.63	5.68	--	1.05
Arizona	19.32	5.58	--	1.04
Colorado	18.43	--	--	1.11
Idaho	--	--	--	1.00
Montana	16.98	--	--	1.05
Nevada	19.02	5.84	--	1.04
New Mexico	18.33	5.66	--	1.04
Utah	21.87	5.87	--	1.04
Wyoming	17.53	5.88	--	1.05
Pacific Contiguous	17.47	--	--	1.04
California	22.97	--	--	1.03
Oregon	17.28	--	--	1.06
Washington	16.73	--	--	1.10
Pacific Noncontiguous	17.35	6.12	--	1.00
Alaska	14.21	5.60	--	1.00
Hawaii	19.49	6.12	--	--
U.S. Total	18.93	6.02	28.32	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%	0.30%
Industrial	2.92%	4.31%	4.00%
Transportation	0.37%	0.06%	0.12%
Total	**0.93%**	**1.40%**	**1.13%**
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%**	**0.58%**
Average Retail Price			
Residential	0.15%	0.05%	0.21%
Commercial	0.44%	0.65%	0.21%
Industrial	0.31%	0.24%	0.51%
Transportation	0.83%	1.57%	0.20%
Total	**0.11%**	**0.10%**	**0.54%**
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

Item	2015			2016			2017		
	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	1,353,358	0.31%
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**	**3,723,826**	**1.14%**
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	144,260	0.11%
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**	**390,340**	**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	-0.20%
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**	**-0.55%**
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.